Master's Thesis of Kim, Hyowon

The effect of white−collar network ratio on redistribution attitudes

재분배 태도에 대한 사회연결망 내 화이트칼라 비율의 효과

August 2023

Graduate School of Social Science
Seoul National University
Sociology Major

Kim, Hyowon

The effect of white-collar network ratio on redistribution attitudes

Kim, Seok-ho

Submitting a master's thesis of Sociology

May 2023

Graduate School of Social Science
Seoul National University
Sociology Major

Kim, Hyowon

Confirming the master's thesis written by
Kim, Hyowon
July 2023

Chair   Im, Dong-Kyun   (Seal)
Vice Chair   Sohn, Yunkyu (Seal)
Examiner   Kim, Seok-ho (Seal)

Abstract

What are the determinants of redistribution attitudes? Previous research on redistribution attitudes has largely focused on individual predictors such as self-interest, value, or ideology. However, potential effects of interpersonal predictors on redistribution attitudes have been neglected. Redistribution attitude is not solely a problem of how much one loses or gains as a result of resource allocation, nor is it solely a problem of values about the fair allocation principles. Given that people are embedded in social networks and interact with others, through which their political attitudes are potentially shaped and formed, it is crucial to consider with whom individuals are socially connected into account. In this regard, this study examines how individuals' social networks may influence redistribution attitudes.

In particular, this study focuses on the ratio at which each individual is connected with others who have white- or blue-collar occupations. This study is interested in finding the sociological determinant of redistribution attitudes, opinions about whether the government should intervene to reduce the disparity between low- and high-income people. Therefore, this study sheds light on the occupational makeup of one's social network.

By learning information and social norms related to politics via social networks, people feel social pressure to hold similar opinions and attitudes with their social contacts. This social pressure is stronger when social ties all share convergent opinions and attitudes. In such social networks, individuals receive coherent, repetitive, and reinforcing signals from the alters, thus amplifying network effects in specific directions. That is, an individual may experience greater pressure to support and act in accordance with what the majority of his or her social contacts who share common traits favor and do.

Thus, it is hypothesized that an ego's redistribution attitude will be influenced by the proportion of white- or blue-collars in his or her social network. Specifically, the more an individual's social network consists of white-collar people, the more likely it is that he

or she believes that reducing income disparities is not the responsibility of the government.

The white-collar network effect, in which white-collar individuals dominate one's social network and result in greater opposition to government-led redistribution, might differ depending on the socioeconomic status of the ego and the socioeconomic context of the country to which the ego belongs. In other words, the network effect is moderated by socioeconomic characteristics of the ego and the macro-level context of the country in which the ego's social network is formed.

Thus, the second hypothesis of this paper is that individuals with lower levels of Subjective Social Status (SSS) would be influenced more by their social ties than those with higher SSS. Given that influence within a network frequently flows from those with more resources to those with fewer resources, the subjective social status of individuals may moderate the white-collar network effect. Thus, this study also investigates whether the effect of an individual's social networks being similarly white-collar or blue-collar on redistribution attitudes varies depending on the individual's socioeconomic status.

Lastly, this paper hypothesizes that the white-collar network effect will be stronger in countries with less income inequality. For the network effect to be enabled, social interaction, information sharing, and the acquisition of social norms need to be encouraged among connected individuals. These kinds of social interactions are stronger when there are greater incentives to do so. Hence, in places with high levels of inequality or economic polarization, people are less likely to trust one another and are less motivated to cooperate with each other.

To test the hypotheses, this paper used the 2017 ISSP data to analyze a series of linear mixed effects models. Support for the first hypothesis (a white-collar network effect) was found. Specifically, the greater the number of white-collar social connections, out of all, the greater the likelihood that a person will be opposed to redistribution, even after accounting for their own subjective social

status and other variables related to redistribution attitudes. These results imply that individuals' attitudes and opinions can be reinforced in a particular direction when their social networks are filled with alters who share similar occupational characteristics.

However, the paper's prediction that people of lower socioeconomic status would be more susceptible to the persuasive power of their social networks was not borne out by the data. This suggests that people are just as susceptible to the influence of their peers, regardless of their subjective social status. Instead, this study has found that macroeconomic conditions moderate the effects of individual-level network effects on redistribution attitudes. Redistribution attitudes can be reinforced in a particular direction, but this reinforcement is more pronounced in countries with lower levels of income inequality.

This research adds to our understanding of sociological perspectives on redistribution attitudes. People's perspectives on redistribution are influenced not only by their own socioeconomic status and/or value-laden political identities, but also by the perceptions and opinions of those with whom they socially interact, as well as macro-level socioeconomic situations. Moreover, the findings of this paper offer alternative explanations for so-called "class betrayal voting," or voting against one's socioeconomic class. Examining the social connections of these individuals who vote against their own class and the larger contexts in which they are embedded can shed light on why those with lower incomes oppose redistribution while those with higher incomes support it. Furthermore, the findings in this paper that specific makeups of social networks reinforce attitudes in a more coherent and directed way lend support to previous research on social network homogeneity and heterogeneity. In sum, this study hints that the diversity or heterogeneity of one's social network may be the key to consent, persuasion, and attitude changes in the current politically polarized climate.

network ratio, occupational composition of social network, homogeneous network, heterogeneous network, mixed effects model

Student Number : 2021−29891

Table of Contents

Tables and Figures

Chapter 1. Introduction

The increase in inequality is a global trend, and South Korea is no exception (An & Bosworth 2020; Kim 2020; Kohler 2015). Despite the fact that increasing inequality causes societal harm (UN 2020) and there are moral justifications for opposing inequality (Scanlon 2018), support for redistribution or welfare policies that allocate and transfer resources to reduce inequality has decreased (Bonica et al. 2013). Thus, in order to reduce inequality, it is crucial to investigate how individual preferences towards redistribution are shaped and formed.

A substantial research has shown that people with higher income oppose redistribution, whereas those with lower income support redistribution since they are the main beneficiaries (Meltzer & Richard 1981; Page & Jacobs 2009; Shayo 2009; Steele & Breznau 2019). However, some evidence on the self—interest explanations for redistribution attitudes was inconsistent with actual voting behavior, in which some voters voted against their current income levels (Dallinger 2010; Newman et al. 2015). As a result, a number of alternative explanations, such as those focusing on subjective levels of income and future prospects of income growth, have been proposed. Another similar line of research has emphasized value or ideology. Political psychology or sociocultural values, in particular, have been identified as the primary reasons why low—income people may not prefer a redistribution policy that serves their economic interests. These studies have shown that partisanship, ideology, and value systems were influential in determining individuals' redistribution attitudes (Hurst et al. 2016; Jimenez—Jimenez et al. 2020; Johnston et al. 2017; Kang 2016; Krawczyk 2010; Lee 2018; Shapiro & Young 1989).

Previous literature on redistribution attitudes, however, has neglected the fact that individuals are embedded in social networks and that their attitudes can be shaped and changed by their interactions with others. In other words, most studies have largely

focused on the individual predictors, not interpersonal predictors of redistribution attitudes. Thus, this study aims to investigate the potential effects of people's social networks on their views about redistribution.

This study specifically focuses on the makeup of an individual's social network in terms of social class, as measured by occupation, which may or may not facilitate the spread of redistribution attitudes from one individual to the next. Since individuals in social networks that are filled with people with similar characteristics receive coherent, repetitive, and reinforcing signals, these homogeneous networks tend to amplify network effects in specific directions. That is, an individual may experience greater pressure to support and act in accordance with what the majority of his or her social contacts who share common traits favor and do. However, heterogeneous networks could produce distinct results. In a network filled with different types of individuals, individuals may receive disparate and contradictory signals due to the varied viewpoints of people around them. This can lead to a decrease in the network effects that exert influence in specific directions.

This study hypothesizes that if a person is connected to a large percentage of white-collar individuals who oppose redistribution, he or she is likely to reject it as well. In contrast, if blue-collar workers, who tend to support redistribution, make up the majority of an individual's social network, that individual is more likely to support redistribution.

The white-collar network effect, in which white-collar individuals dominate one's social network and result in greater opposition to government-led redistribution, might differ depending on the socioeconomic status of the ego and the socioeconomic context of the country to which the ego belongs. In other words, the network effect is moderated by the socioeconomic characteristics of the ego and the country-level macro-context where the ego's social network is formed.

Thus, the second hypothesis of this paper is that individuals with

lower levels of Subjective Social Status (SSS) would be influenced by their social ties more than those with higher SSS. Given that influence within a network frequently flows from those with more resources to those with fewer resources, the subjective social status of individuals may moderate the white-collar network effect. Thus, this study also investigates whether the effect of an individual's social networks being similarly white-collar or blue-collar on redistribution attitudes varies depending on the individual's socioeconomic status.

Lastly, this paper hypothesizes that the white-collar network effect will be stronger in countries with less income inequality. For the network effect to be enabled, social interaction, information sharing, and the acquisition of social norms need to be encouraged among connected individuals. These kinds of social interactions are stronger when there are greater incentives to do so. Hence, in places with high levels of inequality or economic polarization, people are less likely to trust one another and are less motivated to cooperate with each other.

By testing linear mixed effects models on the 2017 International Social Survey Programme (ISSP) data, this study confirms that individuals are more likely to adopt redistribution attitudes that align with their peers within social networks, and that this effect may vary depending on the economic context of the country to which individuals belong, but not on individuals' SSS. Specifically, the more a person was connected with white-collar individuals among his or her social ties, the more that person was likely to oppose redistribution. This white-collar network effect was stronger in countries with lower levels of income inequality.

Overall, this study contributes to our knowledge of the sociological perspectives on redistribution attitudes. This study shows that it is not just one's own socioeconomic standing and/or value-laden political identities that shape one's views on redistribution; one's social networks also play a significant role. Notwithstanding some limitations, this study concludes by providing

some suggestions for future studies.

This paper is organized as follows: Chapter 2 reviews the literature on redistribution attitudes and identifies an important gap in the literature, the fact that little attention has been paid to social networks. By reviewing the research on social networks, this study summarizes that in a social network where more alters share similar characteristics, the ego's attitude or behavior is reinforced and strengthened in a certain direction. Based on this finding, this study hypothesizes that the degree to which the ego's social network is white－collar or blue－collar will influence redistribution attitudes. Furthermore, this study posits that this effect may vary depending on the ego's socioeconomic status as well as the macroeconomic context in which the ego's social network is embedded. Next, in Chapter 3, specific methods for testing these hypotheses, including data, variables, and models, are described. Then, Chapter 4 presents the results of both the descriptive and main analyses. Finally, Chapter 5 concludes the paper by summarizing the findings and offering suggestions for future study.

Chapter 2. Literature Review

2.1. Redistribution attitudes

This section provides a comprehensive review of the existing literature on redistribution attitudes, which refer to the preferences of individuals regarding the transfer and allocation of resources (Steele & Breznau 2019). On the one hand, some studies rely on the self－interest framework, which attempts to predict and explain redistribution attitudes in terms of an individual's economic interests and utilities. On the other hand, another line of research emphasizes psychological aspects such as values or ideology to explain attitudes toward redistribution. It is important to note that these two frameworks are not mutually exclusive; rather, they are intertwined and each line of explanation just has a distinct focus and set of interests. Nonetheless, for the sake of clarity, this paper

differentiates between these two frameworks in this section. Overall, the existing accounts fail to consider the social interconnectedness underlying redistribution attitudes. Hence, this study aims to fill the gap in the literature by investigating a neglected aspect of interpersonal influence within social networks.

2.1.1. Self-Interest Framework

According to the self-interest framework, individuals are primarily motivated to support or oppose redistributive policies based on their perception of whether these policies benefit or harm them. In particular, according to models based on the standard self-interest assumption, the demand for redistribution should increase as the ratio of median to mean income decreases (Meltzer & Richard 1981). This framework suggests that lower-income individuals favor redistribution, while higher-income individuals oppose it (Page & Jacobs 2009; Shayo 2009). This is intuitive, as redistribution policies seek to reallocate resources from those with higher income who contributed more to the common tax pool to those with lower income who contributed less (Steele & Breznau 2019). Therefore, people with lower income should support further redistribution, given that they are the primary beneficiaries.

However, previous research on the effect of self-interest motivations on redistribution attitudes is inconsistent with real-world voting behavior, in which some voters vote against their current levels of income (Dallinger 2010; Newman et al. 2015). Consequently, a number of alternative models have been proposed to explain the actual voting phenomenon within the framework of economic self-interest. For instance, Benabou and Ok (2001) showed that redistribution preferences are influenced not only by current income levels, but also by future expected incomes or the possibility of future upward mobility. Those who believe they or their children will earn more than the median income in the near future may oppose the current redistribution policy, even if the current income level is low. In a similar vein, Kuhn (2019) demonstrated that

5

low-income individuals may not desire additional redistribution if they anticipate future economic growth and have a positive outlook on the macroeconomy. On the other hand, some studies have suggested that what matters in one's support for redistribution policy is subjective or relative sense of socioeconomic status, rather than absolute amount of income. For instance, Brown-Iannuzzi et al. (2015) found that those with high subjective status had a low preference for redistribution policies. In contrast, when respondents were informed that their actual status was lower than their self-perception, they tended to support greater redistribution (Cruces et al. 2013).

Overall, these studies indicate that absolute or relative levels of income, wealth, or social status influence the redistribution attitudes of individuals. It is important to note, however, that redistribution is not solely an economic issue; it is also a normative issue. That is, a person with high levels of income and wealth, positive prospects for future growth, and a stable socioeconomic status may favor greater redistribution if he or she holds egalitarian values and norms (Breznau 2010).

2.1.2. Values and Ideology Framework

If one conceptualizes redistribution as a normative issue, individuals' psychological value system or partisan identities would better explain redistribution attitudes. It is common knowledge that leftist ideology or leftwing partisanship favors more redistribution, whereas rightist ideology or rightwing partisanship opposes redistribution (Haidt 2012). Several empirical studies have provided evidence in support of this observation. For instance, individuals with more left-leaning political ideologies expressed more support of redistributive policies (Shapiro & Young 1989). Johnston et al. (2017) demonstrated that people with authoritarian tendencies are more likely to identify with the Republican Party and its ideology due to cultural issues such as abortion, resulting in stronger opposition to redistribution. In the context of South Korea, individuals who identify

with the right−wing political party and have a low income tend to oppose redistribution policies because they prioritized their values and identities over economic self−interest (Kang 2013).

There are reasons to believe that ideology or partisan identity shape political attitudes. First, ideology or partisan identity is predominantly the result of early political socialization and is relatively stable (Feldman & Johnston 2014). Thus, it serves as a long−term partisan commitment, preceding attitudes toward particular issues such as redistribution. Second, they serve as an important heuristic upon which political decision−makers can rely (Downs 1957). Adhering to the preferences of favored parties can help to alleviate cognitive burdens when a person is making decisions on multiple issues. Therefore, individuals whose preferences for redistribution are aligned with ideology or partisan identity may have preferences for redistribution that are not contingent on their economic interests.

There are also studies that explain how individuals' value systems about how economic, political, and social systems ought to function influence their attitudes toward redistribution. If individuals perceive distribution outcomes as natural differences based on people's abilities and endeavors, they will be more likely to oppose redistribution since it is unfair to reallocate resources from those who worked hard and earned high levels of income to those who did not (Hurst et al. 2016; Lee 2018). On the other hand, if one recognizes that income and wealth distribution are largely determined by external factors such as luck, perpetuating income inequality is perceived as unfair, thus increasing support for redistribution (Jimenez−Jimenez et al. 2020; Krawczyk 2010).

In summary, studies based on economic self−interests believe redistribution attitudes should align with individual economic interests, whereas studies based on personal values and ideologies believe redistribution attitudes should align with personal values and ideologies. It is critical to note that these two explanations are neither mutually exclusive nor rivalry. Economic self−interests and partisan

ideologies are intricately intertwined, therefore they cannot be separated. In other words, this paper is not interested in deciding between self–interest or rational–based explanations and values or irrational–based explanations. Instead, this paper attempts to argue that both explanations assume an isolated individual and use individual predictors that do not take interactions with others into account.

In this light, this study attempts to explain redistribution attitudes through the "humans as social animals" perspective, which states that individuals interpret their attitudes and behaviors in light of their social relationships and interactions. By engaging in social relationships with others, individuals can acquire political knowledge and become familiar with social norms. Consequently, the objective of this study is to investigate potential variations in redistribution attitudes based on social networks.

2.2. Social Networks and Redistribution Attitudes

This section describes how social networks matter in shaping one's political attitudes. Social networks serve as channels through which people shape their opinions, attitudes and perception of social norms. People rely on their social networks to get information about politics and learn about what the social norms are. This is why social networks are critical for studying the redistribution attitudes, which is one of the salient political attitudes.

Previous literature has repeatedly shown that social networks matter in shaping citizens' political attitudes and behavior. In political sociology literature, the columbia school first emphasized the interdependence and social embeddedness that influence individual decision makings. In the 1940s, Lazarsfeld et al. (1944) found that people's private conversations with friends, neighbors, and acquaintances have significant influence on their political opinions and decisions, even more than the mass media. This seminal work found that in the 1940 U.S. election, people relied on their social contacts more than the media in getting information about political

candidates and campaigns. Opinion leaders, in particular, who actively use mass media to obtain information, played an important role in disseminating information to others. They are, in other words, the 'hubs' in the social networks. What this implied was that although a majority of people did not actively seek information on media, they could get information by their interpersonal social networks. In a similar study, Katz and Lazarsfeld (1964) showed that discussing political issues with other people in one's social network strongly explained that person's vote choice. Specifically, they found that interpersonal discussion, especially with opinion leaders, was powerful enough to persuade people and make them change their political opinions and behavior.

While the focus has shifted from social network-based approach to political psychology-based approach of Michigan school from the late 1950s, the interest in social networks as an important predictor of political behavior re-emerged by the new Columbian school. Following the tradition of public opinion research emphasizing the role of social networks, the new columbian school continued to prove that social networks matter and cannot be ignored in explaining political attitudes. For instance, La Due Lake and Huckfeldt (1998) showed that a person discussing political issues with others who have high levels of political knowledge, interacting frequently with these others, as well as having a high number of discussants in one's social network were associated with increased political participation. Likewise, McClurg (2006) found that if a person perceived that the discussants had higher political knowledge, they tended to participate more in political processes.

These studies all show that people not only consider their own partisanship or self-interests but also what others think, perceive, and tell them. Hence, social networks can shape one's political attitudes such as redistribution attitudes. What, then, are the specific mechanisms behind this social network effect on political attitudes and behaviors? There are two possible mechanisms: first, social networks function as channels through which political information is

9

passed on, and second, they also function as channels through which individuals perceive what the socially accepted norms are.

Firstly, social networks facilitate the exchange and refinement of information and help the formation of political opinion and behavior. Individuals can refine media-sourced political information through discussion networks (Eveland 2004), share political information, and convert political information into their own political knowledge (McClurg 2006). Eveland and Hivey (2009) found that regardless of the political orientation of the discussants, the more frequently individuals discuss politics with others, the greater their knowledge of the candidate's stance on a variety of political issues. Briefly, information passed on through social networks can help people understand more about politics and shape political opinions.

Secondly, social networks also play an important role in shaping perceived social norms (Lapinski & Rimai 2005; McClurg 2003). Perceived norms reflect each individual's understanding of the collective norms. They can vary across people since they rely on diverse communication processes across people (Lapinski & Rimai 2005). People are more likely to comply with a behavior if they think that it is widespread among their peers and encouraged by others who they interact with (Lapinski & Rimai 2005). McClurg (2003), for example, emphasized that through repeated discussions with people who are interested in and actively participate in politics, individuals can learn about the legitimacy of political participation and the norm that political participation is an essential part of democracy. In a similar vein, Schulman and Levine (2012) also pointed out the influence of collective norms on political participation. They showed that discussing political issues on campus reinforced collective norms about participating in politics, and this actually was associated with increased real-world political participation outside of campus.

To summarize, by learning information and social norms related to politics, people feel social pressure to hold similar opinions and attitudes with their social contacts. This kind of pressure strengthens even more when social ties all have convergent opinions and

attitudes. That is, an individual might feel more pressure to follow what the majority of his or her social contacts support and behave. Mutz (2002a) attributed this psychological pressure to conform to one's social network to a human tendency to reduce conflicts within and between individuals. Considering that people learn about their status and relations with others, as well as how others think via social networks, to whom an individual is socially connected may influence one's opinions and attitudes toward redistribution. This paper refers to this as "social network effects on redistribution attitudes".

2.3. Social Network Effect

This paper argues that homogeneous social networks would have greater effects on redistribution attitudes. It is well-established that homogeneous versus heterogeneous networks can produce distinct results. Since individuals within homogeneous social networks receive coherent, repetitive, and reinforcing signals, homogeneous networks tend to reinforce network effects in particular directions. On the other hand, in a heterogeneous network, people can get divergent and conflicting signals because their peers have different points of view, which weakens network effects that push in certain directions.

2.3.1. Homogeneous Social Networks

 The homogeneity of social networks has long been emphasized in the literature of political sociology. Homogeneity was determined by the degree to which individuals with whom a respondent discusses political issues share similar characteristics. If a respondent's social ties, that is, alters, share similar political opinions and preferences, this respondent is said to be in a homogeneous social network, according to studies.

    In particular, a substantial amount of research has focused on alters' partisanship to measure homogeneity in social networks. Partisanship or partisan identity is a set of beliefs and feelings that culminate in a sense of psychological attachment to a political party

11

(Campbell et al. 1980). Partisanship is an important heuristic that voters rely on in their political decision makings (Downs 1957). Without knowing every detail about the complicated political world and issues, partisan identity can help voters judge and make decisions more efficiently and coherently. However, partisanship has been identified as the primary source of biases in political decision-making processes and motivated reasoning. For example, partisanship causes people to selectively accept information that is beneficial to their in-group or pro-attitudinal beliefs while rejecting information that contradicts their predispositional beliefs (Klar 2014; Peterson & Iyengar 2021). In addition, strong partisanship results in the portrayal of political processes as binary, as a contest between "us" and "them." Consequently, the social pressure to conform to in-group opinions and norms that differ from those of the out-group is intensified (Hutchens et al. 2019; Klar 2014; Suhay 2015).

In this light, previous literature has highlighted the negative influence of homogeneous political communication networks on democratic processes. For instance, there is a long tradition of research that shows that political discussion in homogeneous networks strengthens individuals' pre-existing attitudes (Berelson et al. 1954; Huckfeldt et al. 1995; Mutz 2006). Moreover, individuals who engage in political discussion primarily with those who share the same partisan affiliations and ideological perspectives are inclined towards information that is significantly biased in favor of their own in-group (Druckman et al. 2018). Similarly, social media studies have shown ideological sorting in online communication networks has led to an echo chamber, where people are primarily exposed to like-minded people and congruent views (Adamic & Glance 2005; Colleoni et al. 2014; Conover et al. 2012). Even if they receive counter-attitudinal information, people in homogeneous networks are more likely to reject it due to motivated reasoning (Klar 2014; Redlawsk 2002; Taber & Lodge 2006).

Overall, homogeneous social networks can reinforce one's attitudes and behavior in a specific direction for the following two

reasons. First, individuals are repeatedly exposed to similar opinions and information in homogeneous social networks. Imagine my hypothetical social network, for example. Having a social connection with a Republican would expose me to pro−Republican attitudes. If I have a large number of social ties with Republicans who share the same partisan identity, I would be exposed to pro−Republican attitudes more frequently in this homogeneous network. Ultimately, being in a homogeneous social network would reinforce one's political attitude in a specific direction. In a homogeneous social network where signals and cues are coherent, consistent, and repetitive, there is little uncertainty, which may have an effect on real−world behavior. Previous research has demonstrated, for instance, that homogeneous social networks prompt individuals to make their vote decisions earlier and increase their propensity to disregard other vote options. (Kim et al. 2013; Schulz−Herzenberg 2014).

Second, homogeneous networks reinforce social conformity effects (Visser & Mirabile 2004). Social conformity effects refer to the tendency of individuals to adopt the attitudes, thoughts, and opinions of their socially connected peers (Mutz 2002b; Mutz 2006). Homogeneous networks make identity salient and influence people's attitudes through conformity pressures. Thus, like−minded people tied around shared identities are more likely to strengthen each other's opinions (Klar 2014). Even if an individual had different views on an issue, the likelihood of changing one's political preferences and conforming to what others prefer was higher in homogeneous social networks where peers held similar beliefs (Yoon 2017). This implies that individuals are more likely to follow what socially connected people think, believe, and behave in a homogeneous social environment.

In conclusion, the more homogeneous a social network is, the more one is influenced by the redistribution attitudes of socially connected others. Imagine that all of the individuals in a person's social network oppose redistribution. This attitude will be

disseminated and become a social norm, be reinforced through social interaction, and increase conformity pressures as a result. As a result, even if a person was initially in favor of more redistribution, repeated exposure to information opposing redistribution and the feeling that one must adhere to the norms may cause that person to change his or her views on redistribution.

2.3.2. Heterogeneous Social Networks

In contrast to homogeneous social networks, which reinforce conformity pressure, heterogeneous social networks generate cross-pressure, in which individuals are influenced by diverse and opposing viewpoints (Lazarsfeld et al. 1944). Cross-pressure may or may not have positive ramifications in terms of democracy. Several studies have demonstrated, for instance, that heterogeneous social networks increase political knowledge and tolerance, while decreasing hostility towards out-groups (Amsalem & Nir 2021; Druckman et al. 2018; McClurg 2006; Mutz 2002b; Sunstein 2002). On the other hand, some studies have shown that heterogeneous social networks result in low levels of political participation (Lazarsfeld et al. 1944; Kim et al. 2013; Mutz 2006; Schulz-Herzenberg 2014). In either case, heterogeneity in the social network inhibits the reinforcement of one-sided attitudes.

In some ways, heterogeneous social networks serve as channels for new information to spread, reducing affective polarization and animosity toward outgroups. In heterogeneous political discussion networks, for instance, people are exposed to diverse viewpoints (McClurg 2006; Mutz 2002b). Mutz (2002b) empirically showed that exposure to diverse information promotes perspective taking, which is thinking about political issues from multiple points of view, resulting in higher political tolerance.

Moreover, individuals in heterogeneous networks are also less likely to engage in partisan-motivated reasoning than people in homogeneous networks (Klar 2014). As a result, the attitudes they develop toward the outgroup incorporate both positive and negative

14

assessments and thus become more ambivalent, less polarized (Huckfeldt et al. 2004). In other words, heterogeneity can result in more political openness and tolerance. Similarly, research on the contact hypothesis indicates that social ties with outgroup members are beneficial to society. Interaction with outgroup members, for example, increases people's willingness to compromise with them (Bond et al. 2018), allowing them to see commonalities with others (Wojcieszak & Warner 2020).

Heterogeneity in a social network may motivate people to explore alternate points of view (Ditto et al. 1998), prompting them to reevaluate their current convictions and resulting in the development of weaker attitudes. In a network with diverse characteristics, the presence of cross-pressure results in an increased level of ambiguity. Heterogeneous groups, characterized by diversity and the absence of a shared identity, typically exhibit less efficacy in reinforcing or augmenting identities compared to homogeneous groups.

On the other hand, some studies have emphasized the negative aspects of heterogeneous social networks. For example, Lazarsfeld et al. (1944) argued that cross-pressure induces psychological conflict within individuals, making them less interested in politics, more ambiguous in their political decisions, thereby delaying vote decisions, and less willing to participate in politics. Mutz (2006) found support for this argument using U.S. presidential election data sets collected in 1992 and 1996, concluding that opposing political opinions contain an element of conflict, which can lead to psychological ambivalence, which in turn discourages political participation. Mutz (2002a) explains two psychological mechanisms undergirding heterogeneity discouraging political participation: intra-personal ambivalence and interpersonal conflict avoidance. To be specific, cross-cutting exposure or heterogeneous signals may cause people to be unsure of where they should stand on political issues, thus eliciting intrapersonal ambivalence. Subsequently, this could lead to less political participation as individuals are not certain

of what to do and follow. At the same time, cross−cutting networks can also trigger interpersonal conflict avoidance. That is, a person may avoid picking a side and choose one among different competing opinions and attitudes, which could result in lagged decision makings.

People in heterogeneous networks show less consistency in their attitudes and behavior during elections (Kim et al. 2013; Schulz−Herzenberg 2014). When communities are more politically heterogeneous and the partisan cues emanating from discussants are diverse, partisan behavior is less predictable and mass volatility should increase. Specifically, voters with politically diverse or heterogeneous discussion contexts are more likely to defect from their party identification when they vote, are more likely to defect from their previous vote choice in subsequent elections, have weaker partisan ties and are more likely to consider alternative political options (Schulz−Herzenberg 2014). Therefore, their most heterogeneous communities are the least effective at mobilizing votes for the dominant parties (Dalton & Flanagan 2017)

To sum up, heterogeneous social networks are associated with more ambiguous and less consistent attitudes. Therefore, this paper predicts that homogeneous social networks will have more influence on redistribution attitudes.

2.4. White−Collar Network Effect

While this study does not delve into the potential positive or negative consequences of homogeneity or heterogeneity in networks, it is crucial to consider with whom individuals are socially connected. If a person is socially connected to people who share similar characteristics with each other, that person's social network is more likely to be homogeneous. In other words, within this ego's social network, it is more likely that the ego is under pressure to behave or think as alters. In contrast, an ego's social network is more likely to be heterogeneous when alters who are socially connected to the ego have diverse characteristics; consequently, this type of social network exerts less conformity pressure on the ego.

What are the criteria for determining whether a social network is homogeneous or heterogeneous? Previous studies have relied primarily on partisanship or consistency of political attitudes to identify homogeneity in social networks, as they were interested in highly partisan and ideological political attitudes. In contrast to previous research that focused on partisan or ideological homogeneity or heterogeneity, this study focuses on socioeconomic similarities and differences in social networks to more efficiently reflect the context of redistribution. This is due to the fact that the redistribution issue involves the politics of resource allocation among diverse social groups.

Given that the redistribution attitude is a problem of resource allocation based on the calculation of how much one loses and gains, social status is of great importance. Nonetheless, if social status is the only predictor of redistribution attitudes, we cannot explain why some important proportion of low-income individuals oppose redistribution while some high-income individuals support it. It is therefore essential to consider not only the individual's own income and status, but also the status of those who surround that individual. In other words, not only does one's own social class matter, but also the social class of one's family, friends, and acquaintances.

In this regard, this study investigates the social status of alters based on whether they have white- or blue-collar jobs. This occupation-based class measure and the resulting distinction between blue-collar and white-collar jobs are more relevant given that the dependent variable is political attitudes regarding income — specifically, the extent to which individuals support government intervention to reduce income disparities between high- and low-income individuals. It has been suggested that blue-collar individuals tend to support redistribution and more state intervention whereas white-collar individuals oppose them. For example, compared to those who identify with traditional blue-collar federations, members of white-collar federations favor market allocation of incomes, less redistribution, a greater degree of privatization, and are more

skeptical of state intervention (Arndt 2018). Consequently, according to this reasoning, the more white-collar family members, friends, and acquaintances people have within their social networks, the more likely they are to have a social network consisting of individuals who are opposed to redistribution. Contrary, if people have more blue-collar social ties, their social networks are likely to consist of individuals who prefer redistribution.

In other words, it is argued that an ego's redistribution attitude will be influenced by the proportion of white- or blue-collars in his or her social network. For instance, assume that the proportion of a certain occupational makeup in a person's social network is high. This implies that the network has a high proportion of others with similar social status characteristics with one another. This kind of homogeneity will exert pressure on the ego to formulate attitudes toward redistribution in a particular direction, as it will facilitate the exchange of information and the development of norms on a particular issue within the network. Hence, this study predicts that, even after controlling for one's own SSS, composition of others' occupations in one's social network would be associated with his or her redistribution attitudes.

Hypothesis 1 [White-Collar Network Effect Hypothesis]: The more an individual's social network consists of white-collar people, the more likely it is that he or she believes that reducing income disparities is not the responsibility of the government. Stated differently, the more a person's social network is dominated by blue-collar individuals, the more likely he or she is to believe that the government should reduce income disparities.

2.5. Differential Network Effect by SSS
It is important to note that network effects can be disproportional; the effect can flow from individuals with more resources to those with fewer resources. In this regard, this paper tests whether homogeneous social networks have different effects on redistribution

attitudes depending on one's socioeconomic status, measured by Subjective Social Status (SSS). More specifically, this paper argues that social network effects on redistribution attitudes would be greater for those with lower SSS.

There are several reasons why this paper predicts there would be differential social network effects by individuals' socioeconomic status. Katz and Lazarsfeld (1964) showed that social status played a crucial role in influencing the manner in which individuals acquired information and formed opinions on public issues. Particularly, people who had higher social and economic status than their counterparts were having influence over others in terms of information acquisition and opinion formation on public issues. Moreover, high political knowledge is correlated with high levels of education, income, and political interest; as a result, those with greater socioeconomic resources have access to more political resources and, consequently, more information (Huckfeldt et al. 2000). This suggests that the flow of information delivery within the network is from those with rich political knowledge to those with little knowledge (Huckfeldt et al. 2000). In other words, the network's distribution of information influence is asymmetric, favoring those with greater resources over those with less. Likewise, within a social network, minorities are more sensitive to the opinions of majorities while majorities are not (Huckfeldt & Sprague 1987; 1995). DiMaggio and Garip (2012) also noted that in heterogeneous networks, members with higher status benefit more from network effects than those with lower status. In heterogeneous networks, the ability of lower-status members to serve as bridges to facilitate the diffusion of information from lower-status to higher-status members is hindered. Overall, the argument put forth is that individuals belonging to the higher social strata wield a disproportionate amount of influence over those belonging to the lower social strata.

To summarize, this study predicts that those with a lower SSS would experience different social network effects than those with a higher status. Particularly, individuals with lower levels of SSS would

be influenced by their social ties more than those with higher SSS.

Hypothesis 2 [Differential White-Collar Network Effect By SSS]: The white-collar network effect, in which having more white-collar ties out of all social ties leads to opposition to government-led redistribution, will be larger among those with lower SSS.

2.6. Differential Network Effect by Country-level Inequality

An individual's political attitude can be influenced not only by the other people in his or her network, particularly by those with more resources to those with fewer resources, but also by the context that shapes the network. There may be larger sociopolitical contexts that make interpersonal interaction within one's social network more vital. In other words, macro-level context may matter in terms of white-collar network effects on redistribution attitudes. In this regard, this paper focuses on the macroeconomic situation of each country, within which the social networks of individuals are formed and embedded.

More specifically, this study expects that the degree of income inequality in a country will moderate the effects of white-collar networks on the redistribution attitudes of individuals in that country. Then why would this study suspect that macroeconomic inequality is a critical context in which some individuals are more susceptible to being influenced by their social ties than others? To have an impact, a network needs to facilitate social interaction, information sharing, and the acquisition of social norms among connected people. Since confirmation bias and social pressure to conform are stronger where there are greater incentives to do so, we can expect the white-collar network effect to vary across countries' macroeconomic contexts. That is, in places with high levels of inequality or economic polarization, people are less likely to trust one another and are less motivated to cooperate with each other. Reduced economic inequality, on the other hand, is associated with increased trust and

cooperation among social groups, which may be related to higher levels of network effects on individuals' redistribution attitudes.

Economic inequality has been shown to have a negative effect on people's willingness to trust one another in social situations, which in turn affects the degree to which individuals are willing to be influenced by others. For instance, Rothstein and Uslaner (2005) argue that inequality leads to a decrease in trust because people in unequal societies lack a sense of shared purpose and view society as a zero-sum game between themselves and others. Conversely, in a more equal society where people tend to trust one another more, the risks and uncertainties associated with others' intentions and actions are relatively lower. Hence, people can expect others to behave as expected, which could facilitate cooperation with one another (Fukuyama 1995).

In a similar vein, a simulation conducted by De Courson and Nettle (2021) showed that low trust and zero cooperation were the resulting equilibrium when resources were unequally distributed among populations. In a highly unequal environment, desperate people's strategies involved the exploitation of others, whereas wealthy individuals avoided all social interaction. Sanchez-Rodriguez et al. (2022) found a similar pattern, demonstrating that in a greater economic disparity, individuals tended to cherish normative self-enhancement values, which are related to the psychological motive that "I" should be more successful. This type of value is associated with the pursuit of personal achievement and focuses on the dominance of the individual while emphasizing self-interest (Schwartz 1992). Meanwhile, in a lower level of economic inequality, individuals were more focused on values of normative self-transcendence, which highlights the significance of transcending one's own self-interest and caring for others (Schwartz 1992). The main point of these studies is that when there is a low degree of inequality, people care about others more and try to meet their needs than when there is a high degree of inequality. Hence, cooperative behaviors that require reciprocity and sharing are more likely to be

prevalent in more equal macro-level contexts.

To sum up, this study predicts that the effects of white-collar network ratio would be moderated by country-level macroeconomic situations. In specific, the influence of white-coller network on redistribution attitudes will be greater for those individuals in countries with lower levels of income inequality.

Hypothesis 3 [Differential White-Collar Network Effect By Country-Level Income Inequality]: The white-collar network effect, in which white-collar network ratio leads to opposition to government-led redistribution, will be larger for individuals in countries with lower levels of gini coefficients.

Chapter 3. Methods

3.1. Data

This study utilizes data from the 2017 International Social Survey Programme (ISSP), whose topic was 'Social Networks and Social Resources.' The 2017 ISSP data includes social network-related variables, which serve as the primary independent variables in this study. Since many countries[1] participated in the collection of the data, modes of data collection, sampling methods, and other details of survey varied depending on the country and institutes that were in charge of the fieldwork. In general, the survey was conducted on people aged 18 years and older, with exception of Finland (15 to 74 years), and Slovakia (16 +), Suriname (21 to 74). Denmark and Sweden had cut-off ages, 79 years and 80 years-old, respectively, while other countries did not have any age limitations. Baseline method of sampling was 'probability sampling', with some

---

[1] Austria (AT); Australia (AU); Switzerland (CH); China (CN); Czech Republic (CZ); Germany (DE); Denmark (DK); Spain (ES); Finland (FI); France (FR); Great Britain (GB-GBN); Croatia (HR); Hungary (HU); Israel (IL); India (IN); Iceland (IS); Japan (JP); Lithuania (LT); Mexico (MX); New Zealand (NZ); Philippines (PH); Russian Federation (RU); Sweden (SE); Slovenia (SI); Slovakia (SK); Suriname (SR); Thailand (TH); Taiwan (TW); United States (US); South Africa (ZA)

countries adopting more complicated methods such as systematic random sampling, stratified sampling, or multistage sampling. Mode of data collection also varies across countries, with options including face-to-face interview, Computer Assisted Web Interview (CAWI), Computer Assisted Self-Interview (CASI), and telephone interview[2].

After data cleaning, there are 12,001 respondents left in the final data of interest. Among 30 countries participating in the 2017 ISSP data collection, Slovenia (SI) did not measure the dependent variable, the United Kingdom (GB-GBN) did not measure the moderating variable, and Suriname (SR) and Taiwan (TW) did not measure the 2-level variable; consequently, they were excluded from this paper's analysis. The final data, therefore, includes 26 countries. Table 1 presents the sample size by country.

Table 1. Sample size by each country

Country	AT	AU	CH	CN	CZ	DE	DK	ES
N	444	481	432	734	375	549	371	659
Country	FI	FR	HR	HU	IL	IN	IS	JP
N	333	544	355	337	417	655	589	219
Country	LT	MX	NZ	PH	RU	SE	SK	TH
N	347	402	483	324	306	441	727	184
Country	US	ZA						
N	524	769						

As shown in Table 1 above, the sample sizes differ across countries. If there are significant country-level differences in social network effect, this might be problematic since the countries with larger sample sizes will be weighted more in the analyses and thus might bias the result. As will be explained in more detail below, there are also country-level differences in distribution of variables. Therefore, this paper adopts several approaches that take into account the country-level variances along with individual-level

---

[2] For more information, please refer to the variable report in the following link: https://www.gesis.org/en/issp/modules/issp-modules-by-topic/social-networks/2017

variances. Further information on choice of modeling is provided in Section *3.3. Models*.

3.2. Variables

3.2.1. Dependent variable: Redistribution Attitudes

The dependent variable is the attitudes of each respondent regarding redistribution. On a 5-point Likert scale, respondents were asked to what extent they agree or disagree with the statement that it is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes (1: strongly agree ~ 5: strongly disagree). Hence, the greater the value, the greater the respondent's support for redistribution. The respondents who answered 'Can't choose' or did not answer were removed from the sample.

3.2.2. Independent Variable: White-Collar Network Ratio

The main independent variable is the white-collar network ratio, which can be seen as occupational-based homogeneity of social networks. This paper relies on the position generator method in order to measure the white-collar network ratio. Here, I first briefly explain these two methods of measuring social network-related variables, and then argue that position generators can better capture the redistribution context of this paper.

Name generators, which have been more commonly used in the previous literature on social networks, focus on generating a list of ego-centric social networks (Lin 1999). Generally, respondents or the egos are asked to give the names of alters, who are socially close to them. Based on these specific names generated, name generators collect further information about these individuals. For instance, respondents give information on their alters' characteristics such as age, gender, educational attainment, and partisanship, as well as information on whether these alters know each other. Hence, an ego's social network is homogeneous if alters share similar content

of characteristics. However, in terms of redistribution attitudes, structural and hierarchical positions are more salient than other characteristics of social contacts.

Utilizing position generators is useful in this regard. Position generators provide respondents with a list of socially significant and hierarchically distinct occupations. This list consists of a small number of occupations that serve as representative examples for describing the hierarchy of existing occupations (Lin & Dumin 1986). In position generators, respondents are asked if they know anyone in each of the listed structural positions. These occupations are regarded as reliable indicators of the resources contained within a social network. In other words, knowing someone with a particular occupation implies accessible resources (Verhaeghe & Li 2015) or latent utility of social ties prior to activation (Hallsten et al. 2015). This is why several studies (Cepić & Tonkovi 2020; Van der Gaag et al. 2008) have relied on the position generator to measure social capital.

The position generator questionnaire that this paper used is as follows: "Here is a list of jobs that people you know may have. These people could be family or relatives, close friends or someone else you know. By 'knowing' a person, we mean that you know him/her by name and well enough to contact him/her. [...] If you know several people who have a job from the list below, please only tick the box for the person who you feel closest to. Each of these jobs could be held by a woman or a man. [...] Do you know a woman or a man who is...?" The respondents were asked to tick only one box on each line as illustrated in Figure 1.

Figure 1. Position Generator Questionnaire in 2017 ISSP

	Family or relative	Close friend	Someone else I know	No one	Can't choose
a. a bus/lorry driver	1	2	3	4	8
b. a senior executive of a large company	1	2	3	4	8
c. a home or office cleaner	1	2	3	4	8
d. a hairdresser/barber	1	2	3	4	8
e. a human resource manager/personnel manager	1	2	3	4	8
f. a lawyer	1	2	3	4	8
g. a car mechanic	1	2	3	4	8
h. a nurse	1	2	3	4	8
i. a police officer	1	2	3	4	8
j. a school teacher	1	2	3	4	8

The main independent variable of this study, white-collar network ratio, was operationalized based on the position generators as follows: Those who responded 'Can't choose' were dropped first. If respondents stated that they knew someone in each occupation, or if they checked one of the boxes numbered 1 through 3, I coded the variables (a-j) as 1. If respondents answered that they did not know anyone in each occupation, that is, if they checked the fourth box, I assigned the variables (a-j) the value 0^3.

Then, the list of jobs was categorized into blue-collar and white-collar jobs based on functional approach(Hyman & Price

---

[3] This paper makes no distinction between families, friends, and acquaintances because it is not concerned with the effects of strong versus weak ties. Social connections with family and friends are traditionally regarded as "strong ties," while connections with acquaintances are regarded as "weak ties." However, there was a clarification in the survey for respondents that stated, "By 'knowing' a person, we mean that you know him/her by name and well enough to contact him/her." This means that we do not need to make an arbitrary distinction between strong and weak ties and treat them as measuring the same concept: class-based homogeneity of social networks.

2016)[4]. Blue-collar jobs are 'a bus/lorry driver', 'a home or office cleaner', 'a hairdresser or barber', and 'a car mechanic'. White-collar jobs are the rest — a senior executive of a large company; a human resource manager/personnel manager; a lawyer; a nurse; a police officer; and a school teacher. Next, I added up the values by each category to construct two variables: blue-collar network volume and white-collar network volume. Finally, white-collar network ratio is calculated by dividing the white-collar network volume by the sum of white-collar and blue-collar network volumes (white-collar network ratio = white-collar network volume / (white-collar network volume + blue-collar network volume)).

Assume, for instance, that a respondent indicated that he or she knew 'a bus/lorry driver', 'a hairdresser or barber', 'a car mechanic', and 'a school teacher' from the position generator. This respondent has three social ties in blue-collar occupations and one contact in white-collar occupations (blue-collar network volume=3, white-collar network volume=1). The white-collar network ratio of this respondent is therefore ¼. Let us compare this respondent to another respondent who answered that he or she knew someone who is 'a lawyer', 'a human resource manager', 'a police officer' and 'a home or office cleaner'. This respondent has three contacts in white-collar occupations and one blue-collar contact. Thereby, the white-collar network ratio would be ¾.

To summarize, the white-collar network ratio is the proportion of a person's social ties that consist of professionals in white collar occupations. In this manner, this variable captures the relative composition of an individual's social network. The greater the value,

---

[4] According to the functional approach toward the working class, white-collar employees are defined as those who perform the following functions: administration; design analysis and planning; supervisory; commerce. These jobs demand specialized experience and rigorous education. Blue collar jobs, on the other hand, involve performing the manual work which requires physical involvement and efforts. These jobs require technically skilled personnel who are formally trained and certified like: mechanics, plumbers, electricians and structural workers. Blue- collar jobs can also be performed by low-skilled people who are designated to perform simple tasks such as cleaning, maintenance and assembly line work.

the greater a person's connections to those with similar white-collar occupations. As an illustration, if a person's entire social network consists of white-collar professionals, that person's white-collar network ratio is 1. This individual has an entirely white-collar social network. Conversely, if a person has a social network consisting solely of blue-collar individuals, his or her white-collar network ratio would be 0. That is, this person's social network is highly homogeneous, consisting entirely of blue-collar workers. In a similar vein, if a person has an equal number of social connections with both white-collar and blue-collar individuals, his or her social network is heterogeneous and white-collar network ratio would be 0.5.

It is important to note that this operationalization differs from that of previous research, which has utilized either volume-based or position score-based measures. I contend that the white-collar network ratio captures the homogeneity of class-based social networks more effectively than conventional measures.

Firstly, some studies have employed the 'network volume' measure, which quantifies the absolute number of social ties. Some individuals may have larger social network volume, for instance because they have large families and relatives. If this is the case, they will know more individuals with diverse occupations than those with small families and relatives listed on the position generators (Van der Gaag et al. 2008). Hence, some studies contend that greater values of network volume indicate greater heterogeneity. The logic is that if a respondent's network volume is sufficiently large, they must have selected a mixture of white-collar and blue-collar jobs.

This logic does not, however, apply well to this paper. If greater network volume values indicate greater heterogeneity, then smaller network volume values should indicate greater homogeneity. Imagine a person with two ties, one to the chief executive officer of a company and the other to a car mechanic. This individual has a low network volume, but a highly heterogeneous social network. This is the reason why this paper does not employ network volume, the most commonly employed measure in the literature.

Secondly, some studies have used position scores from ISCO−08[5] to measure how high or low status one's social network is. After the seminal work by Lin and Dumin (1986), which used occupational scores to assess the resources associated with the network members' occupational positions, several studies have used different score−based measures. These include the average position scores (sum of position scores of all the checked occupations divided by the number of checked occupations) and the maximum position scores (the highest scores among the checked occupations). The larger the average position score, and the higher the maximum position score, the more powerful and prestigious the network resources are. These measurements would be useful in other contexts, but for this paper, the main focus of interest is in homogeneity not prestigiousness.

Another option based on position scores is to compute the range of position scores within one's social network. The range is the difference between the highest and the lowest position scores of the checked occupations. This operationalization reflects the diversity of social network resources (Verhaeghe & Li 2015). However, high/low diversity and heterogeneity/homogeneity are not essentially synonymous.

For example, imagine that Jane knows four people in the position generator − one among them has a blue−collar job and a low position score of 20, and three others are white−collar and have high position scores of 90. The range of Jane's social network is therefore 70. And there is Eric, who indicated that he knows four people in the position generator. One of them is white−collar and has a position score of 90, one is white−collar and has a position score of 70, one is blue−collar and has a position score of 30, and the final one is blue−collar and has a position score of 20. Eric's range is also 70.

---

[5] ISCO−08 is the 2008 version of International Standard Classification of Occupation. The 2017 ISSP also uses the ISCO−08 when coding respondents' occupations. For more details, please refer to: https://www.ilo.org/public/english/bureau/stat/isco/isco08/

Despite having the same range, Jane's social network is more homogenous than Eric's. That is, Jane's ties share similar characteristics with one another more than Eric's. Jane's white-collar network ratio is ¾ (three white-collar ties out of four social ties), whereas Eric's is ½ (two white-collar ties out of four ties). To put it another way, Jane has a more homogeneously white-collar social network than Eric does.

To summarize, the white-collar network ratio is the main independent variable in this study, and it measures the class-based composition of social networks. The greater the value, the more white-collar an individual's social network is. In contrast, the smaller the value, the more blue-collar an individual's social network is.

3.2.3. Moderating Variable: Subjective Social Status

Individual-level moderating variable for testing hypothesis 3 is 'Subjective Social Status (SSS),' which describes how individuals evaluate their social status in relation to that of other groups (Gidron & Hall 2017). SSS can capture how resourceful an individual is within one's social network. It is an inclusive measure of socioeconomic status, encompassing not only economic status but also the social respect and esteem that one gets from others (Gidron & Hall 2017). Hence, this paper uses SSS as a proxy of one's socioeconomic status within their social surroundings. In the survey, respondents were asked to indicate their social standing on a 10-point scale from 1 (Lowest, Bottom) to 10 (Highest, Top). Therefore, the greater the value of SSS, the higher the perceived social status in comparison to others.

3.2.4. Moderating Variable: Gini Coefficient

As for country-level variables, this paper uses the Gini inequality index. The Gini coefficient is based on the comparison of cumulative proportions of the population against cumulative proportions of income they receive, and it ranges between 0 in the case of perfect

equality and 1 in the case of perfect inequality[6].

 This paper utilizes the 2017 OECD-published Gini coefficient along with ISSP data. However, Australia (AU) and Mexico (MX), which do not have 2017 measurements, have been replaced with 2016 values, while Japan (JP) has been replaced with 2018 values. In addition, the values of China (CN), India (IN), the Philippines (PH), and Thailand (TH) were used as estimates by the World Bank in 2017 because OECD statistics were not available. Table 2 presents the Gini coefficients by country.

Table 2. Gini coefficients by each country

Country	AT	AU	CH	CN	CZ	DE	DK	ES
Gini	0.275	0.330	0.299	0.391	0.249	0.289	0.264	0.333
Country	FI	FR	HR	HU	IL	IN	IS	JP
Gini	0.266	0.292	0.359	0.289	0.334	0.359	0.250	0.334
Country	LT	MX	NZ	PH	RU	SE	SK	TH
Gini	0.374	0.459	0.335	0.423	0.317	0.282	0.220	0.365
Country	US	ZA						
Gini	0.390	0.618						

3.2.5. Control Variables

As for control variables, this paper uses basic socio-demographic factors, variables that were considered in prior research to explain redistribution attitudes, and also country dummies.

 Basic socio-demographic variables include sex (-1: Male, 1: Female), age (16 ~ 96), education level (0: No formal education ~ 6: Upper level tertiary (Master, Doctor)), and religious attendance (1: Several times a week or more often ~ 8: Never).

 To sum up, the descriptive statistics for all the variables in models are shown in Table 3.

---

[6] For more information, please refer to the variable report in the following link
https://data.oecd.org/inequality/income-inequality.htm

Table 3. Descriptive Statistics of Raw Variables

Variable	Mean	SD	Min	Max	Skew-ness	Kur-tosis
[Y] Redistribution Attitude	2.31	1.13	1	5	0.65	−0.42
[X] White-Collar Network Ratio	0.58	0.14	0	1	−0.29	2.47
[M] SSS	5.70	1.83	1	10	−0.23	0.10
[M] Gini Coefficient	0.34	0.09	0.22	0.62	1.64	2.84
Sex	Male (5,752); Female (6,249)					
Age	46.14	16.13	16.00	96.00	0.20	−0.71
Education	3.52	1.60	0.00	6.00	−0.11	−0.82
Religious Attendance	5.69	2.28	1.00	8.00	−0.23	0.10

Although Table 3 displays the descriptive statistics of raw variables, this paper uses group-mean centered individual-level variables and grand-mean centered country-level variables in mixed effects models, as further explained in the methodology section. In this regard, Table 4 shows the descriptive statistics of these mean-centered variables.

Table 4. Descriptive Statistics of Mean-Centered Variables

Variable	Mean	SD	Min	Max	Skew-ness	Kur-tosis
[Y] Redistribution Attitude	2.31	1.13	1	5	0.65	−0.42
[X] White-Collar Network Ratio	0.00	0.13	−0.64	0.47	−0.30	2.43
[M] SSS	0.00	1.70	−6.04	5.46	−0.03	0.57
Gini Coefficient	0.00	0.09	−0.12	0.28	1.64	2.84
Sex	Male (5,752); Female (6,249)					
Age	0.00	15.81	−33.86	51.51	0.20	−0.71
Education	0.00	1.46	−4.30	3.81	0.02	−0.63
Religious	0.00	1.92	−6.64	4.75	−0.51	−0.06

Attendance							

Gini Coefficient is the only country-level variable thus grand-mean centered, whereas all other variables are group-mean centered except Sex, which is coded as Male (−1) and Female (+1).

3.3. Models

To empirically test the hypotheses, this paper examines a series of mixed-effects models[7], which take into account the multi-level structure of the data where individual respondents are nested within a specific country. In the models, individual-level variables are denoted with the subindexes i (individual-level) and j (country-level). Country-level variable, the gini coefficient of each country, is denoted with the subindice of j. Following the instruction of Algina and Swaminathan (2011), all the individual-level variables are group-mean centered and the country-level variable is grand-mean centered in the analyses.

Model 1 is random intercept model allowing intercepts to vary across countries: $Y_{ij} = \beta_{0j} + \beta_1 WCNR_{ij} + \beta_2 SSS_{ij} + \beta_3 Gini_j + \beta_k Controls_{ij} + e_{ij}$. In this model, the dependent variable, Y_{ij} is ith respondent's opinion on whether the government should reduce income differences in country j and β_{0j} is the country-specific intercept for the jth country. Since the intercept is allowed to vary at the country-level, it can be extended as follows: $\beta_{0j} = \gamma_{00} + u_{0j}$, where u_{0j} is a random effect for country j. Country j's average levels of redistribution attitude can differ from the overall intercept γ_{00}. By plugging in the extended intercept component in the model, the model 1 is re-written as follows:

$$Y_{ij} = (\gamma_{00} + u_{0j}) + \beta_1 WCNR_{ij} + \beta_2 SSS_{ij} + \beta_3 Gini_j + \beta_k Controls_{ij} + e_{ij} \quad (1)$$

β_1 is the slope of $WCNR_{ij}$, the white-collar network ratio of

---

[7] Considering the debate among scholars on which model to choose under different assumptions, this paper tested fixed-effects models for the robustness check. Specifically, the fixed-effects models include country dummies to capture country-specific unobserved heterogeneities. The results of fixed-effects models were not different from that of mixed-effects models, and are presented in Appendix.

individual i in country j. To recapitulate hypothesis 1, the higher a person's white-collar network ratio, the more that person would think that reducing income differences is not the government's responsibility. Hence, Model 1's main estimates of interest is β_1, which is expected to be positive and statistically significant.

Model 2 adds the random coefficients to Model 1, allowing slopes to vary across countries:

$$Y_{ij} = (\gamma_{00} + u_{0j}) + (\gamma_{10} + u_{1j})WCNR_{ij} + \beta_2 SSS_{ij} + \beta_3 Gini_j + \beta_k Controls_{ij} + e_{ij} \quad (2)$$

In this model, the coefficient of main independent variable, $WCNR_{ij}$, is composed of fixed part (γ_{10}) and random part (u_{1j}), resulting in country-specific slopes. Model 2 also tests hypothesis 1, hence the main focus would be whether the random slopes are statistically significant.

Model 3 and Model 4 add an individual-level interaction term between White-Collar Network Ratio and SSS to the previous models - Model 1 and Model 2 respectively. The difference between Model 3 and Model 4 is that the former allows only random intercepts while the latter also allows random slopes. These models test hypothesis 2, which posits that the white-collar network effect as predicted in hypothesis 1, will be larger among those whose socioeconomic positions are lower. Hence, the main focus of interest is the coefficient of interaction term, which should be negative and statistically significant to support hypothesis 2.

Finally, to test hypothesis 3, Model 5 adds a cross-level interaction term between White-Collar Network Ratio and Gini coefficients to Model 2. There is no random intercept model since including the cross-level interaction term indicates random slopes model by design. Specifically, the model is represented as:

$$Y_{ij} = \beta_{0j} + \beta_{1j}WCNR_{ij} + \beta_2 SSS_{ij} + \beta_k Controls_{ij} + e_{ij} \quad (3a)$$
$$\beta_{0j} = \gamma_{00} + \gamma_{01}Gini_j + u_{0j} \quad (3b)$$
$$\beta_{1j} = \gamma_{10} + \gamma_{11}Gini_j + u_{1j} \quad (3c)$$

By modeling the country-level variances as in equations 3b and 3c and plugging in these equations into the equation 3a, Model 5 is derived as:

$$Y_{ij} = (\gamma_{00} + u_{0j}) + (\gamma_{10} + u_{1j})WCNR_{ij} + \gamma_{01}Gini_j + r_{11}Gini_j * WCNR_{ij} +$$
$$\beta_2 SSS_{ij} + \beta_3 Gini_j + \beta_k Controls_{ij} + e_{ij} \quad (4)$$

Hypothesis 3 posits that the effect of white−collar network ratio ($WCNR_{ij}$) is moderated by the Gini coefficients of a country ($Gini_j$). Particularly, the network effect would be larger in countries with lower Gini coefficients, that is income inequality. Therefore, the main focus of Model 5 is in r_{11}, which is expected to be negative and statistically significant.

Chapter 4. Results

4.1. Descriptive Analyses

Before delving into the results of the main hypothesis tests, this section presents descriptive statistics and exploratory analyses.

Figure 2 presents the distribution of this dependent variable in the total sample (n=12,001, median=2, mean=2.31, standard deviation=1.13, skewness=0.65, kurtosis=−0.42). The higher the value, the more likely it is that the respondent thinks it is not the government's responsibility to reduce the gap between the high−income and low−income individuals, thus opposing redistribution. In general, people appear to favor greater redistribution across countries. Although slightly skewed to the right, the descriptive statistics suggest the skewness is not problematic − thus, the dependent variable is regarded as being continuous and normally distributed.

Figure 2. Distribution of Redistribution Attitude

Distribution of Redistribution Attitudes
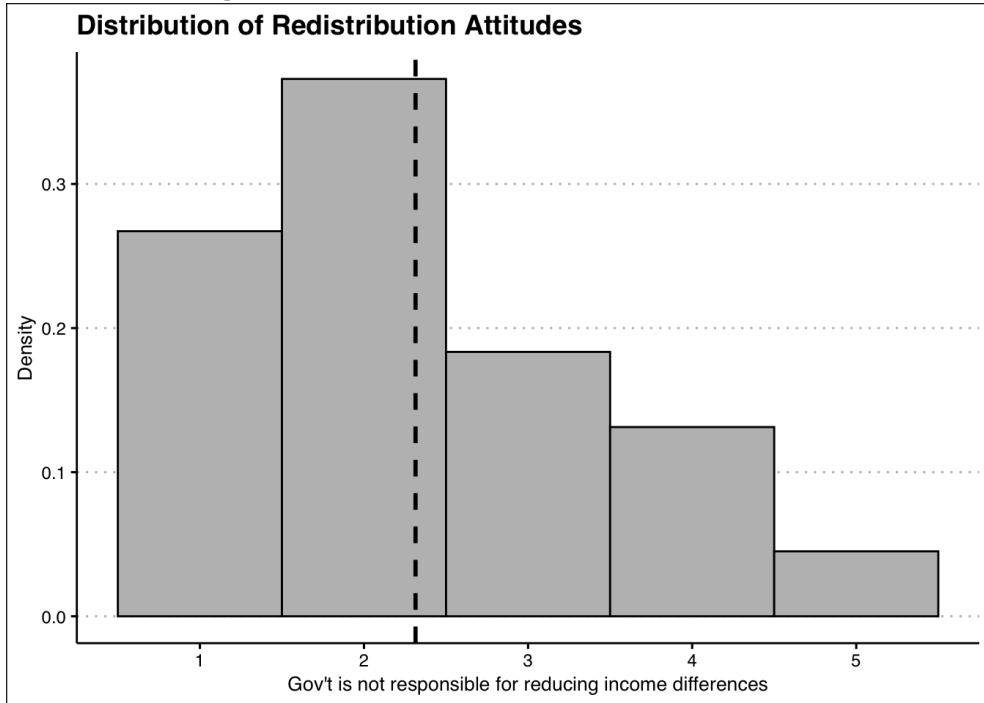
This is the density plot of the dependent variable on x－axis (the larger the value, the more a respondent thinks that the government is not responsible for reducing income differences, thus more against redistribution). The dashed line indicates the mean value, which is 2.31.

Figure 3 depicts the same distribution for each country, and Table 5 presents the descriptive statistics of the redistribution attitudes. Figure 3 and Table 5 both show that there are country－level differences in average level of redistribution attitudes. For instance, the United States had the highest average value, indicating that US citizens are more inclined to think that reducing income differences between low－income and high－income individuals is not the government's responsibility. On the other hand, Russia and Hungary's average values of redistribution attitudes were the lowest level among the countries. On average, Russian and Hungarian people are more supportive of governmental intervention to reduce income differences. Hence, the country－level differences in redistribution attitudes should be controlled for or taken into account in hypothesis testing.

36

Figure 3. Distribution of Redistribution Attitude by Country
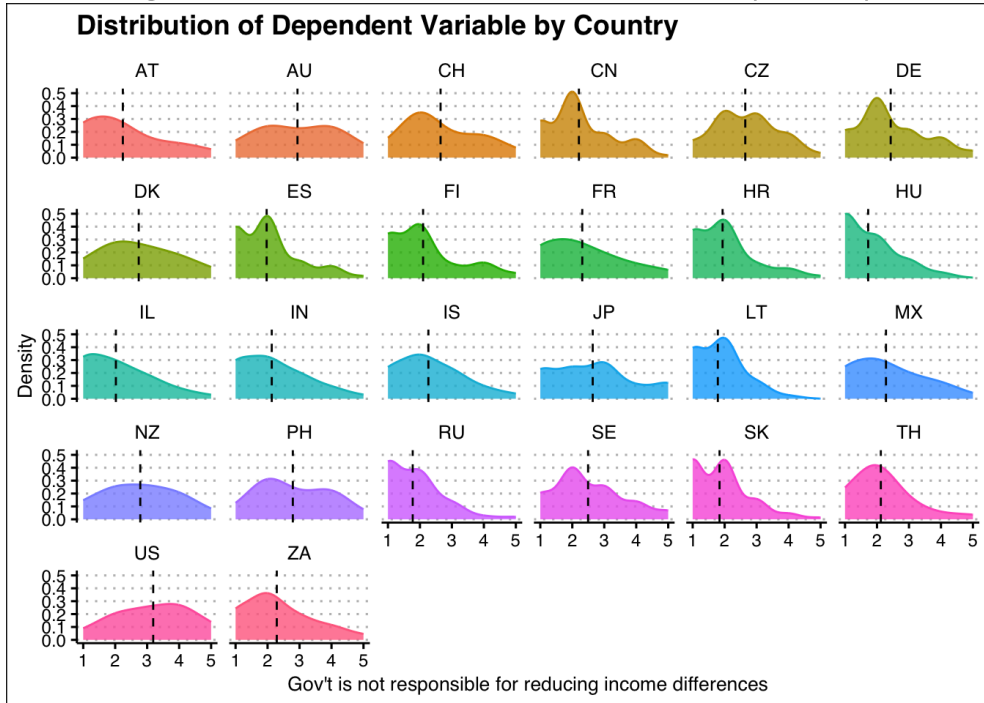
This is the same density plot of the dependent variable, but plotted by each country. The dashed line indicates the mean value of redistribution attitudes within each country.

Table 5. Descriptive Statistics of Redistribution Attitudes by Country

Country	AT	AU	CH	CN	CZ	DE	DK	ES
Mean	2.24	2.94	2.65	2.21	2.65	2.43	2.74	1.97
SD	1.23	1.21	1.13	1.00	1.00	1.09	1.17	0.97
Country	FI	FR	HR	HU	IL	IN	IS	JP
Mean	2.10	2.31	1.94	1.72	2.02	2.13	2.26	2.64
SD	1.11	1.21	0.95	0.87	1.07	1.07	1.07	1.31
Country	LT	MX	NZ	PH	RU	SE	SK	TH
Mean	1.79	2.28	2.78	2.79	1.77	2.49	1.84	2.12
SD	0.75	1.00	1.16	1.08	0.90	1.12	0.89	0.96
Country	US	ZA						
Mean	3.19	2.29						
SD	1.16	1.09						

The main independent variable is the white-collar network ratio. The distribution of the white-collar network ratio variable by country is depicted in Figure 4.

Figure 4. Distribution of White-Collar Network Ratio by Country

**Distribution of White-Collar Network Ratio by Country**
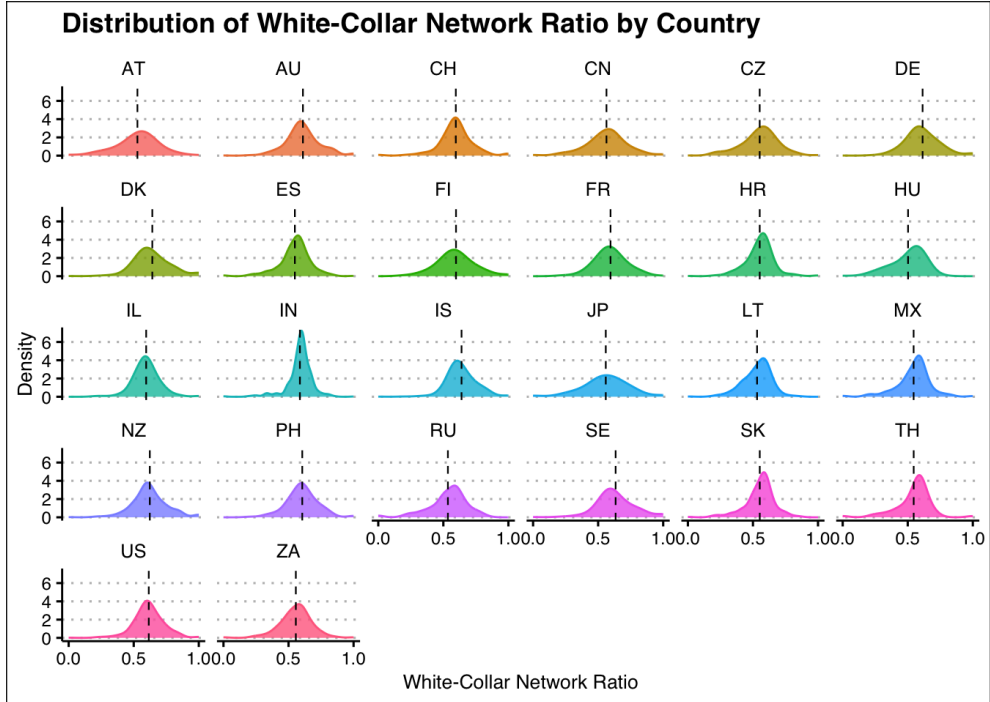
This is the density plot of the independent variable plotted by each country. The x-axis indicates the white-collar network ratio ranging from 0 to 1. The larger the value, the more a respondent's social network is homogeneously white-collar. On the contrary, the smaller the value, the more a respondent's social network is homogeneously blue-collar. The value 0.5 indicates a heterogeneity, where a respondent's social ties include 50% white-collar individuals and 50% blue-collar individuals. The dashed line indicates the mean value of white-collar network ratio within each country.

It appears that the general distributions of white-collar network ratio take a similar bell-curve shape across countries. Those around 0 on the x-axis are the people with highly homogeneous blue-collar network, while those around 1 on the x-axis are those with highly homogeneous white-collar network. The closer the value of white-collar network ratio is to 0.5, the more heterogeneous the people's social networks are. Figure 3, hence, shows that many people have heterogeneous social networks, while a small number of people have highly white- or blue-collared networks.

The individual-level moderator in this study is SSS, which is an indicator of an individual's socioeconomic status. Figure 5 displays

38

the distribution of raw values of SSS across the entire sample. Although the distributions are generally in a bell-like shape, it seems that there are country-level differences in the averages of SSS. This could be problematic because individuals in some countries (e.g., India) tend to have lower average SSS, whereas others (e.g., Denmark) tend to have higher levels of SSS. Note that all individual-level variables, including SSS, are group-mean centered in the main analyses. As a result, higher values of SSS after group-mean centered, indicate that one's SSS is higher than the average of other people in one's country. As such, the country-level differences between SSS is taken into account, and the analyses focus on within-country variances of SSS in testing hypotheses.

Figure 5. Distribution of SSS by Country
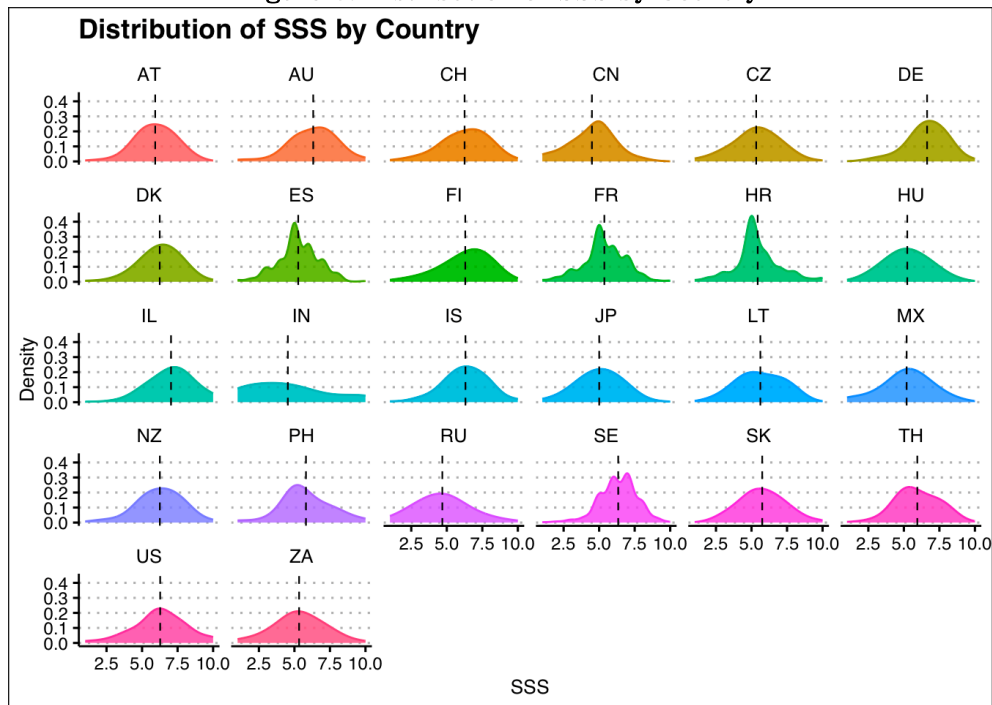
This is the density plot of the individual-level moderating variable, SSS, plotted by each country. The x-axis indicates the SSS ranging from 1 to 10. The larger the value, the more a respondent's Subjective Social Status is higher relative to others. The dashed line indicates the mean value of SSS within each country.

Figure 6. Distribution of Gini Coefficients
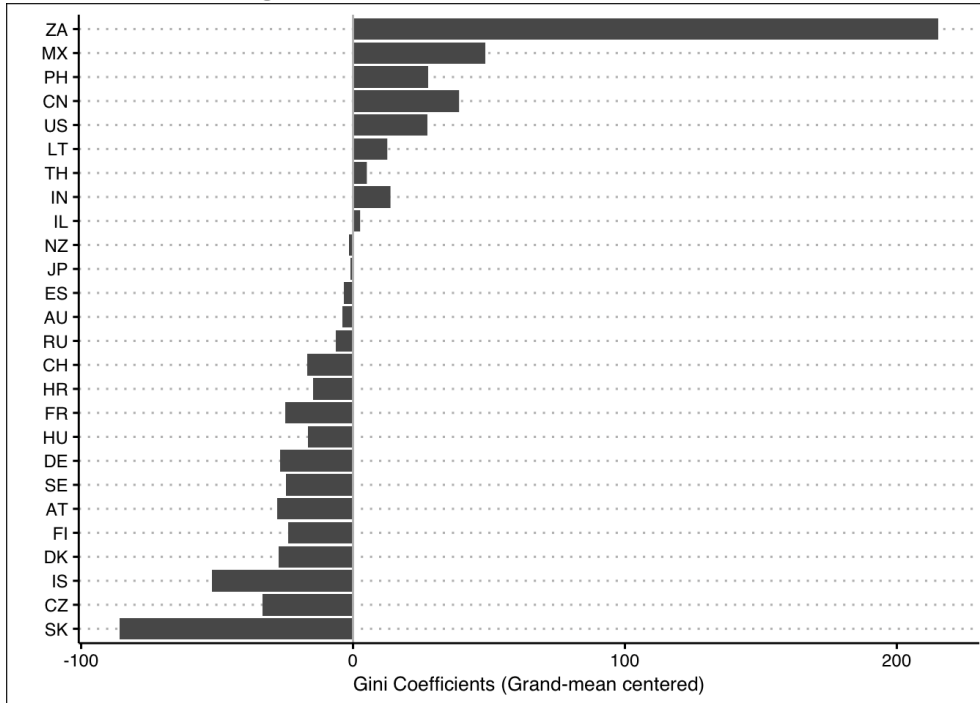
This is the bar plot of the country-level moderating variable, Gini coefficients. The x-axis indicates the Gini coefficients which are grand-mean centered. The larger the value, the higher a country's income inequality is. The gray vertical line at x=0 indicates the grand-mean value of Gini coefficients across the countries.

The country-level moderating variable is Gini coefficients of each country, as presented in Figure 6. As Gini coefficients are grand-mean centered, Figure 6 displays relative differences in income inequality across countries. Compared to other countries, South Africa (ZA), Mexico (MX), China (CN), the United States (US) and the Philippines (PH) had higher levels of income inequality. On the other hand, countries such as Slovakia (SK), Iceland (IS), Czech Republic (CZ) and Denmark (DK) had relatively lower levels of income inequality.

As explained in the previous section (3.3. Models), this paper used various estimation strategies to account for the nested data structure, including multilevel or mixed effects models which are presented in the main text, as well as OLS regression analyses with country-fixed effects (which are presented in Appendix). Because

the dependent variable is regarded as being continuous and normally distributed, the linear mixed models were fitted using the REML (restricted maximum likelihood) method. All multilevel analyses were carried out in R with the 'lmer' function from the 'lme4' package.

This study has followed the conventional steps to analyze mixed effects models. First, the null model was tested and the ICC (intraclass correlation coefficient) was calculated. The expected average value of redistribution attitudes (=intercept) in all countries and individuals is around 2.32, according to Table 6. More importantly, in the table's random effects section, country-level variation in redistribution attitudes is 0.1481, while individual-level variation is 1.1477. Based on these findings, the ICC, or the proportion of variation due to countries out of total variation, can be calculated, which is around 0.114. Thus, country-level variations can explain about 11.4% of the total variation in redistribution attitudes. As a result, this nested data structure cannot be ignored and should be considered when testing hypotheses using mixed effects modeling.

Table 6. Null Model

Fixed Effects	Estimate (Std. Error)	Pr(>|t|)
(Intercept)	2.319 (0.076)	<2e-16 ***
Random Effects	Variance	Std. Dev.
Country (Intercept)	0.1481	0.3849
Residual	1.1477	1.0713

Figure 7 shows the simulation of random effects of this null model. Using the R function called 'REsim()', this plot shows simulated random effects from linear mixed model object's posterior distributions. If the confidence intervals around the dot do not cross the red line, which indicates the zero random effect, we

could be 95% confident that the estimated random intercepts are distinguishable from zero. This simulation of random effects further emphasizes the importance of taking nested data structure into account and provides a justification for using mixed effects models.

Figure 7. Simulation of Random Effects (Null Model)
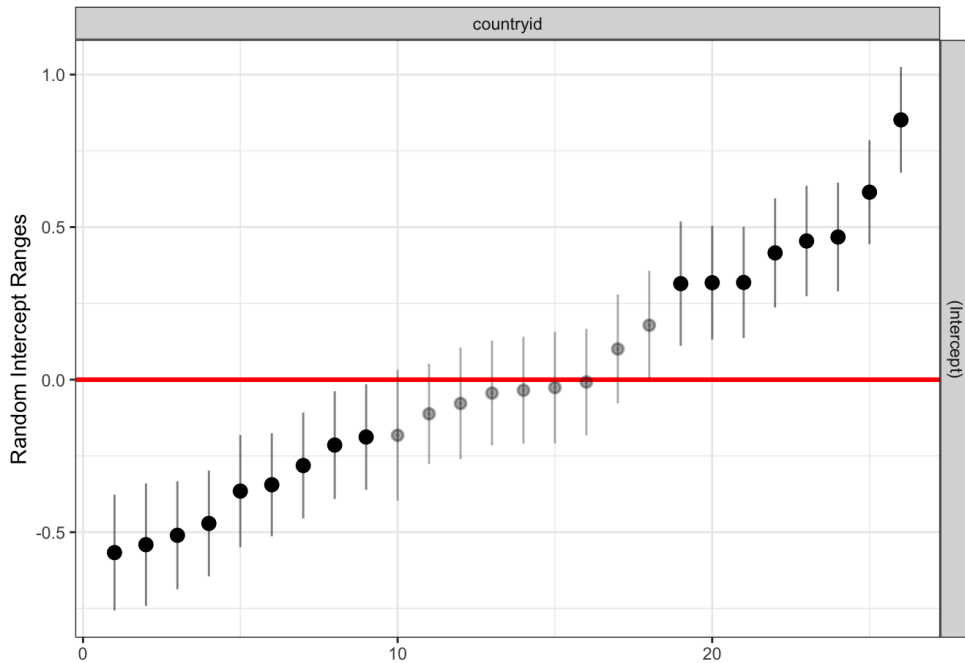
The x−axis represents each country (total 26 countries) and the y−axis represents the random intercepts. Each dot represents the estimated intercept for each country, and the line surrounding each dot represents the 95% confidence interval. If the 95% confidence intervals contain zero, the intercepts of these countries do not differ significantly.

4.2. Main Analyses

Table 7 displays the outcomes of mixed effects models. It should be noted that the primary goal of this paper is to test the hypotheses, not to choose one model that outperforms the others. As a result, while this paper not only presents the estimated results of several models but also model fit statistics, the emphasis is on testing hypotheses rather than comparing models. Using different model specifications, each with a different set of underlying assumptions about variance structure, this paper finds evidence for hypotheses 1

and 3 but not for hypothesis 2.

To interpret the results on random intercepts, which were included in all of the models, the fixed effect intercept reveals that the estimated average redistribution attitude was 2.38 ([2.22, 2.53] at a 95% confidence interval) when all predictor variables were zero. However, there are country−level differences, with the standard deviation for the random intercept being around 0.39. Assuming random intercepts follow a normal distribution, we anticipate that the majority of countries will fall within one standard deviation of the mean (2.38). Therefore, random intercepts for most countries would range between 1.99 and 2.77.

Moving on to the results for the main independent variable, all models support hypothesis 1: there was a significant association between the white−collar network ratio (WCNS) and redistribution attitudes. Overall, controlling for other variables, every unit increase in a person's white−collar network ratio across all countries corresponds to a 0.4 unit increase in redistribution attitude. This relationship was statistically significant at the 5% significance level. That is, if a person's social network was filled with blue−collar ties (WCNS = 0) and then changed to all white−collar ties (WCNS = 1), that person's attitudes toward redistribution shift by about 0.4 units in favor of less redistribution. Hence, hypothesis 1 was confirmed: the more a person is socially connected to white−collar individuals among his/her social ties, the more that person opposes redistribution.

Meanwhile, no evidence supporting hypothesis 2 was found. With all other variables held constant in Models 3 and 4, increasing the WCNR term by one unit was associated with a 0.4−unit increase in the dependent variable, which was statistically significant at the 5% significance level. This white−collar network effect on redistribution attitude was 0.001 units lower in Model 3 and 0 units lower in Model 4 as respondents' SSS increased by one unit (WCNR X SSS). This interaction effect, however, was not statistically significant at the 5% level of significance. Consider the person with the highest SSS level,

which is 10, and the person with the lowest SSS level, which is 1. The predicted redistribution attitudes of these two people differ by no more than 0.009 (=0.001 X (10−1)). Given that the dependent variable's one standard deviation is 1.13, including an interaction term in the model makes little difference.

Finally, Model 5 shows evidence in support of hypothesis 3. The cross−level interaction term between Gini coefficients and WCNR had a statistically significant and negative relationship at the 5% significance level. This implies that the more white−collar ties an individual has in his or her social network, the more likely he or she is to oppose government−led redistribution, while this network effect becomes smaller as the country's Gini coefficient increases. That is, in a more unequal macroeconomic environment, individuals are less likely to be influenced by their social ties in terms of redistribution attitudes.

Table 7. Linear Mixed Effects Models

	Model 1 Random Intercept (RI)			Model 2 Random Slope (RS)			Model 3 RI with Individual-level Interaction			Model 4 RS with Individual-level Interaction			Model 5 RS with Cross-level Interaction		
Fixed Effects	b	CI	p	b	CI	p	b	CI	p	b	CI	p	b	CI	p
(Intercept)	2.38	- 2.22 – 2.53	<0.001	2.37	2.22 – 2.53	<0.001	2.38	2.23 – 2.53	<0.001	2.37	2.22 – 2.53	<0.001	2.38	2.22 – 2.53	<0.001
WCNR	0.4	0.25 – 0.55	<0.001	0.4	0.18 – 0.63	<0.001	0.4	0.25 – 0.55	<0.001	0.4	0.18 – 0.63	<0.001	0.39	0.19 – 0.59	<0.001
SSS	0.06	0.04 – 0.07	<0.001	0.06	0.04 – 0.07	<0.001	0.06	0.04 – 0.07	<0.001	0.06	0.04 – 0.07	<0.001	0.06	0.04 – 0.07	<0.001
WCNR X SSS							- 0.01	- 0.09 – 0.07	0.832	0	- 0.09 – 0.08	0.95			
Gini	0.48	- 1.42 – 2.38	0.618	- 0.2	- 2.02 – 1.62	0.828	0.48	- 1.42 – 2.38	0.619	−0.2	- 2.02 – 1.62	0.828	0.48	- 1.42 – 2.38	0.618
WCNR X Gini													−3.04	−5.32 – - 0.77	0.009
Sex	- 0.11	- 0.15 – - 0.07	<0.001	- 0.11	- 0.15 – - 0.07	<0.001	- 0.11	- 0.15 – −0.07	<0.001	−0.11	- 0.15 – - 0.07	<0.001	−0.11	- 0.15 – - 0.07	<0.001

|	b	CI	p	b	CI	p	b	CI	p	b	CI	p	b	CI	p
Age	0	-0.00 – 0.00	0.583	0	-0.00 – -0.00	0.625	0	-0.00 – 0.00	0.586	0	-0.00 – 0.00	0.626	0	-0.00 – 0.00	0.652
Education	0.03	0.02 – 0.05	<0.001	0.03	0.02 – 0.05	<0.001	0.03	0.02 – 0.05	<0.001	0.03	0.02 – 0.05	<0.001	0.03	0.02 – 0.05	<0.001
Religious attendance	-0.01	-0.02 – 0.00	0.262	-0.01	-0.02 – 0.00	0.246	-0.01	-0.02 – 0.00	0.262	-0.01	-0.02 – 0.00	0.246	-0.01	-0.02 – 0.00	0.233
Random Effects															
σ^2	1.13			1.12			1.13			1.12			1.12		
τ_{00} (Intercept)	0.15			0.16			0.15			0.16			0.15		
τ_{11} (WCNR)				0.18						0.18			0.11		
ρ_{01}				-0.40						-0.40			-0.44		
Marginal/ Conditional R2	0.019 / 0.136			0.017 / 0.139			0.019 / 0.136			0.017 / 0.139			0.019 / 0.138		
AIC/BIC	35649.31 / 35723.24			35641.31 / 35730.02			35655.732/ 35737.05			35647.76 / 35743.87			35635.05 / 35731.16		

Note: The dependent variable is redistribution attitude. The larger the value, the more a respondent thinks that it is not the government's responsibility to reduce income differences. Regression coefficients (b), 95% confidence intervals (CI), and p-values (p) are presented in each column. Overall, ICC is 0.12, total number of observations is 12,001, and the number of countries is 26.

Further notes on random effects: σ^2 indicates the variance of residual at Level-1. τ_{00} is the variance estimate for u_{0j}, which quantifies the heterogeneity in the intercepts at country-level. Similarly, τ_{11} is the variance estimate for u_{1j} that quantifies the heterogeneity in the slopes of WCNR at country-level. Meanwhile, ρ_{01} indicates the covariance between the intercepts and slopes. The negative covariance indicates that a higher intercept value is associated with a lower scope.

In conclusion, this paper has found support for hypotheses 1 and 3: the more a person is socially connected to white—collar individuals within their own social network, the more likely he or she is to oppose redistribution, and this 'white—collar network effect,' as it is referred to in this study, is smaller in countries with higher levels of macroeconomic inequality.

To further illustrate the result, this study uses Model 5 as the representative model and presents a number of visualizations in Figures 8 through 10. Figure 8 shows the fixed effects of all predictors in the model with 95% confidence intervals. Although the control variables are not the primary focus of this study, the results are consistent with previous research. While age and religious attendance did not have statistically significant correlations with redistribution attitudes, on average, women are more likely than men to support redistribution. The greater an individual's level of education, the greater his or her opposition to redistribution. Furthermore, consistent with the literature on self—interest, the higher a person's SSS, the more likely they were to oppose redistribution.

Figure 8. Plot of Estimated Coefficients with 95% Confidence Intervals
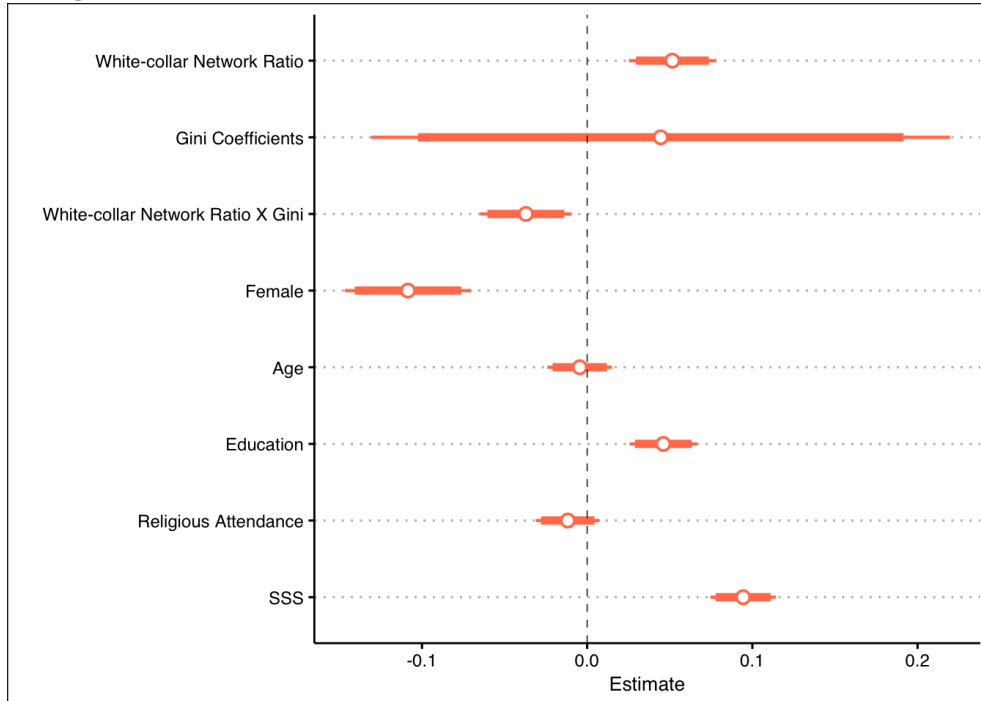
Note that all variables are group-mean centered, and estimates for the country dummies are omitted in this plot. The x-axis represents estimated coefficients, and the dotted line represents the point at which coefficients are zero. The circle represents regression coefficient point estimates, while the red line represents their 95% confidence intervals. If the 95% confidence intervals intersect the dotted line, the coefficients are not statistically different from zero.

Figure 9 and Figure 10 plot the random effects from Model 5. As shown in the left panel of Figure 9, random intercepts are statistically significant across countries. Figure 10 is the same plot drawn differently by reordering the countries in descending order. When we allow the intercepts to differ between countries, the United States and Hungary had the largest deviations from the estimated fixed intercept, albeit in the opposite direction. In other words, the US had the highest average level of opposition to expanding the government-led redistribution, while Hungary had the highest level of support for the government-led redistribution, as expected in the descriptive analysis.
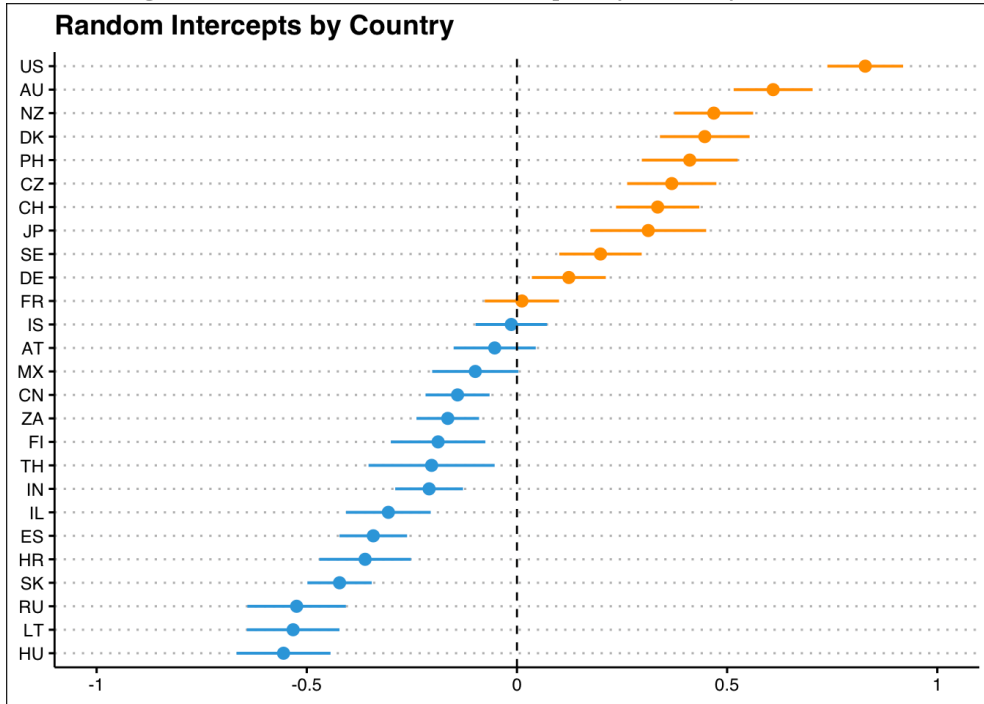
Figure 9. Plot of Random Intercepts and Slopes by Country (Model 5)
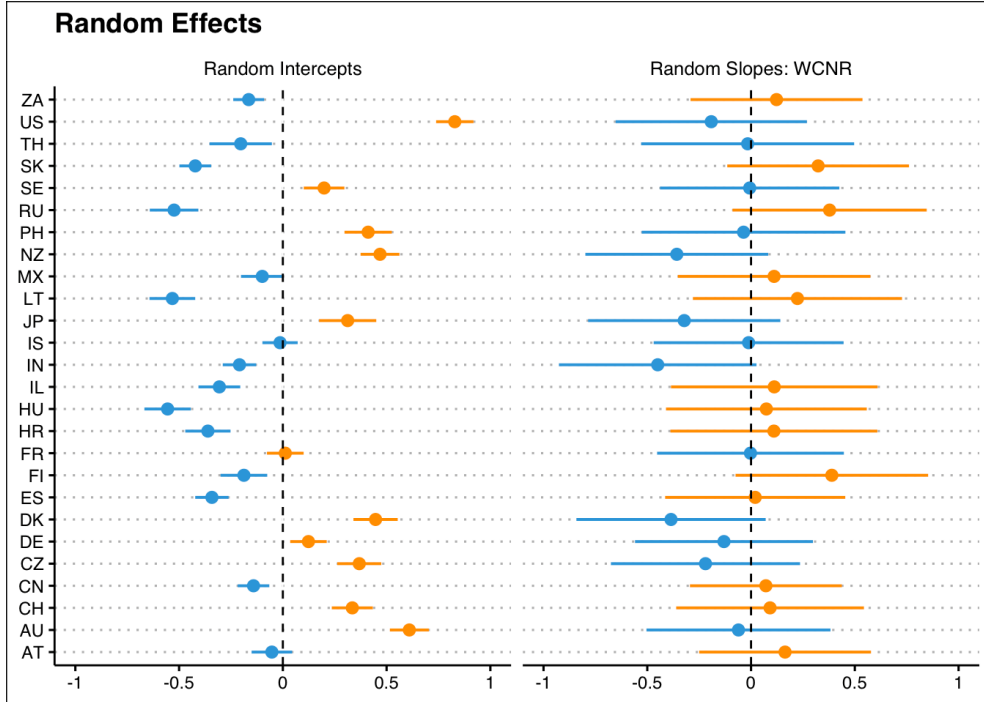
The x-axis indicates the predicted values of random effects (points) with 95% confidence intervals (lines). These random effects are plotted separately by each country in the y-axis. The left panel displays random intercepts while the right panel displays random slopes by each country.

The right panel of Figure 9, however, suggests that allowing WCNR slopes to vary across countries is not substantively meaningful because, for all countries, 95% confidence intervals cross the zero line. It is important to note that the cross-level interaction term may be significant even if the random slope parameter for the level-1 variable is not significant (LaHuis & Ferguson 2009). What we see here is that the cross-level interaction term in Model 5 can explain the seemingly random variation in the level-1 slopes observed in Model 2, the model in which the cross-level interaction term is absent. To put it differently, a country's Gini coefficient moderates the relationship between white-collar network ratio and redistribution attitudes at the individual level.

Figure 10. Plot of Random Intercepts by Country (Model 5)

The x-axis indicates the predicted values of random effects (points) with 95% confidence intervals (lines). These random effects are plotted separately by each country in the y-axis.

Figures 11 to 13 elucidate this finding. In the left panel of Figure 11, some countries (e.g., SK, IN, and FI) had statistically significant variation or random effects in the slope of the WCNR. Also, as illustrated in Figure 12, there is a positive relationship between individuals' white-collar network ratio and redistribution attitudes in the majority of countries, with varying levels of intercepts and slopes. However, this seemingly random slope is gone in Model 5 when the cross-level interaction term is taken into account, as shown in the right panel of Figure 11.

Figure 11. Plot of Random Slopes by Country (Model 2 vs. Model 5)

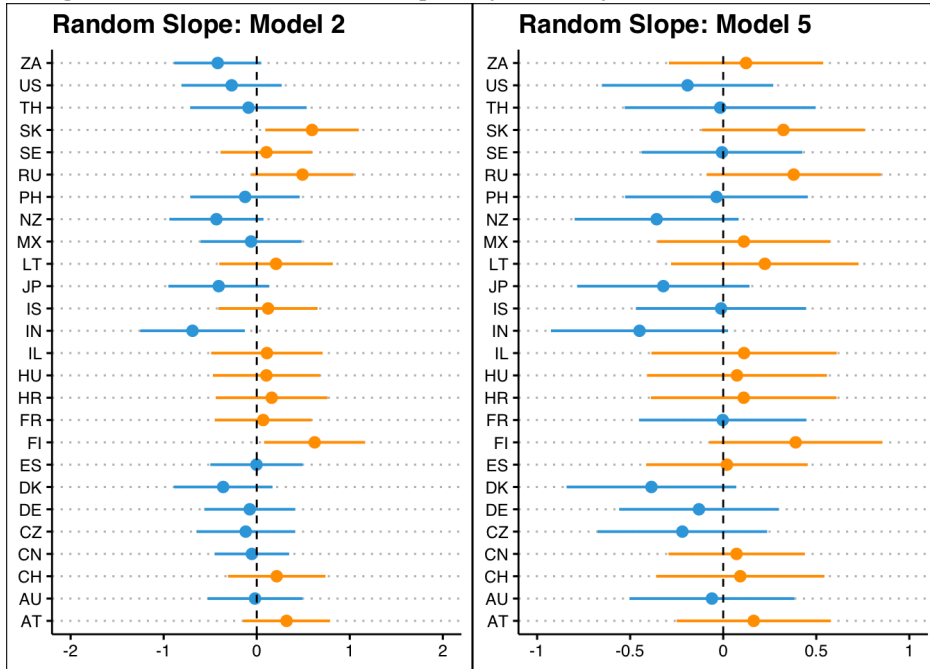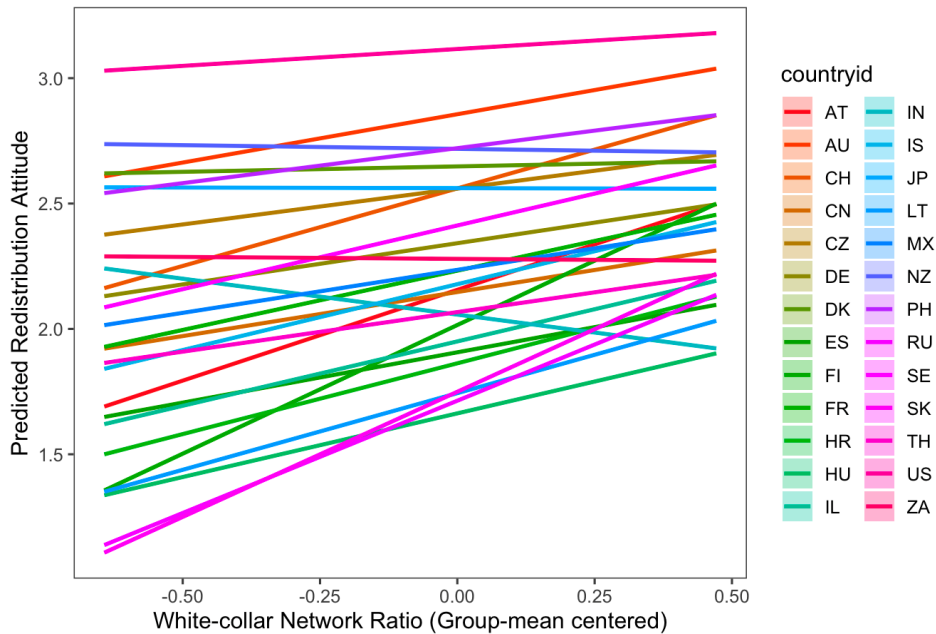# Figure 12. Plot of Random Intercept and Slope (Model 2)

This plot shows the marginal effect of individuals' white-collar network ratio on redistribution attitudes controlling for other control variables. According to the model specification (Model 2), both intercepts and slopes are allowed to randomly vary across countries.

51

Figure 13 visualizes the cross-level interaction between the white-collar network ratio and Gini coefficients. The expected white-collar network effect, where social ties with white-collar individuals lead to opposition to redistribution, is stronger in countries with lower Gini coefficients (the red line). That is, in more equal societies with not-too-large income disparities, people are more willing to be persuaded by others and form their redistribution attitudes. In contrast, the white-collar network effect is weaker or even negative in countries with extreme income inequality (the blue line). This implies that in extremely unequal environments, people tend to refuse the influence of others, or they might even go against what their social peers think.

Figure 13. Interaction Effect between WCNR and Gini Coefficients
Interaction Effect: White-collar Network Ratio X Gini Coefficients
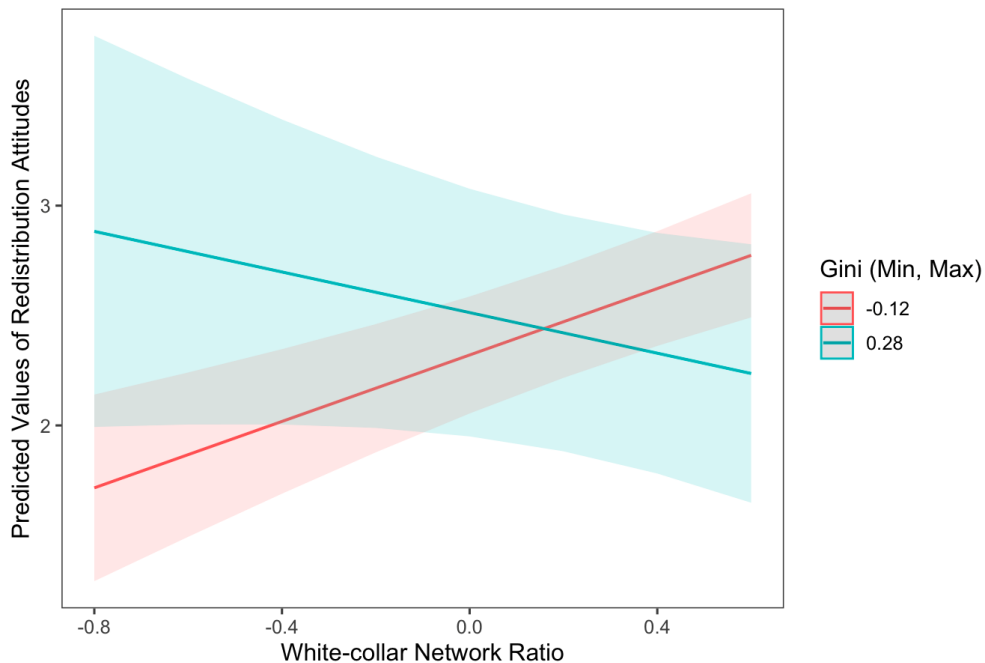
The x-axis indicates the white-collar network ratio and the y-axis indicates the predicted values of the dependent variable. The red and blue lines respectively represent the white-collar network effect for countries with minimum and aximum Gini coefficients.

Overall, the results show the power of social networks on

redistribution attitudes. If a person has a highly dense white-collar social network, regardless of that person's own socioeconomic position, he/she would be more likely to hold negative attitudes towards governmental intervention to increase redistribution. If, on the contrary, a person has a highly dense blue-collar social network, he/she would be more likely to support more redistribution, regardless of his/her own socioeconomic status. This kind of network effect is greater in countries where income inequality is lower, which may promote trust, reciprocity, self-transcendence values, and cooperative norms.

Chapter 5. Conclusion

The present paper contributes to the extensive literature on the influence of social networks on political attitudes. Individuals interpret their attitudes and behaviors in light of their social interactions and relationships. People are influenced by the beliefs and perspectives of those with whom they associate and interact. This kind of pressure is stronger when the opinions and attitudes of those in a person's social circle are similarly aligned. That is to say, a person might feel more compelled to agree with and act like most of his or her social circle.

However, prior research on what factors influence people's opinions on redistribution tended to ignore the role that interpersonal dynamics play. With this critical but often overlooked sociological perspective in mind, the purpose of this research was to address this knowledge gap by examining potential variations in redistribution attitudes based on social networks. In this regard, the main variable of interest was the white-collar network ratio, the proportion of a person's social ties that consist of individuals with white-collar occupations. The greater the value, the greater a person's connections to similar people who share the commonality that they have white-collar occupations, thus resulting in more repetitive and coherent social cues within one's social network.

This study had three hypotheses on the white-collar network effect. First, the paper predicted that the greater a person's social network is dominated by blue(or white)-collar individuals, the more likely he or she is to believe that the government should (or should not) reduce income disparities. Second, the white-collar network effect, in which white-collar individuals dominate one's social network resulting in greater opposition to government-led redistribution, will be larger for those with lower subjective social status. Given that influence within a network often flows from those with more resources to those who are less resourceful, the white-collar network effect may be moderated by individuals' own subjective social status. Third, the white-collar network effect will be stronger in countries with lower levels of income inequality. As higher levels of macroeconomic inequality is associated with less cooperation and reciprocity, this study hypothesized that a more equitable macroeconomic environment could strengthen the white-collar network effect.

To test the hypotheses, this paper used the 2017 ISSP data and analyzed a series of linear mixed effects models. Support for the first hypothesis (a white-collar network effect) was found. Specifically, the greater the number of white-collar social connections, out of all, the greater the likelihood that a person will be opposed to redistribution, even after accounting for their own subjective social status and other variables related to redistribution attitudes. In other words, the more blue-collar a person's social network, the more likely this person was to support redistribution. These results imply that individuals' attitudes and opinions can be reinforced in a particular direction when their social networks are filled with alters who share similar characteristics such as occupation-based class in this paper.

However, the paper's prediction that people of lower socioeconomic status would be more susceptible to the persuasive power of their social networks was not borne out by the data. This suggests that people are just as susceptible to the influence of their

peers regardless of their subjective social status.

Instead, this study found that macroeconomic conditions moderate the effects of individual–level network effects on redistribution attitudes. Individuals' political attitudes, in this case redistribution attitudes, can be reinforced in a particular direction, but this reinforcement is more pronounced in countries with lower levels of income inequality. In societies with extreme inequality, it is possible that the persuasive power of social relationships may actually diminish or even invert.

Taken together, this research adds to our understanding of sociological perspectives on redistribution attitudes. People's redistribution attitudes are influenced not only by their own socioeconomic status and/or value–laden political identities, but also by the perceptions and opinions of those with whom they socially interact. Moreover, the effect of composition of those an individual interacts on redistribution attitudes could be stronger or weaker depending on macro–level socioeconomic situations. In other words, this paper has shown that social interaction and complex interdependencies play a role in shaping redistribution attitudes, and that this sociological aspect should not be omitted.

Moreover, the findings of this paper offer alternative explanations for so–called "class betrayal voting," or voting against one's socioeconomic class. Examining who these people who vote against their own class are socially connected to, social makeup of their networks, and larger contexts in which they are embedded in and interact with others, can shed light on why those with lower incomes oppose redistribution while those with higher incomes support it.

Additionally, the findings in this paper that specific makeups of social networks reinforce attitudes in a more coherent and directed way lend support to previous research on social network homogeneity and heterogeneity. In sum, the results show that diversity or heterogeneity may be the key to consent, persuasion, and attitude changes in the current politically polarized climate.

However, this study has some limitations. One limitation is that

people with high levels of subjective social status (SSS) tend to associate with others who work in white-collar jobs, a phenomenon known as self-selection or homophily. If homophily exists, the subjective social status should be a confounder variable which precedes and influences both the white-collar network ratio and redistribution attitudes. In this case, models 3 and 4, where the SSS is modeled as the moderator variable, may have been improperly specified. The correlation coefficient between the white-collar network ratio and SSS is 0.193, which was statistically significant (t=21.535, df=11,999, p-value < 2.2e-16; Pearson's product-moment correlation test). Even though there is a statistically significant correlation between these variables, we do not know which comes first. If the SSS comes before the white-collar network ratio, then the variable should be treated as the confounder.

Furthermore, this paper has shown that there is a positive correlation between the white-collar network ratio and a pro-redistribution attitude. However, this does not prove that there is a causal relationship, and causality can work in both directions. Those who have a predisposition to favor redistribution may choose to associate with blue-collar workers, while those who have a predisposition to oppose redistribution may choose to associate with white-collar workers.

This calls for further study to examine if the same causal relationships are seen once homophily and reverse causality have been controlled for. Given the limitations of cross-sectional survey data, this paper could only show expected associations between social networks and redistribution attitudes, but future research might benefit from either experimental studies or study designs that allow causal network analysis. It would be possible to randomly assign people to groups with different network structures in an online experiment. One type of network could serve as the control group, while either a network filled with blue- or white-collar individuals could be treatment groups. Participants in these three groups may be exposed to the beliefs of their fellow players through in-game

communication and forums while engaging in cooperative activities, such as economic games. Players in the white-collar network group would be subjected to in-game messages rejecting any further redistribution or re-allocation of resources. In this way, researchers could see how networks change over time as people interact with each other and test for causal relationships between social network attributes and redistribution attitudes through the use of online experiments.

Bibliography

ISSP Research Group (2017): International Social Survey Programme: Social
Networks and Social Resources - ISSP 2017. GESIS, Cologne. ZA No.
6980 Data file Version 2.0.0, https://doi.org/10.4232/1.13322

Adamic, Lada A., and Natalie Glance. 2005. "The Political Blogosphere and the
2004 US Election." *Proceedings of the 3rd international workshop on Link
discovery*.

An, Chong-Bum, and Barry Bosworth. 2013. Income Inequality in Korea: An
Analysis of Trends, Causes, and Answers. Harvard University Asia Center
Publications Program.

Benabou, Roland, and Efe A. Ok. 2001. "Social Mobility and the Demand for
Redistribution: The POUM Hypothesis." The Quarterly Journal of
Economics 116(2):447-487.

Berelson, Bernard R., William N. McPhee, and Paul F. Lazarsfeld. 1954.
"Voting : A Study of Opinion Formation in a Presidential Campaign."
Chicago: University of Chicago Press.

Bonica, Adam, Nolan McCarty, Keith T. Poole, and Howard Rosenthal. 2013.
"Why Hasn't Democracy Slowed Rising Inequality? Journal of Economic
Perspectives 27(3):103-124

Brown-Iannuzzi, Jazmin L., Kristjen B. Lundberg, Aaron C. Kay, and B. Keith
Payne. 2015. "Subjective Status Shapes Political
Preferences." Psychological Science 26(1):15-26.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes.
1980. The American Voter. University of Chicago Press.

Cepić, Dražen, and Željka Tonković. 2020. "How Social Ties Transcend Class
Boundaries? Network Variability as Tool for Exploring Occupational
Homophily." Social Networks 62:33-42.

Colleoni, Elanor, Alessandro Rozza, and Adam Arvidsson. 2014. "Echo
Chamber or Public Sphere? Predicting Political Orientation and Measuring
Political Homophily in Twitter Using Big Data." Journal of
Communication 64(2):317-332.

Conover, Michael D., Bruno Gonçalves, Alessandro Flammini, and Filippo
Menczer. 2012. "Partisan Asymmetries in Online Political Activity." EPJ
Data Science 1(1):1-19.

Cruces, Guillermo, Ricardo Perez-Truglia, and Martin Tetaz. 2013. "Biased
Perceptions of Income Distribution and Preferences for Redistribution:

Evidence from a Survey Experiment." Journal of Public Economics 98:100–112.

Dallinger, U. 2010. "Public support for redistribution: what explains cross-national differences?." Journal of European Social Policy 20(4):333–349.

Dalton, Russell J., and Scott E. Flanagan. 2017. Electoral Change in Advanced Industrial Democracies: Realignment or Dealignment? Vol. 5045. Princeton University Press.

De Courson, Benoît, and Daniel Nettle. 2021. "Why do inequality and deprivation produce high crime and low trust?" Sci Rep 11(1):1937

DiMaggio, Paul, and Filiz Garip. 2012. "Network Effects and Social Inequality." Annual Review of Sociology 38:93–118.

Downs, Anthony. 1957. "An Economic Theory of Political Action in a Democracy." Journal of Political Economy 65(2):135–150.

Druckman, James N., Matthew S. Levendusky, and Audrey McLain. 2018. "No Need to Watch: How the Effects of Partisan Media Can Spread via Interpersonal Discussions." American Journal of Political Science 62(1):99–112.

Eveland Jr, William P., and Myiah Hutchens Hively. 2004. "The Effect of Political Discussion in Producing Informed Citizens: The Roles of Information, Motivation, and Elaboration." Political Communication 21(2):177–193.

Eveland Jr, William P., and Myiah Hutchens Hively. 2009. "Political Discussion Frequency, Network Size, and 'Heterogeneity' of Discussion as Predictors of Political Knowledge and Participation." Journal of Communication 59(2):205–224.

Feldman, Stanley, and Christopher Johnston. 2014. "Understanding the Determinants of Political Ideology: Implications of Structural Complexity." Political Psychology 35(3):337–358.

Finseraas, Henning. 2009. "Income Inequality and Demand for Redistribution: A Multilevel Analysis of European Public Opinion." Scandinavian Political Studies 32(1):94–119.

Fukuyama, Francis. 1995. Trust: The Social Virtues & the Creation of Prosperity. New York Free Press.

Gidron, Noam, and Peter A. Hall. 2017. "The Politics of Social Status: Economic and Cultural Roots of the Populist Right." The British Journal of Sociology 68(S1):57–84.

Haidt, Jonathan. 2012. The Righteous Mind: Why Good People Are Divided by
    Politics and Religion. Vintage.

Hällsten, Martin, Christofer Edling, and Jens Rydgren. 2015. "The Effects of
    Specific Occupations in Position Generator Measures of Social
    Capital." Social Networks 40:55-63.

Huckfeldt, R. Robert, and John Sprague. 1995. Citizens, Politics and Social
    Communication: Information and Influence in an Election Campaign.
    Cambridge University Press.

Huckfeldt, Robert, Paul Allen Beck, Russell J. Dalton, and Jeffrey Levine. 1995.
    "Political Environments, Cohesive Social Groups, and the Communication
    of Public Opinion." American Journal of Political Science 1025-1054.

Huckfeldt, Robert, Kenichi Ikeda, and Franz Urban Pappi. 2000. "Political
    Expertise, Interdependent Citizens, and the Value Added Problem in
    Democratic Politics." Japanese Journal of Political Science 1(2):171-195.

Huckfeldt, Robert, Paul E. Johnson, and John Sprague. 2004. Political
    Disagreement: The Survival of Diverse Opinions within Communication
    Networks. Cambridge University Press.

Huckfeldt, Robert, and John Sprague. 1987. "Networks in Context: The Social
    Flow of Political Information." American Political Science
    Review 81(4):1197-1216.

Hurst, Charles E., Heather M. Fitz Gibbon, and Anne M. Nurse. 2016. Social
    Inequality: Forms, Causes, and Consequences. Routledge.

Hutchens, Myiah J., Jay D. Hmielowski, and Michael A. Beam. 2019.
    "Reinforcing Spirals of Political Discussion and Affective
    Polarization." Communication Monographs 86(3):357-376.

Hyman, Richard, and Robert Price. 2016. The New Working Class?: White-
    Collar Workers and Their Organizations-A Reader. Springer.

Jimenez-Jimenez, Natalia, Elena Molis, and Angel Solano-Garcia. 2020. "The
    Effect of Initial Inequality on Meritocracy: A Voting Experiment on Tax
    Redistribution." Journal of Economic Behavior & Organization 175:380-
    394.

Johnston, Christopher D., Howard G. Lavine, and Christopher M. Federico.
    2017. Open versus Closed: Personality, Identity, and the Politics of
    Redistribution. Cambridge University Press.

Kang, Hee-Kyung. 2016. "The Class Politics and The Stratification Betrayal
    Voting Behavior - A Study on the Relevance of Subjective Stratification
    Variable." Economy and Society 110:38-81.

Kang, Won-Taek. 2013. "Class Betrayal Voting' in South Korean Elections."
    Korean Party Studies Review 12(3):5-28.

Katz, Elihu, and Paul Felix Lazarsfeld. 1964. Personal Influence, The Part
    Played by People in the Flow of Mass Communications. Transaction
    publishers.

Kim, Seokho, Barum Park, and Hunjoo Ha. 2013. "사회연결망 특성이 후보
    선택시기와 투표참여에 미치는 영향." In Park & Kang. (Eds.), Analyzing the
    2012 Presidential Election in South Korea. Nanam Press.

Kim, Taesim. 2020. "Fair Inequality?: System Justification and Redistribution
    Preferences." Peace Studies 28(1):129-167.

Klar, Samara. 2014. "Partisanship in a Social Setting." American Journal of
    Political Science 58(3):687-704.

Kohler, Pierre. 2015. "Redistributive Policies for Sustainable Development:
    Looking at the Role of Assets and Equity." The UN Department of
    Economic and Social Affairs (DESA) Working Papers.

Krawczyk, Michal. 2010. "A Glimpse through the Veil of Ignorance: Equality of
    Opportunity and Support for Redistribution." Journal of Public
    Economics 94(1-2):131-141.

Kuhn, Andreas. 2019. "The Subversive Nature of Inequality: Subjective
    Inequality Perceptions and Attitudes to Social Inequality." European
    Journal of Political Economy 59:331-344.

LaHuis, David M., and Matthew W. Ferguson. 2009. "The Accuracy of
    Significance Tests for Slope Variance Components in Multilevel Random
    Coefficient Models." Organizational Research Methods 12(3):418-435.

Lapinski, Maria Knight, and Rajiv N. Rimal. 2005. "An Explication of Social
    Norms." Communication Theory 15(2):127-147.

Lazarsfeld, Paul Felix, Bernard Berelson, and Hazel Gaudet. 1944. The
    People's Choice: How the Voter Makes up His Mind in a Presidential
    Campaign. Columbia University Press.

Lee, Cheol Sung, In Hyee Hwang, and Hyunji Lim. 2018. "The Socio-
    Economic Foundations of the Korean Welfare State : Asset Inequality,
    Insurance Motives, and Social Policy Preferences, 2007-2016." Korean
    Political Science Review 52(5):1-30.

Lee, Hee-Jeong. 2018. "An Analysis on the Change in the Subjective
    Socioeconomic Status of the Youth and Its Effect on Perception toward
    Justice." Korean Journal of Sociology 52(3):119-164.

Lin, Nan. 1999. "Social Networks and Status Attainment." Annual Review of
    Sociology 25(1):467–487.

Lin, Nan, and Mary Dumin. 1986. "Access to Occupations through Social
    Ties." Social Networks 8(4):365–385.

McClurg, Scott D. 2003. "Social Networks and Political Participation: The Role
    of Social Interaction in Explaining Political Participation." Political
    Research Quarterly 56(4):449–64.

McClurg, Scott D. 2006. "The Electoral Relevance of Political Talk: Examining
    Disagreement and Expertise Effects in Social Networks on Political
    Participation." American Journal of Political Science 50(3):737–754.

Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size
    of Government." Journal of Political Economy 89(5):914–927.

Mutz, Diana C. 2002a. "Cross−Cutting Social Networks: Testing Democratic
    Theory in Practice." American Political Science Review 96(1):111–126.

Mutz, Diana C. 2002b. "The Consequences of Cross−Cutting Networks for
    Political Participation." American Journal of Political Science 46(4):838–
    855.

Newman, B. J., Christopher D. Johnston, and Patrick Lown. 2015. "False
    consciousness or class awareness? Local income inequality, personal
    economic position, and belief in American meritocracy." American Journal
    of Political Science 59(2):326–340.

Niehues, Judith. 2014. "Subjective Perceptions of Inequality and Redistributive
    Preferences: An International Comparison." Cologne Institute for
    Economic Research. IW−TRENDS Discussion Paper 2:1–23.

Page, Benjamin I., and Lawrence R. Jacobs. 2009. Class War?: What Americans
    Really Think about Economic Inequality. University of Chicago Press.

Peterson, Erik, and Shanto Iyengar. 2021. "Partisan Gaps in Political
    Information and Information−Seeking Behavior: Motivated Reasoning or
    Cheerleading?" American Journal of Political Science 65(1):133–147.

Redlawsk, David P. 2002. "Hot Cognition or Cool Consideration? Testing the
    Effects of Motivated Reasoning on Political Decision Making." Journal of
    Politics 64(4):1021–1044.

Sanchez−Rodriguez, Angel, Rosa Rodriguez−Bailon, and Guillermo B. Willis.
    2022. "Economic Inequality Affects Perceived Normative Values." Group
    Processes & Intergroup Relations 25(1):211–226.

Scanlon, Thomas. 2018. Why Does Inequality Matter? Oxford University Press.

Schulz-Herzenberg, Collette. 2014. "The Influence of the Social Context on South African Voters." Journal of Southern African Studies 40(4):839–859.

Schwartz, Shalom H. 1992. "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries." Advances in Experimental Social Psychology 25:1–65

Shapiro, Robert Y., and John T. Young. 1989. "Public Opinion and the Welfare State: The United States in Comparative Perspective." Political Science Quarterly 104(1):59–89.

Shayo, Moses. 2009. "A Model of Social Identity with an Application to Political Economy: Nation, Class, and Redistribution." American Political Science Review 103(2):147–174.

Steele, Liza G., and Nate Breznau. 2019. "Attitudes toward Redistributive Policy: An Introduction." Societies 9(3):50.

Suhay, Elizabeth. 2015. "Explaining Group Influence: The Role of Identity and Emotion in Political Conformity and Polarization." Political Behavior 37:221–251.

UN(United Nations). 2020. "Inequality in a rapidly changing world." World Social Report.

Van der Gaag, Martin, Tom AB Snijders, and Henk D. Flap. 2008. "Position Generator Measures and Their Relationship to Other Social Capital Measures." Social Capital: An International Research Program 27–49.

Verhaeghe, Pieter-Paul, and Yaojun Li. 2015. "The Position Generator Approach to Social Capital Research: Measurements and Results." Pp. 166–86 in Handbook of research methods and applications in social capital. Edward Elgar Publishing.

Visser, Penny S., and Robert R. Mirabile. 2004. "Attitudes in the Social Context: The Impact of Social Network Composition on Individual-Level Attitude Strength." Journal of Personality and Social Psychology 87(6):779.

Yoon, Jisung. 2017. "The Social Influence on Voting Revisited." Ph.D. dissertation, Department of Political Science, The Graduate School, Seoul National University.

Appendix

Table A 2. Fixed-Effects Models (with Country dummies)

	Model 1			Model 2			Model 3		
	Estima−tes	*CI*	*p*	*Estima−tes*	*CI*	*p*	*Estima−tes*	*CI*	*p*
(Intercept)	1.66	1.42 − 1.90	<0.001	1.77	1.43 − 2.12	<0.001	1.12	0.74 − 1.50	<0.001
WCNR	0.4	0.25 − 0.55	<0.001	0.2	-0.25 − 0.65	0.376	1.39	0.83 − 1.96	<0.001
SSS	0.06	0.04 − 0.07	<0.001	0.04	-0.01 − 0.08	0.123	0.06	0.04 − 0.07	<0.001
WCNR X SSS				0.03	-0.04 − 0.11	0.369			
Gini	0.19	-0.18 − 0.56	0.308	0.19	-0.18 − 0.56	0.315	1.82	0.86 − 2.78	<0.001
WCNR X Gini							-2.96	-4.57 − -1.35	<0.001
Sex	-0.11	-0.15 − -0.07	<0.001	-0.11	-0.15 − -0.07	<0.001	-0.11	-0.15 − -0.07	<0.001
Age	0	-0.00 − 0.00	0.583	0	-0.00 − 0.00	0.559	0	-0.00 − 0.00	0.645
Education	0.03	0.02 − 0.05	<0.001	0.03	0.02 − 0.05	<0.001	0.03	0.02 − 0.05	<0.001
Religious attendance	-0.01	-0.02 − 0.00	0.262	-0.01	-0.02 − 0.00	0.255	-0.01	-0.02 − 0.00	0.231
country: AU	0.6	0.47 − 0.72	<0.001	0.59	0.47 − 0.72	<0.001	0.59	0.46 − 0.72	<0.001
country: CH	0.31	0.18 − 0.45	<0.001	0.31	0.17 − 0.45	<0.001	0.3	0.17 − 0.44	<0.001
country: CN	0.02	-0.09 − 0.12	0.773	0.02	-0.09 − 0.12	0.772	0.01	-0.09 − 0.12	0.791

country: CZ	0.43	0.28 – 0.58	<0.001	0.43	0.28 – 0.58	<0.001	0.43	0.28 – 0.58	<0.001
country: DE	0.05	-0.08 – 0.19	0.422	0.05	-0.08 – 0.18	0.431	0.04	-0.09 – 0.17	0.534
country: DK	0.39	0.23 – 0.54	<0.001	0.38	0.23 – 0.53	<0.001	0.36	0.21 – 0.51	<0.001
country: ES	-0.26	-0.38 – -0.14	<0.001	-0.26	-0.38 – -0.14	<0.001	-0.26	-0.38 – -0.15	<0.001
country: FI	-0.22	-0.37 – -0.07	0.005	-0.22	-0.37 – -0.07	0.005	-0.23	-0.39 – -0.08	0.003
country: FR	0.05	-0.09 – 0.18	0.498	0.05	-0.09 – 0.18	0.494	0.04	-0.10 – 0.17	0.593
country: HR	-0.31	-0.46 – -0.17	<0.001	-0.31	-0.46 – -0.17	<0.001	-0.32	-0.46 – -0.17	<0.001
country: HU	-0.46	-0.61 – -0.31	<0.001	-0.46	-0.61 – -0.31	<0.001	-0.46	-0.61 – -0.31	<0.001
country: IL	-0.36	-0.49 – -0.22	<0.001	-0.36	-0.49 – -0.22	<0.001	-0.36	-0.49 – -0.23	<0.001
country: IN	-0.08	-0.19 – 0.04	0.183	-0.08	-0.19 – 0.04	0.193	-0.08	-0.20 – 0.03	0.169
country: IS	-0.07	-0.21 – 0.07	0.324	-0.07	-0.21 – 0.07	0.315	-0.1	-0.23 – 0.04	0.176
country: JP	0.4	0.23 – 0.56	<0.001	0.39	0.23 – 0.56	<0.001	0.39	0.23 – 0.56	<0.001
country: LT	-0.47	-0.61 – -0.34	<0.001	-0.47	-0.60 – -0.34	<0.001	-0.48	-0.61 – -0.34	<0.001
country: MX	0.01	-0.11 – 0.13	0.867	0.01	-0.11 – 0.13	0.862	0	-0.12 – 0.13	0.945
country: NZ	0.45	0.32 – 0.58	<0.001	0.45	0.32 – 0.58	<0.001	0.45	0.32 – 0.57	<0.001
country: PH	0.47	0.33 – 0.60	<0.001	0.47	0.33 – 0.60	<0.001	0.47	0.34 – 0.61	<0.001

country: RU	-0.42	-0.57 – -0.27	**<0.001**	-0.43	-0.57 – -0.28	**<0.001**	-0.43	-0.57 – -0.28	**<0.001**
country: SE	0.16	0.02 – 0.30	**0.029**	0.16	0.01 – 0.30	**0.03**	0.14	-0.00 – 0.28	0.051
country: SK	-0.41	-0.55 – -0.27	**<0.001**	-0.41	-0.55 – -0.27	**<0.001**	-0.41	-0.55 – -0.27	**<0.001**
country: TH	-0.14	-0.32 – 0.03	0.1	-0.14	-0.32 – 0.03	0.102	-0.15	-0.32 – 0.02	0.088
country: US	0.83	0.72 – 0.95	**<0.001**	0.83	0.72 – 0.95	**<0.001**	0.84	0.72 – 0.96	**<0.001**
Observations	12001			12001			12001		
R2 / R2 adjusted	0.125 / 0.122			0.125 / 0.122			0.126 / 0.123		
AIC	35515.584			35516.776			35504.63		

Australia (AT) is the baseline category among country dummies. These findings are essentially the same as those presented in the main text. The findings support hypotheses 1 and 3, but not hypothesis 2. Thus, this paper found consistent evidence of social network effects on redistribution attitudes using different modeling strategies.

국문 초록

재분배 태도에 대한 사회연결망 내 화이트칼라 비율의 효과

김효원(Kim, Hyowon)
사회학(Sociology)
The Graduate School
Seoul National University

무엇이 재분배 태도를 결정하는가? 대부분의 선행연구는 자기 이해, 가치관, 정치 이념 등과 같은 개인적인 변수에 관심을 두었으나, 대인 간 연결망이 재분배 태도에 잠재적으로 미칠 수 있는 효과에는 주목하지 않았다. 재분배 태도는 단순히 자원 배분의 결과로 개인이 얼마나 손해 또는 이득을 보는지, 혹은 개인 스스로의 가치관에 어떠한 자원 배분 원칙이 부합하는지의 차원에만 국한되는 것은 아니다. 개인이 사회적 연결망 속에 배태되어 타인과 상호작용을 하며, 이를 통해 정치 태도가 결정됨을 고려한다면, 누구와 연결되어 있는지 또한 고려할 필요가 있다. 이에 따라 이 연구는 개인이 어떠한 특성을 공유하는 사람들과 연결되어 있는지를 중심으로, 사회연결망 속에서 재분배 태도가 어떻게 영향을 받는지를 살펴본다.

이 연구는 특히 개인이 얼마나 많은 화이트칼라 또는 블루칼라 직군의 사람들과 사회적으로 연결되어 있는지에 주목한다. 사회연결망의 여러 특성 중에서 이 연구가 직업에 기반한 특성에 주목하는 이유는, 종속변수가 소득과 관련된 정치적 태도, 특히 정부가 저소득자와 고소득자 간 소득 격차를 줄이기 위해 개입을 해야 하는지에 대한 태도이기 때문이다. 개인의 사회연결망이 얼마나 유사한 직종을 가진 사람들로 구성되어 있느냐는 개인의 재분배 태도가 어떠한 방향으로 형성되는지에 영향을 줄 것이다.

사회연결망을 통해 정치와 관련된 정보와 사회적 규범을 학습하고 인식함으로써 개인들은 자신과 연결된 사람들과 유사한 의견과 태도를 가져야 한다는 사회적 압력을 느낀다. 사회적 압력은 사회적 연결망 내에 구성원들이 일치된 의견과 태도를 공유할수록 더 강해진다. 동질적인 사회연결망 내에서 개인은 타인들로부터 일관성 있고 반복적이며 강화된 신호를 받기 때문이다. 따라서 이 연구는 개인의 재분배 태도는 개인의 사회연결망이 얼마나 화이트칼라 또는 블루칼라로 구성되어 있느냐에

영향을 받을 수 있다는 가설을 제기한다. 구체적으로 개인의 사회연결망이 화이트칼라로 구성될수록 소득격차를 줄이는 것은 정부의 책임이 아니라고 판단할 가능성이 크다.

개인의 사회연결망이 화이트칼라로 구성될수록 그 개인은 정부의 재분배 태도에 반대한다는 '화이트칼라 연결망 효과'는 개인의 사회경제적 지위와 개인이 속한 국가의 사회경제적 맥락에 따라 달라질 수 있다. 즉, 개인의 사회경제적 특성과 개인의 사회연결망이 형성되는 국가의 거시적 맥락에 의해 연결망 효과가 조절된다.

따라서 이 논문의 두 번째 가설은 주관적 사회적 지위가 낮은 개인은 주관적 사회적 지위가 높은 개인보다 사회연결망에 더 많은 영향을 받는다는 것이다. 사회연결망 내 영향력이 자원이 더 많은 개인에서 자원이 적은 개인으로 흐른다는 것을 고려할 때, 개인의 주관적인 사회적 지위는 화이트칼라 연결망 효과를 완화할 수 있다. 따라서 개인의 사회연결망이 얼마나 화이트칼라 혹은 블루칼라로 구성되어 있는지가 재분배 태도에 미치는 영향이 개인의 주관적 사회적 지위에 따라 달라지는지를 살펴본다.

마지막으로, 이 논문은 소득 불평등이 적은 국가에서 화이트칼라 연결망 효과가 더 강할 것이라는 가설을 제시한다. 연결망 효과가 활성화되기 위해서는 연결된 개인 간의 사회적 상호작용, 정보 공유 및 사회적 규범 획득이 장려되어야 한다. 이러한 종류의 사회적 상호작용은 그렇게 할 더 큰 동기가 있을 때 더 강해진다. 따라서 불평등이나 경제적 양극화가 심한 곳에서는 사람들이 서로를 신뢰할 가능성이 작고 서로 협력할 의욕이 저하되므로 타인들에게 반응하고, 타인들과 상호작용하는 것이 활발하지 않다.

이 논문은 2017 ISSP 데이터를 사용하여 선형 혼합 효과 모델을 통해 세 가지 가설을 검증한다. 분석 결과 제 1 가설(화이트칼라 연결망 효과)에 대한 증거를 찾을 수 있었다. 개인이 사회연결망이 화이트칼라로 구성될수록 개인은 재분배 태도에 반대할 가능성이 큰 것으로 나타났다. 이는 개인의 사회연결망이 비슷한 직업적 특성을 가진 사람들로 구성되어 있을수록 개인의 의견이나 태도가 특정한 방향으로 강화될 수 있음을 의미한다.

그러나 개인의 주관적 사회적 지위가 낮을수록 자신들의 사회연결망의 설득에 더 민감하게 반응할 것이라는 두 번째 가설은 증명되지 않았다. 이는 사람들이 주관적인 사회적 지위와는 관계없이 사회연결망의 영향력에 동일하게 민감하다는 것을 시사한다. 대신, 이 연구는 개인이 속한 국가의 사회경제적 맥락이 개인의 사회연결망이 재분배 태도에 미치는 영향을 완화한다는 것을 발견하였다. 재분배 태도는 사회연결망에 의해 특정한

방향으로 강화될 수 있지만, 이러한 사회연결망 효과는 소득 불평등 수준이 낮은 국가에서 더욱 두드러지게 나타난다.

종합하면, 이 연구는 재분배 태도에 대한 사회학적 관점을 더한다. 즉, 개인의 재분배 태도는 자신의 사회경제적 지위 또는 자신의 가치관이나 정치적 이념뿐만 아니라 개인이 사회적으로 상호작용하는 사람들의 인식과 의견 및 개인이 처한 거시적 수준의 사회경제적 상황에 의해 영향을 받는다. 또한, 이 논문의 결과는 소위 "계급 배반 투표", 즉 자신의 사회경제적 계급의 이해에 반하는 투표 현상에 대한 대안적인 설명을 제공한다. 자신의 계급이해에 반대하는 투표를 하는 사람들이 누구와 연결되어 있는지, 그러한 사회연결망의 특징 및 사회연결망이 내재하여 있는 큰 맥락을 살펴보는 것은 왜 소득이 낮은 사람들은 재분배를 반대하고, 소득이 높은 사람들은 재분배를 지지하는가에 대한 설명을 제공할 수 있다. 또한, 본 논문에서 사회연결망의 동질적인 구성이 특정 방향으로 태도를 강화한다는 발견은 사회연결망의 동질성과 이질성에 대한 선행 연구를 지지한다. 나아가 이는 사회연결망의 이질적인 구성이 현재 정치적으로 양극화된 기후에서 동의, 설득, 태도 변화의 열쇠가 될 수 있음을 시사한다.