Bachelor Thesis

Income Inequality and COVID-19 Conspiracy Belief

A Cross-Country Analysis

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Abstract

This bachelor thesis offers a cross-country analysis of the effect of income inequality on the belief in COVID-19 conspiracy theories. It addresses the research question: *To what extent does income inequality promote the belief in COVID-19 conspiracy theories?* To answer this question, bivariate and multivariate linear regression analyses are applied. Moreover, a *COVID-19 Conspiracy Index* for 23 non-European and European countries is computed based on data from an online survey on conspiracy beliefs. Income inequality is constructed by three independent variables: objective income inequality, subjective income inequality, and unemployment. The results of the analyses suggest that income inequality only partially affects the belief in COVID-19 conspiracy theories. In a bivariate context, only objective income inequality significantly promotes COVID-19 conspiracy belief, while in a multivariate context, objective income inequality loses its significant effect, and unemployment gains it. However, the analyses provide some surprising outcomes in other regards. First, economic wealth appears to have a very significant impact on the belief in COVID-19 conspiracy theories. Second, when Nigeria and Kenya are excluded from the studies, the effect of income inequality becomes more significant. These results ask for further research.

Table of Contents

Table of Tables

Table of Figures

1 Introduction

"Conspiracy theories are not fringe ideas, tucked neatly away in the dark corners of society. They are politically, economically, and socially relevant to all of us." (Uscinski, 2018, p. 1)

In the early spring of 2020, the COVID-19 pandemic entered the lives of people around the globe, causing not only a serious health crisis but also a crisis of misinformation. Ranging from theories that present 5G networks as the source of the virus (Ahmed, Vidal-Alaball, Downing, & Seguí, 2020) and accusations that deny the existence of the virus (Imhoff & Lamberty, 2020) to claims that vaccines are just an excuse to inject microchips (Thomas & Zhang, 2020), conspiracy theories have spread almost as fast as the virus itself.

The emergence of conspiracy theories during a crisis like the COVID-19 pandemic is not a new phenomenon. Past research shows that conspiracy theories are particularly appealing to individuals in times of large-scale uncertainty (Douglas, Uscinski, et al., 2019). The novel coronavirus raised many questions for which new answers were required. Politicians and health experts continuously updated their knowledge base as they learned more every day. Such environments display fertile ground for conspiracy theories since they offer explanations that might lead to a better understanding or a feeling of control. Besides the need for understanding and control, individuals are also drawn to conspiracy theories when they seek to uphold a positive image of themselves or their groups (Douglas, Uscinski, et al., 2019). During a crisis, conspiracy theories give the opportunity to blame others for what has happened. Such patterns were also recognizable in the beginning and throughout the pandemic. A popular conspiracy theory assumed that China released the virus intentionally (Šrol, Čavojová, & Ballová Mikušková, 2022).

While conspiracy theories can help satisfy certain psychological needs, they also have dangerous consequences. These dangerous consequences were recognizable during the pandemic. Research has shown that the belief in COVID-19 conspiracy theories is negatively related to the compliance with health measures such as social distancing. Thus, conspiracy belief has severe consequences for individual and collective well-being. The non-compliance with such measures can largely be traced back to a lack of trust (Imhoff & Lamberty, 2020)

At the moment, previous studies have mainly focused on the individual reasons why people believe in conspiracy theories. However, little is known about contextual factors that promote conspiracy beliefs. Considering the global impact of COVID-19, including contextual predictors seems inevitable. Particularly one societal indicator is highly interesting for the research surrounding conspiracy beliefs: income inequality. The pandemic exposed and

intensified the fragility and inequality of the global economic system. Income inequality is known to cause a wide range of health and social problems. Moreover, previous research has suggested that income inequality is an essential driver for the support of populist leaders and parties (Stoetzer, Giesecke, & Klüver, 2021). Especially the insights from the research on populism prove to be interesting for the investigation of income inequality in the light of conspiracy theories. Research has found several similarities between conspiracy theorists and populists (Castanho Silva, Vegetti, & Littvay, 2017). Additionally, the support for populism is known to promote the belief in conspiracy theories (Stecula & Pickup, 2021).

Hence this study operates under the research question: *To what extent does income inequality promote the belief in COVID-19 conspiracy theories?* The expectation is to identify a positive relationship between income inequality and conspiracy beliefs. Thus, it is hypothesized that income inequality promotes COVID-19 conspiracy theories. Since this thesis examines the effect of income inequality – which has not received much attention – only one research question and hypothesis are examined. Consequently, this thesis follows primarily the aim to serve as a starting point for future research.

The results of this bachelor thesis have the potential to contribute to the current literature on COVID-19 conspiracy theories and conspiracy theories in general for the following reasons. With the focus on income inequality, this thesis helps extend knowledge about contextual factors of conspiracy belief. It sheds light on an indicator that gained hardly any attention despite its broad consequences for society. Moreover, the thesis takes a cross-country perspective, which allows for detecting differences in European and non-European countries. Until today, most studies have focused on individual countries, mainly from the Global North. Last but not least, the insights of the thesis can provide knowledge that might be useful for future crisis management.

In order to provide a basis for testing the hypothesis and answering the research question, the next chapter introduces individual and contextual factors promoting conspiracy beliefs that have been identified in previous research. Followed by that, the relationship between income inequality and conspiracy belief is discussed. Here, empirical and theoretical insights from research on populism are crucial. Hereafter, the theoretical insights are connected to the leading topic of this thesis – the COVID-19 pandemic. The third chapter introduces the research design of this study. At the heart of this chapter is the concrete explanation and justification of relevant data for this study. The fourth chapter constitutes the data analysis of this thesis. The analysis consists of bivariate correlations and bivariate and multivariate linear regression analyses. The conclusion summarizes and discusses the findings of this bachelor

thesis and also considers the weaknesses and strengths of this study as well as implications for future research.

2 Theoretical Framework

This chapter introduces the theoretical framework of the bachelor thesis. First, factors on the individual and contextual level which promote conspiracy beliefs are discussed. Hereafter, the relevance of income inequality as a predictor by the example of populism is explained. Finally, COVID-19 is presented as a particular case for investigating the relationship between income inequality and conspiratorial belief.

2.1 What Promotes Conspiracy Belief?

Before explaining the theoretical reasons for conspiratorial belief, it is necessary to clarify and explain crucial terms. Starting with the question of what *conspiracy theories* are. Sunstein and Vermeule (2008) define a conspiracy theory as "an effort to explain some event or practice by reference to the machinations of powerful people, who have also managed to conceal their role" (p. 4). This definition captures the two core characteristics of conspiracy theories – it offers an *explanation*, and it emphasizes the central role of *powerful people* who are working in secret. Conspiracy theories hence draw a clear distinction between people in power and the ones without power. These powerful people can be parts of governments, but also any other group of people which is perceived as powerful and malevolent (Douglas, Uscinski, et al., 2019). Conspiracy theories about COVID-19 and the vaccines accused, for instance, governments, the World Health Organization, or health care providers (Imhoff & Lamberty, 2020). Another important term is *conspiracy belief*, which defines the "belief in a specific conspiracy theory, or set of conspiracy theories" (Douglas, Uscinski, et al., 2019, p. 4). Closely related to it is *conspiracy thinking*, which is based on findings that people believing in one conspiracy theory are likely to believe in others (Douglas, Uscinski, et al., 2019; Goertzel, 1994). When conspiracy theories fit a common theme, this makes sense: the belief in one conspiracy theory acts as proof of the belief in another. However, it has also been shown that people believe in contradictory conspiracy theories (Miller, 2020). While this might seem irrational, it is coherent since most conspiracy theories are built upon one core assumption: there is an elite who is secretly plotting against ordinary people. Hence, conspiracy

belief and thinking can often be understood as an expression of a general mindset or political attitude.

Moving on to the question of what promotes conspiracy beliefs. A significant amount of research has focused on individual factors that explain why people believe in conspiracy theories. However, there has also been some work done on contextual factors. Thus, the following section discusses predispositions on both individual and contextual levels. Eventually, it is pointed out that income inequality, a crucial sociopolitical factor, has not yet gained much attention in terms of conspiracy beliefs.

2.1.1 Individual Factors

Several individual factors have been suggested as predictors of conspiracy beliefs. Particularly psychologists have contributed much knowledge to the research by finding answers to why individuals are drawn toward conspiracy theories. For a long time, psychological studies shared the assumption that conspiracy belief is reducible to the gullibility of individuals. It has been shown that individuals with lower levels of analytical thinking (Swami, Voracek, Stieger, Tran, & Furnham, 2014), critical thinking (Lantian, Bagneux, Delouvée, & Gauvrit, 2021), education (Goertzel, 1994) and psychopathological character traits such as paranoia and schizophrenia (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013) are more likely to believe in conspiracy theories. While these factors are still relevant today, they oversimplify conspiratorial beliefs since they merely concentrate on cognitive skills. Hence, other individual factors need to be considered. A crucial contribution has been delivered by Douglas, Sutton, and Cichocka (2017). They argued that people are drawn to conspiracy theories because they hope to satisfy *epistemic*, *existential*, and *social needs*. This approach includes cognitive factors but also other psychological ones. In the following, each of these needs is discussed more in detail.

Epistemic needs display the desire for understanding, accuracy, and subjective certainty (Douglas et al., 2017). When individuals face complex and confusing events, they engage in sensemaking to find answers to uncertainties (Weick, Sutcliffe, & Obstfeld, 2005). Conspiracy theories can help in the process of sensemaking by offering simple and causal explanations. Empirical findings can support these theoretical considerations. Research has shown that individuals under uncertain conditions are more likely to adopt conspiracy theories (van Prooijen & Jostmann, 2013). Evidence also suggests that conspiratorial belief is connected to the need for cognitive closure, especially when there is not a sufficient and satisfying

explanation (Leman & Cinnirella, 2013). Further, research links conspiracy beliefs with searching for patterns and meanings (van Prooijen, Douglas, & Inocencio, 2018).

In contrast, *existential needs* require security and control (Douglas et al., 2017). Subsequently, conspiracy theories seem not only to act as a causal explanation but also as an instrument to feel more secure and to have more control. Goertzel (1994), for instance, argues that individuals who feel a lack of control are drawn toward conspiracy theories because those theories offer them the chance to reject official narratives and to have an alternative option. Research has supported these assumptions. Empirical findings show that individuals who feel powerless are more likely to believe in conspiracy theories (Abalakina-Paap, Stephan, Craig, & Gregory, 1999). Equally important, there is evidence that conspiracy belief increases when individuals feel a loss of control (Bruder et al., 2013). Lastly, belief in conspiracy theories also seems higher when experiencing stressful events (Swami et al., 2016).

Finally, *social needs* seek to belong and maintain a positive image of oneself and a group (Douglas et al., 2017). Conspiracy theories commonly blame others (Douglas et al., 2017). A familiar image illustrated in conspiracy theories is one of the powerful groups which victimizes common people. Also, the relationship between social needs and conspiratorial belief is supported by empirical findings. For instance, it has been shown that conspiratorial belief is associated with narcissism (Cichocka, Marchlewska, & Zavala, 2016). Other studies could identify a relationship between conspiratorial belief and the psychological need to feel unique (Imhoff & Lamberty, 2017). According to Douglas, Uscinski et al. (2019), conspiracy theories give individuals the feeling of having special, important knowledge that others do not have and consequently provide them with a sense of uniqueness. Besides seeking a positive image of oneself, individuals also aim to maintain a positive image of their groups, such as nationalities, political parties, and religious groups (Douglas et al., 2017). Similar to individual narcissism, narcissism on a collective level seems to predict conspiracy beliefs (Cichocka et al., 2016; Douglas, Sutton, & Cichocka, 2019). Additional findings suggest that individuals who belong to a discriminated group are more drawn to conspiracy theories (Abalakina-Paap et al., 1999). Hence, members of low-status groups are more likely to believe in conspiracy theories (Goertzel, 1994).

Overall, it has been shown that on an individual level, conspiratorial belief is primarily driven by cognitive factors. Conspiracy theories attract individuals because they seek causal explanations for uncertain events. Nevertheless, this does not mean they are merely crazy or gullible. Research has shown that individuals are drawn toward conspiracy theories when specific needs are not fulfilled. Such needs ask for epistemic but also existential and social

fulfillment. In particular, social needs point to the importance of contextual factors when aiming to explain conspiracy belief. In the following, those factors are discussed more in detail.

2.1.2 Contextual Factors

While there has been essential work done on individual predispositions influencing conspiracy belief, it is also vital to move beyond them and focus on factors at the contextual level. Scholars concentrating on the contextual level argue that conspiracy theories affect countries differently (Schlipphak, Bollwerk, & Back, 2021). Consequently, this argument rejects the assumption that people who believe in conspiracy theories are merely crazy or mindless. Nevertheless, a deep understanding of conspiratorial belief includes the individual level as well as the contextual level. Thus, insights from social and contextual studies on conspiracy theories should be viewed rather as an extension to the existing knowledge from psychological research than as a replacement. In fact, contextual factors promoting conspiratorial belief can help understand why people try to satisfy specific psychological needs.

In general, the existing findings on contextual factors can be distinguished into two groups: political and demographic factors. One key political factor for the belief in conspiracy theories is the degree of democracy (Cordonier, Cafiero, & Bronner, 2021; Drochon, 2018). Citizens in a political system with no or poor democratic features are restricted in terms of political participation, free expression, or free access to independent information. Such circumstances might increase the feeling of powerlessness and political exclusion among citizens, making them more receptive to conspiracy theories. In the same way, individuals living in poorer countries show feelings of exclusion and insecurity and thus are more drawn to conspiracy theories (Drochon, 2018). Moreover, individuals who distrust authorities (Abalakina-Paap et al., 1999) and institutions (van Prooijen, Spadaro, & Wang, 2022) are more likely to believe in conspiracy theories.

Political extremism is a second political predictor. It is assumed that political extremists – from both the right and the left spectrum - share a mutual set of thinking patterns (van Prooijen, Krouwel, & Pollet, 2015) and show feelings of distress (van Prooijen & Krouwel, 2019). Conspiracy theories hence can help to restore feelings of safety and control. Further, political extremists show overconfidence regarding their own judgments and intolerance towards other groups and opinions (van Prooijen & Krouwel, 2019). Such thinking patterns help to uphold a good image of the own group and thus promote conspiracy beliefs (Douglas et al., 2017).

One demographic predictor of conspiracy belief is the educational level. Research suggests a close relationship between education and conspiracy beliefs. Individuals with lower levels of education are more likely to believe in conspiracy theories (Goertzel, 1994; van Prooijen, 2017). Van Prooijen (2017) argues that individuals with higher education levels are less likely to believe in simplistic answers to complex events, feel less powerless, and perceive themselves in a higher socioeconomic position. Differences in education are primarily caused by inequalities within the education system (Antoninis, Delprato, & Benavot, 2016). Also, Freeman and Bentall (2017) support the relationship between education and conspiracy belief. Moreover, they identified that individuals who are male, unmarried, members of ethnic minority groups, have lower incomes, and are unemployed are more likely to believe in conspiracy theories.

To sum up, this section indicates that besides individual factors, contextual factors are crucial for understanding conspiratorial belief. However, the research on contextual factors is still underdeveloped. In particular, one core social factor has not gained much attention – income inequality. The following section introduces the relevance of income inequality as a predictor for conspiracy belief.

2.2 Income Inequality and Conspiracy Beliefs: Building upon the Knowledge from Populism Studies

Although the contextual perspective has been increasingly given space in the research on conspiracy theories, income inequality is still widely unexplored. Not only is there a lack of empirical research but also theoretical explanations. The missing empirical investigation of income inequality seems surprising considering its broad consequences for the individual, society, and politics. Research has shown that increased income inequality negatively affects behavioral, physical, and mental health (Matthew & Brodersen, 2018). Moreover, people living in countries with higher levels of income inequality show more negative feelings toward public institutions (Andersen, 2012), lower civic participation (Lancee & van de Werfhorst, 2012), and lower support for democracy (Andersen, 2012). The research on populism has acknowledged the relevance of income inequality. Several studies indicate a close association between income inequality and populist support. It is argued that experiencing income inequality increases the likelihood of supporting populist leaders and parties (Inglehart & Norris, 2016; O'Connor, 2017; Stankov, 2018; Stoetzer et al., 2021).

These insights are especially interesting for the study on conspiratorial belief since research has indicated populism as a predictor of conspiracy belief (Stecula & Pickup, 2021). Moreover, certain similarities between populism and conspiracy theories are evident. Both share similarities regarding their worldviews and thinking styles. Supporters of populism and conspiracy theories are convinced that a powerful elite controls and victimizes common people (Castanho Silva et al., 2017). Subsequently, both show high levels of distrust in elites and institutions (Abalakina-Paap et al., 1999; Rooduijn, 2018). In addition, populism and conspiracy theories are based on a simplistic thinking style that consists of simple and causal explanations for complex events (Castanho Silva et al., 2017). But not only do worldviews and thinking styles resemble each other, but also motivating factors for populist support and conspiratorial belief do. Gidron and Hall (2020) reveal that individuals who feel socially marginalized, such as those with low income or education levels, are more likely to believe in conspiracy theories. This also seems typical for people endorsing conspiracy beliefs (Abalakina-Paap et al., 1999; Goertzel, 1994). Marginalization often goes hand in hand with the feeling of powerlessness. Hence, populism and conspiracy theories offer some kind of control to individuals who feel that way. Based on these similarities in the worldviews and the motivating factors, it is not surprising that populists openly use conspiracy theories, which denounce their political rivals or aim to explain uncertain events. For instance, Donald Trump has been a great promoter of the 'birther movement', which falsely accused Barack Obama of being not an American citizen (Kelley-Romano & Carew, 2017).

Against this backdrop, it is reasonable to use knowledge from populism studies to investigate the relationship between inequality and conspiracy theories. Studies that analyze how income inequality affects the support of populism have been focused mainly on three psychological mechanisms: economic insecurity, distrust in institutions and elites, and social exclusion. Due to the previously discussed similarities between populism and conspiracy thinking, these aspects are also perceived to be suitable for studying the relationship between income inequality and conspiracy belief.

Economic insecurity describes "the anxiety produced by the possible exposure to adverse economic events and by the anticipation of the difficulty to recover from them" (Bossert & D'Ambrosio, 2013, p. 1018). Among others, rising income inequality can also be understood as an adverse economic event. The insecurities caused by it are far-reaching. It indicates to what extent people have fallen behind compared to others and shows the risk of social decline for people higher up in society (Engler & Weisstanner, 2021). Hence, it is assumed that people who feel left behind and those who fear societal decline are more likely

to support radical and populist alternatives (Stoetzer et al., 2021). Since it has been shown that stressful events predict conspiratorial beliefs (Swami et al., 2016), economic inequality might be a possible link between income inequality and the belief in conspiracy theories. Individuals who experience income inequality perhaps support conspiracy theories to find an explanation for their marginalized situation. Further, it is essential to remember that conspiracy theories give individuals a certain degree of control by offering them the opportunity to reject official narratives and to have an alternative option (Goertzel, 1994).

Another proposed link between income inequality and populist support is distrust in authorities and institutions. Research has shown that individuals who do not trust political elites are more likely to support populist parties (Algan, Guriev, Papaioannou, & Passari, 2017; Rooduijn, 2018). It has been shown that unemployed people and those with lower incomes tend to be less satisfied with the political system (Algan et al., 2017). Probably such dissatisfaction is caused by the tendency to blame the pollical elite for the economic position (Rooduijn, 2018). The research on conspiracy theories has already indicated a positive link between institutional distrust and conspiracy beliefs (Abalakina-Paap et al., 1999). Consequently, distrust could represent a possible connection between income inequality and the belief in conspiracy theories.

Lastly, the research on populism suggests that the level of social exclusion links income inequality and populist support. It has been shown that individuals who are unemployed or with low incomes experience higher levels of political and economic exclusion (Gidron & Hall, 2020; Imhoff, 2022). Individuals who feel marginalized are more likely to turn their backs on mainstream policies and support populist parties and politicians (Stoetzer et al., 2021). Similar to the support for populism, conspiratorial belief is closely associated with social exclusion (Alper, 2021). It has been shown that conspiracy theories often act as an alternative option to mainstream agendas. Moreover, individuals drawn by conspiracy theories also hope to improve their own or their group's image. The distinctive picture of a *corrupting elite* which betrays the *common people* does show a defensive way of coping with unfair and unequal outcomes. This picture can be recognized in a popular conspiracy theory on the COVID-19 vaccines, which assumes that Bill Gates is linked to a plot to use vaccination as an excuse to implant microchips into people (Thomas & Zhang, 2020). This example shows that conspiracy theories not only explain complex events, such as the pandemic and a worldwide vaccination program but also draw a negative picture of certain groups of the society.

To sum up, this section strengthens the relevance of income inequality as an essential factor for conspiratorial beliefs. Due to the many similarities between conspiracy theories and

populism, it is plausible to build upon the knowledge from populism studies when investigating the effect of income inequality on conspiracy belief. In that sense, three possible mechanisms which link income inequality and conspiracy belief were discussed.

2.3 Income Inequality and Conspiracy Belief during the COVID-19 Pandemic

This bachelor thesis studies the relationship between income inequality and a specific set of conspiracy theories, in fact, those which are related to COVID-19. The decision to focus on COVID-19-related conspiracy theories is based on particular reasons, which are discussed in the following.

At first, the question of why individuals particularly believe in COVID-19 conspiracy theories should be addressed. The pandemic represents a crisis in which feelings of powerlessness, loss of control, and anxiousness were intensified. Consequently, individuals might turn to conspiracy theories to restore feelings of safety and control. Turning to medical conspiracy theories is not unique to the COVID-19 pandemic but has appeared with other outbreaks of infectious diseases like health crises such as H1N1 or Ebola (Smallman, 2015; Vinck, Pham, Bindu, Bedford, & Nilles, 2019). Those cases showed further that individuals believing in conspiracy theories are less likely to comply with health measures such as consulting a medical professional or receiving a vaccine. Subsequently, the belief in health-related conspiracy theories causes severe consequences for the individual and collective well-being and hinders necessary public health agendas.

The belief in health-related conspiracy theories can be explained by missing trust in politics and health professionals. According to Murtin et al. (2018), political trust is primarily based on a government's competence and integrity. A government is competent when it is able to respond to citizens' needs and manage uncertainties, while it shows integrity when it is accountable, transparent, and fair. During the COVID-19 period, governments faced the immense challenges of a worldwide pandemic. Mixed messages were sent to the public frequently, and top-down policies drove policy decisions. In addition, previously unknown health experts became more prominent on the political stage, and scientific knowledge - frequently complex to understand without medical knowledge - was the basis for various policy decisions. Observing such developments increases insecurities, harms political trust, and might thus promote the belief in COVID-19 conspiracy theories.

In addition to that, the pandemic has exacerbated income inequality. In order to limit the number of infections and causalities, most governments decided to shut down economic activities and restrict the freedom of mobility. The negative consequences disproportionally impacted vulnerable groups, such as lower-income groups (Narayan et al., 2022). While employees with higher skills often switched to home office relatively quickly, people with lower skills experienced severe work and income losses. Observing the growth of income inequality and the unequal distribution of consequences probably promoted the rise of feelings of economic insecurities, distrust in the political system, and social exclusion. It is hence assumed that individuals experiencing such inequalities are more drawn to COVID-19 conspiracy theories.

In sum, these findings lead to the assumption that the COVID-19 pandemic and related conspiracy theories are particularly interesting for studying the relationship between income inequality and conspiracy belief. The COVID-19 conspiracy belief displays a unique risk to the individual and collective well-being, and the pandemic caused higher rates of income inequality. Based on the insights from this chapter, the following hypothesis is formulated:

Income inequality promotes the belief in COVID-19 conspiracy theories.

3 Data

This section starts with a short description of the research design of the bachelor thesis, followed by a discussion of its strengths and weaknesses. Here, especially the merits and disadvantages of the YouGov Survey are pointed out. Next, the operationalization of the beliefs in COVID-19 conspiracy theories and income inequality is turned to. Lastly, the control variables are operationalized and discussed.

3.1 Research Design

This study aims to show a positive relationship between income inequality and the belief in COVID-19 conspiracy theories. To do so, a *COVID-19 Conspiracy Index* for European and non-European countries based on the results of a survey by the YouGov Institute (2021) is computed. In this survey, respondents were asked to what extent they agree or disagree with 12 conspiratorial statements. The survey was carried out in 24 European and non-European countries with a total number of 26.276 adults. The individual results were summarized at the country level. Since the bachelor thesis focus on COVID-19 conspiracy

theories, only three conspiracy items from the survey are included. This selection leads to the exclusion of Thailand because there is no available data for it on the COVID-19 conspiracy items. Thus, the total sample size consists of 23 countries. A small sample size like this demands particular caution in the statistical design and its interpretation. Due to the low degree of freedom, only three independent variables are tested. The data on income inequality is derived from several economic databases.

It should be noted that the YouGov survey is, to some degree, limited. First, as an online survey, it can lack demographic representation as young people are probably more often on the internet than the older ones (Ball, 2019). Second, the risk of social desirability bias could also affect the outcome. People might try to hide beliefs in conspiracy theories due to the stigmatization of those ideas (Smallpage, Enders, Drochon, & Uscinski, 2021). Nevertheless, the YouGov survey does show significant advantages, as it is one of the few surveys which asks participants directly about their attitudes towards specific conspiracy theories. Further, it includes multiple European and non-European countries, allowing space to study country-level factors. And most important, it shows high up-to-datedness since conspiracy theories about COVID-19 and the vaccines were included in the study. Because of these characteristics, it is assumed that the YouGov survey serves as a good data source.

To answer the research questions, statistical analyses are carried out. More precisely, bivariate and multivariate linear regression analyses are executed. Moreover, averages and correlations are presented. The data will be tested using SPSS.

3.2   Belief in COVID-19 Conspiracy Theories

In order to analyze the beliefs in COVID-19 conspiracy theories, a *COVID-19 Conspiracy Index* based on three conspiracy items from the YouGov Survey is composed. The respondents rated their attitude towards a conspiracy item on a 5-point scale in the survey. They could decide between 'Definitely true', 'Probably true', 'Don't know either way – this may be true or may be false', 'Probably false', and 'Definitely false'. For the *COVID-19 Conspiracy Index,* the percentage of agreement (i.e., percentage of every 'Probably true' and 'Definitively true' answer) for each country was averaged. Since it is assumed that conspiratorial beliefs work in a monological way, data is aggregated on a scale level (Goertzel, 1994). In the following, the three conspiracy items are discussed more in detail, and their relevance to the study is explained.

(1) The truth about the harmful effects of vaccines is being deliberately hidden from the public.

This conspiracy item has been chosen because it addresses trust issues in the vaccines against COVID-19. While vaccination programs are one of the critical interventions against the spread of COVID-19, vaccine hesitancy has been a significant challenge for them. It can be assumed that there is a close link between conspiratorial belief and vaccination hesitance. Both are driven by distrust in elites, such as politicians and scientists.

(2) Coronavirus is a myth created by some powerful forces, and the virus does not really exist.

While the first conspiracy item does not deny the existence of COVID-19, this conspiracy item does. It refers to the idea that the pandemic is simply a lie or a hoax. Similar to the first conspiracy item, this one has real consequences for health. It can be assumed that people who believe the coronavirus is a lie are also not eager to receive a vaccination or comply with other protective measures.

(3) Regardless of who is officially in charge of governments and other organisations, there is a single group of people who secretly control events and rule the world together

Compared to the first two conspiracy items, this one does not refer to the coronavirus specifically but displays the general distrust in elites. Nevertheless, it is assumed that if a person endorses the first two conspiracy theories, it is highly likely that the person also supports the general conspiracy theory. This is again linked to the idea that conspiratorial belief works like a monological belief system.

Since it is assumed that the belief in one conspiracy item is related to the belief in the other two, it is crucial to check the relationship statistically. A reliability analysis found the conspiracy items internally consistent, displaying a relatively good Cronbach's alpha of $\alpha = 0.86$[1]. Consequently, the relationship between the conspiracy items is proven in a conceptual and statistical sense. Hence, a *COVID-19 Conspiracy Index* can be computed by summing each country's scores of the three items.

Table 3.1 displays the descriptive statistics of all three conspiracy items and the computed index. The results confirm that conspiratorial belief is not a rare phenomenon. The assumption about the concealment of harmful effects of the vaccines achieves, on average, an agreement rate of 29.7%. In one country, it is even supported by 54%. In contrast, the myth

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[1] Full reliability test is recorded in the SPSS Syntax File.

conspiracy item receives much less support. On average, 11.78% of the respondents agree with the conspiracy theory. The results are not surprising since this conspiracy item denies the existence of the coronavirus. After more than one year of self-isolation, mandatory face masks, and multiple infections, of which some ended deadly, it is reasonable that only a lower number of people still believe in COVID-19 as a lie. Moreover, a look at the general conspiracy item reveals striking insights. This item achieved the highest agreement rate. On average, 36,91% of the respondents support the conspiracy theory that a powerful elite secretly controls events and rules the world. Moreover, in a couple of cases, it is supported by far more than half of the respondents. A possible explanation for this phenomenon could be that this conspiracy item refers to a very general idea, which multiple specific conspiracy theories resemble. Additionally, not everyone who believes that a powerful elite is secretly controlling the world is attracted by conspiracy theories on COVID-19, but they might be drawn to others.

Table 3.1 *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Conspiracy Index	**23**	**8.00**	**46.00**	**26.13**	**10.72**	**114.94**
Conspiracy Harm	23	10.00	54.00	29.70	11.30	127.68
Conspiracy Myth	23	3.00	30.00	11.78	6.42	41.18
Conspiracy General	23	10.00	72.00	36.91	16.49	271.99
Valid N (listwise)	23					

A closer look at the *COVID-19 Conspiracy Index*, displayed in Figure 3.1, reveals further noteworthy insights. Denmark shows the lowest agreement rate, merely 8%, while Nigeria displays the highest with 46%. In general, one can observe a tendency to higher conspiratorial belief rates in countries from the Global South than from the Global North[2]. In Figure 3.2, the comparison of Global South and Global North regarding the belief in COVID-19 conspiracy theories is illustrated.

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[2] Distinction according to United Nations' Finance Center For South-South Cooperation.

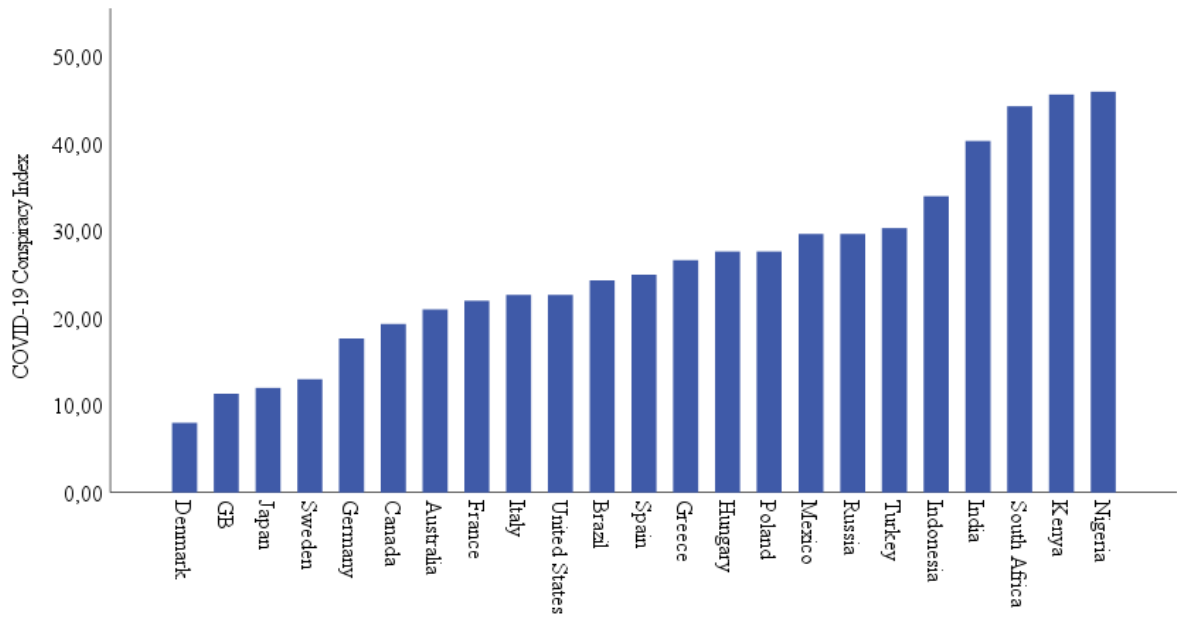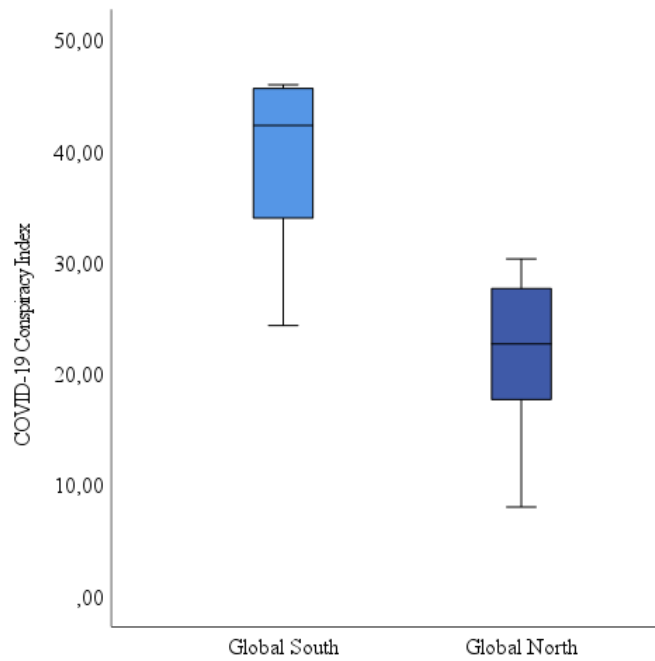**Figure 3.1** *COVID-19 Conspiracy Index of all 23 Countries*

Figure 3.2 *Comparison between Global South and Global North*

3.3 Income Inequality

Income inequality is measured in three ways: objective inequality, subjective inequality, and unemployment rates. In the following, the inequality variables are discussed more in detail.

Objective Income Inequality

The key indicator for measuring income inequality is the *Gini coefficient*, which is also used in this bachelor thesis. The U.S. Census Bureau (2021) defines the Gini coefficient as follows: "The Gini coefficient incorporates the detailed shares data into a single statistic, which summarizes the dispersion of income across the entire income distribution. The Gini coefficient ranges from 0, indicating perfect equality (where everyone receives an equal share), to 1, perfect inequality (where only one recipient or group of recipients receives all the income).". Data on the Gini coefficient is retrieved from the World Inequality Database. This is done because of two reasons. First, the database incorporates all countries included in the YouGov survey. Second, the database consists of the most current data. For the study, data from 2020 is used. In 2020, the most significant economic changes happened due to the coronavirus. Since it is argued that the pandemic has deepened already existing inequalities, this time selection makes sense.

Subjective Income Inequality

It is commonly argued that objective inequality alone cannot explain the effects of income inequality on societies. Further, the theoretical framework assumes that endorsing negative feelings moderates the relationship between income inequality and conspiratorial belief. Based on this, both the objective and subjective components of income inequality are included in the analysis. Since this bachelor thesis analyzes context-based drivers for conspiratorial belief, it is possible to aggregate individual-level data into country-level data. Therefore, data is retrieved primarily from *Pew Research Center (2021)* and secondarily from the *ISSP Research Group (2021)*. Both surveys showed the most current data on subjective inequality for the countries in the YouGov survey. The second is included in this study because it provides data on Denmark, which was in the first survey not covered.

The survey from the Pew Research Center was conducted in Spring 2019. It asked its respondents to give their opinion on the following statement: *Thinking about the future of (survey country), please tell me whether you feel generally optimistic or generally pessimistic*

about [...] [r]educing the gap between the rich and poor. (Q12b.). In the survey, the respondents also had the option to choose 'neither' instead of 'optimistic' and 'pessimistic'. However, for the analysis, only the pessimistic attitudes are relevant.

The ISSP survey was conducted in July 2018 and asked its respondents to give their opinion on the following statement: *Differences in income in my country are too high.* (Q4.a.). The survey item is measured on a 5-point scale ranging from 'strongly agree' to 'strongly disagree'. Similar to the *COVID-19 Conspiracy Index*, the percentage of agreements (i.e., percentage of every 'strongly agree' and 'agree' answer) for Denmark is averaged.

Unfortunately, there was no adequate survey data applicable from the year 2020 and later. Therefore, it was impossible to test the perception of income inequality during the pandemic. In the end, it is a matter of balance. For the study's sake, it was decided to include the subjective income variable after all. The primary justification for this decision is that inequality is a structural problem that has already existed before the pandemic. The year 2020 is only chosen for the other variables because it is argued that these inequalities have been deepened during the pandemic.

Unemployment

Besides objective and subjective income inequality, an unemployment variable is also included in the analyses. Two reasons justify the inclusion of unemployment in the study. On the one hand, increased unemployment intensifies income inequality by increasing the income shares of the high-income groups and decreasing the income shares of the low-income groups (Mocan, 1999). On the other hand, unemployment risks are the highest among individuals with the lowest income (Björklund, 1991). These increased risks were recognizable in many countries during the pandemic. Individuals from the lowest income sector were those who had to face the most severe job and income losses (Dewan, Ernst, & Achkar Hilal, 2022; Narayan et al., 2022). Because of this, the unemployment rate from 2020 is included in this study. The year 2020 has been chosen since the unemployment rate increased the most in the first year of the pandemic (Dewan et al., 2022). It is assumed that the feelings of income inequality have been raised by that. The data on unemployment is retrieved from the World Development Indicators (WDI) by the World Bank. The WDI is one of the most reliable and comprehensive databases for economic indicators, which is updated continuously.

3.4   Democracy, Corruption, and Economic Growth

Other variables can influence the relationship between income inequality and the belief in COVID-19 conspiracy theories. These variables are called third variables and are controlled for in this study. At first, the effect of the democracy level is checked. Studies have shown that people living in countries with an underdeveloped democratic system are more likely to believe in conspiracy theories (Drochon, 2018). The data on democracy was derived from Democracy Index from 2020. The Index is published every year by the Economist Intelligence Unit. It measures five categories: electoral process and pluralism, the functioning of government, political participation, political culture, and civil liberties. Based on the scores in all five categories, a country is classified as one of four regime types: 'full democracy' (10-8), 'flawed democracy' (8-6), 'hybrid regime' (6-4) or 'authoritarian regime' (4-0).

Second, the degree of corruption is controlled. Also, corruption is often defined as a driver for conspiratorial belief since it is closely related to distrust in political elites (Cordonier et al., 2021). The Corruption Perceptions Index from 2020 is used to include corruption in the analysis. The Index is published by Transparency International every year. Countries are categorized following a scale from 0 to 100, where 0 is highly corrupt and 100 is very clean.

Lastly, the study controls for the effect of economic growth. Economic growth is an essential socioeconomic indicator. In addition, during the pandemic, most countries had to deal with decreased economic growth rates. The most common indicators for economic growth are the gross domestic product (GDP) or the GDP per capita. Latter is more valuable for this study because it allows comparing individuals' economic situations. The data on GDP per capita is retrieved from the WDI by the World Bank.

Table 3.2 displays the descriptive statistics of all relevant variables.

Table 3.2 *Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
COVID-19 Conspiracy Index	23	8.00	46.00	26.13	10.72	114.94
Objective Income Inequality	23	0.41	0.76	0.54	0.10	0.01
Subjective Income Inequality	23	33.0	86.0	62.87	14.56	211.97
Unemployment	23	2.80	29.22	8.66	5.92	35.03
Democracy	23	3.31	9.26	7.15	1.68	2.83
Corruption	23	25.00	88.00	55.43	20.03	401.08
Economic Wealth	23	1.88	63.21	25.89	20.73	429.70
Valid N (listwise)	23					

4 Analysis

In this section, the quantitative data from the YouGov survey is analyzed to test the hypothesis of this bachelor thesis and eventually to answer the research question asking to what extent income inequality promotes the belief in COVID-19 conspiracy theories. First, the bivariate correlations between all relevant variables are analyzed. Second, the hypothesis is tested with the help of bivariate and multivariate linear regression analyses. An interpretation of the results is given that considers the significance, strength, and direction of the described relationships.

4.1 Bivariate Correlations

The Pearson's coefficient is used to measure the linear correlation between two variables. The outcomes are always between -1 and +1, where -1 shows a perfect negative linear relationship, 0 indicates no linear association, and +1 shows a perfect positive linear relationship. Table 4.1 reveals the Pearson's correlation coefficients for the relationships between the dependent and the independent variables and the relationship between the independent variables to each other. Table 4.2 displays a possible interpretation of different Pearson's coefficients according to Diaz-Bone (2018).

Table 4.1 *Bivariate Correlations*

	1.	2.	3.	4.	5.	6.	7.
1. COVID-19 Conspiracy Index	1.00						
2. Objective Income Inequality	0.59**	1.00					
3. Subjective Income Inequality	-0.47*	-0.46*	1.00				
4. Unemployment	0.37	0.38	0.17	1,00			
5. Democracy	-0.73**	-0.47*	0.35	-0.04	1.00		
6. Corruption	-0.85**	-0.61**	0.41	-0.19	0.90**	1.00	
7. Economic Wealth	-0.83**	-0.58**	0.41	-0.26	0.80**	0.93**	1.00

** p<0.01 * p<0.05

Table 4.2 *Interpretation of Correlation Coefficients*

Correlation Coefficient	Interpretation
$0.00 \leq r \leq 0.05$	No correlation
$0.05 \leq r \leq 0.20$	Weak correlation
$0.20 \leq r \leq 0.50$	Moderate correlation
$0.50 \leq r \leq 0.70$	Strong correlation
$0.70 \leq r \leq 1.00$	Very strong correlation

The results prove to be very interesting for the outcome of this study. Only two of the three income inequality variables seem to correlate with the *Covid-19 Conspiracy Index*. While objective and subjective income inequality significantly correlate with the *Covid-19 Conspiracy Index*, unemployment does not. However, objective and subjective inequality do not correlate with the *Covid-19 Conspiracy Index* in the same direction. While objective inequality is positively correlated to the *Covid-19 Conspiracy Index* (0.59**), subjective inequality is negatively correlated (-0.47*) to it.

Further, the correlation matrix indicates that democracy (-0.73**), corruption (-0.85**), and economic wealth (-0.83**) are negatively correlated to the *Covid-19 Conspiracy Index*. However, the results also suggest high collinearity between those three variables. Since multicollinearity causes difficulties in testing individual regression coefficients, democracy and corruption are excluded from the linear regression analyses. This leaves economic wealth as the only third variable in this study.

Similar to that, subjective income inequality and economic wealth seem to correlate significantly negatively with objective income inequality. However, since in both cases, the regression coefficient is below 0.7, it should be fine to keep them in the analysis. Further, a Variance Indicator Factor (VIF) test indicates no significant multicollinearity between the dependent variable, all independent variables, and economic wealth.

4.2 Linear Regression Analyses

The linear regression analyses consist of bivariate and multivariate regression analyses. To interpret the result of the analyses correctly, certain conditions must be met. First, there must be a linear relationship between the dependent and independent variables. Second, the residuals should have a constant variance. Third, the residuals must be normally distributed.

Lastly, there should be no high correlation between the independent variables. The degree of collinearity has already been checked in the bivariate correlation section. It was shown that there is no critical correlation between objective income inequality, subjective income inequality, unemployment, and economic wealth.

Regarding the other three assumptions, only the unemployment variable violates linearity, independence, and normality[3]. Hence, the variable is log-transformed. The transformation shows the correction of non-normality, heteroscedasticity, and non-linearity[4]. Further, the non-collinearity with other independent variables can be verified[5]. One disadvantage of the transformation is that unemployment is more challenging to interpret. Assumptions about the relationship between unemployment and COVID-19 conspiracy belief can only be made about the direction and strength. Despite this drawback, the transformed variable is used for further analysis.

Moving to the regression analyses. The bivariate regression analyses consist of three models. Each includes the dependent variable, the *COVID-19 Conspiracy Index*, and one of the independent variables. Based on the outcomes of the bivariate regression analyses, conclusions about the impact of each independent variable on the dependent variable can be made. Each bivariate regression model is illustrated in a table consisting of four coefficients: standardized Beta coefficient, standard error, significance level, and R^2 adjusted. Table 4.3 displays all three models.

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[3] The linear regression assumptions tests are recorded in the SPSS Syntax File.
[4] The correction by the log-transformation is recorded in the SPSS Syntax File.
[5] The correlation matrix with the transformed unemployment variable can be found in the Appendix.

Table 4.3 *Bivariate Regression Analyses*

	(1)	(2)	(3)
Objective Income Inequality	63.51** (19,18)		
Subjective Income Inequality		-0.35* (0.14)	
Unemployment			14.26 (8.73)
Constant	-8.00	48.09	13.84
N	23	23	23
R^2 adjusted	0.31	0.19	0.07

** p<0.01 * p<0.05

The first bivariate regression model analyses the relationship between objective income inequality and the *COVID-19 Conspiracy Index*. The model indicates a significant positive relationship between the two variables (63.51**). Hence, each one unit increase in objective income inequality is associated with a 63.51 unit increase in the *COVID-19 Conspiracy Index.* Moreover, the model shows that objective income inequality can explain 31% of the variance in the COVID-19 conspiracy belief.

The second bivariate regression model analyzes the relationship between subjective income inequality and the COVID-19 Conspiracy Index. This model indicates a significant relationship between both variables (-0.35*). With an increase of one percentage point in subjective income inequality, the COVID-19 Conspiracy Index decreases by 0,35 percentage points. Further, the model indicates that subjective income inequality can explain 19% of the variance.

The last model of the bivariate regression analyses includes, besides the COVID-19 Conspiracy Index, unemployment. According to the model, the relationship between both variables is not significant.

In sum, only two out of three hypothesized variables can predict the belief in COVID-19 conspiracy theories. Moreover, the bivariate regression analyses reveal unexpected

outcomes. It was assumed that all three independent variables affect the dependent variable positively. Nevertheless, subjective income inequality seems to influence the *COVID-19 Conspiracy Index* negatively. These results are discussed more in detail in the concluding section of this bachelor thesis.

Having analyzed and discussed the bivariate linear relationships, the multivariate regression analyses are now executed. In contrast to the bivariate analyses, the multivariate analyses aim at explaining the overall impact of the independent variables on the *COVID-19 Conspiracy Index.* For that reason, two models are constructed. The difference between the two models is that the second model includes economic wealth as a control variable. In the following, the results from the multivariate regression analyses are compared with each other and put in relation with the results from the bivariate regression analyses. Both models are displayed in Table 4.4.

Table 4.4 *Multivariate Regression Analyses*

	(1)	(2)
Objective Income Inequality	32.94 (22.29)	1.69 (16.94)
Subjective Income Inequality	-0.30* (0.15)	-0.18 (0.11)
Unemployment	14.45* (7.95)	10.64* (5.59)
Economic Wealth		-0.35*** (0.08)
Constant	14.91	36,36
N	23	23
R^2 adjusted	0.41	0.71

*** p<0.01 ** p<0.05 *p<0.1

The first model can explain 41% of the variance in the *COVID-19 Conspiracy Index*. Therewith, the inclusion of all three independent variables leads to a higher explanatory power. However, the model also shows significant differences in the outcomes. While objective

income inequality shows the most positive significant effect on the dependent variable in the bivariate regression, it has no significant effect in the multivariate regression. In contrast, unemployment has a significant positive impact on the COVID-19 Conspiracy (14.45*). Like the bivariate regression model, the multivariate regression model indicates a significant negative relationship between subjective income inequality and the belief in COVID-19 conspiracy theories (-0.30*). With an increase of one percentage point in subjective income inequality, the *COVID-19 Conspiracy Index* decreases by 0,30 percentage points.

Moving to the second model, which includes economic wealth as a control variable. Compared to the first model and the bivariate regression models, this model shows a much higher ability to explain the variance in the *COVID-19 Conspiracy Index* (R^2 adjusted = 0.71). Moreover, the model suggests a significant negative relationship between economic wealth and the belief in COVID-19 conspiracy theories (-0.35***). With every one unit increase in economic wealth, the *COVID-19 conspiracy index* decreases by 0.35 percentage points. From the hypothesized independent variables, only unemployment positively affects conspiratorial belief (10.64*).

The results of both multivariate regression analyses show that when all predicting variables are included in one regression model, the belief in COVID-19 conspiracy theories is better explained. However, the results from the analyses also show that objective income inequality loses and unemployment wins significance when included in a multivariate model with subjective income inequality. Subjective income inequality has a significant negative effect on conspiracy belief in the bivariate as well as in the multivariate relationships. Yet, when economic wealth is included in the model, it loses its significance. In contrast, unemployment also seems to have a significant positive effect in this model.

The different effects of unemployment on conspiracy belief might be caused by certain countries which do not fit into the hypothesized relationship. An analysis reveals that Nigeria, Kenya, and India seem to be those countries. Moreover, Nigeria and Kenya differ similarly from other cases in the bivariate relationships between objective and subjective income inequality and COVID-19 conspiracy belief. Hence, Nigeria and Kenya are excluded to test the robustness of the regression analyses. The results of the bivariate (Table 4.5) and multivariate regression analyses (Table 4.6) indicate that unemployment significantly increases the belief in COVID-19 conspiracy theories. In addition, both multivariate models can explain more variance of the *COVID-19 Conspiracy Index*. Moreover, all three inequality variables significantly affect the COVID-19 conspiracy belief in the model without economic wealth. In the second multivariate model, the effect of economic wealth remains significantly negative,

and unemployment remains the only hypothesized variable with a significant positive impact. Nevertheless, the effect of unemployment becomes more significant. These findings demand a further discussion of subjective income inequality, unemployment, and economic wealth and their effects on the belief in COVID-19 conspiracy theories.

Table 4.5 *Bivariate Regression Analyses (excluding Kenya and Nigeria)*

	(1)	(2)	(3)
Objective Income Inequality	57.16*** (15.73)		
Subjective Income Inequality		-0.27** (0.13)	
Unemployment			14.18* (7.32)
Constant	-6.26	41.71	12.05
N	23	23	23
R^2 adjusted	0.38	0.16	0.12

***p<0.01 **p<0.05 *p<0.1

Table 4.6 *Multivariate Regression Analyses (excluding Kenya and Nigeria)*

	(1)	(2)
Objective Income Inequality	32.14*	7.32
	(18.15)	(14.24)
Subjective Income Inequality	-0.23*	-0.16*
	(0.12)	(0.09)
Unemployment	13.47*	10.88**
	(6.52)	(4.69)
Economic Wealth		-0.27***
		(0.07)
Constant	10.08	28.68
N	23	23
R^2 adjusted	0.48	0.73

***p<0.01 **p<0.05 *p<0.1

Regarding the hypothesis of this bachelor thesis, these results have different consequences. In a bivariate relationship, only objective income inequality promotes conspiratorial belief. However, in the multivariate relationship, objective income inequality seems to have no significant positive effect on the belief in COVID-19 conspiracy theories, while unemployment appears to have one. Beyond that, the results differ when Nigeria and Kenya are excluded from the analysis. First, the effect of income inequality, in general, is stronger. Second, the effect of unemployment is significantly positive in all regression models. Hence, the hypothesis that income inequality positively impacts the COVID-19 conspiracy belief can only be partially approved.

5 Discussion and Conclusion

In this cross-country study, the question of *to what extent does income inequality promote the belief in COVID-19 conspiracy theories* was addressed. To answer this question, bivariate and multivariate linear regression analyses were executed. Besides insights from previous studies on conspiratorial belief, knowledge from the research on populism served as a theoretical base in this study. The results of the analyses could support the hypothesis of this

bachelor thesis to some degree. In a bivariate relationship, objective and subjective income inequality significantly impact the belief in COVID-19 conspiracy theories, yet not in the same direction. Subjective income inequality has a negative impact on the belief in COVID-19 conspiracy theories, while objective income inequality has a positive one. Hence, in a bivariate relationship, only objective income inequality supports the hypothesis. The results from the multivariate regression analyses prove something different. Instead of objective income inequality, unemployment positively affects the belief in COVID-19 conspiracy theories. Beyond that, the bachelor thesis discovered that economic wealth negatively affects the COVID-19 conspiracy belief strongly. Moreover, income inequality gains more significance when Nigeria and Kenya are omitted. In the following, these results and their meaning are discussed more in detail, starting with possible reasons for these results.

First, the negative effect of subjective income inequality is discussed. A closer look at the data reveals that objective and subjective income inequality often do not correspond. One possible explanation for this outcome could be that the subjective income inequality variable is based on data from 2018 and 2019. However, the misperception of inequality is nothing unique to this study and goes with insights from earlier research. It has been shown that individuals, on average, hold wrong beliefs about the degree of inequality in their country (Gimpelson & Treisman, 2018). But what causes the misperception of inequality? Some research has begun to explore this question. First, individuals often refer to their own experiences and environment when answering such complex questions of estimating inequality (Hauser & Norton, 2017). Second, intensive media coverage of inequality might lead to overestimating the inequality in a country. Such a pattern can be recognized in the case of Germany, which is commonly known for overestimating inequality (Diermeier, Goecke, Niehues, & Thomas, 2017). Lastly, another predictor of perceptions of inequality stems from ideology. Individuals living in post-socialist countries might be more sensitive to inequality and overestimate it. In this study, Hungary perceives income inequality as higher than it is in reality (Corneo & Grüner, 2002). These findings can help to understand the differences between subjective and objective income inequality and, to some degree, their effect on the belief in COVID-19 conspiracy theories. Nevertheless, the reasons why perceived inequality negatively impacts conspiracy beliefs cannot be answered to the fullest by this. Hence, further investigation is required.

Coming now to the two variables which seem to have the most significant effect on the belief in COVID-19 conspiracy theories: unemployment and economic wealth. While unemployment does not significantly affect conspiracy belief in a bivariate relationship, it gains

explanatory power when included in a multivariate context. Thus, it supports the hypothesis that income inequality positively affects the belief in COVID-19 conspiracy theories. The theoretical background of this study can support this relationship. It is hypothesized that unemployment triggers feelings of economic insecurity, decreases trust, and strengthens the feelings of exclusion.

Furthermore, the strong effect of economic wealth needs to be discussed. The results suggest that a higher GDP per capita causes a lower belief in COVID-19 conspiracy theories. Including the insights from the theoretical framework, this relationship is not surprising. It is argued that economic insecurity predicts conspiracy beliefs. Economic insecurity is triggered when individuals do not feel economically safe. Consequently, individuals living in an economically poor country have more experience with economic insecurity. A closer look at the countries with a low GDP reveals additional explanatory answers. Those countries with the lowest economic wealth - Nigeria, Kenya, and South Africa - also show the firmest belief in COVID-19 conspiracy theories. Moreover, all three countries display one of the lowest rates of people who are fully vaccinated against COVID-19 (World Health Organization). The low vaccination rates do not necessarily need to be caused by high vaccination hesitancy. When several vaccines were available, the inequalities within the global medical system became apparent. The moment at which many countries started with their booster program, the large majority of countries was being left behind. This inequality hit African countries the most (Asundi, O'Leary, & Bhadelia, 2021). Hence, the low availability of vaccines largely affected the low vaccine rates. However, vaccine hesitancy seems prevalent in African countries (Afolabi & Ilesanmi, 2021). This medical distrust can be traced to a large extent to historical experiences. Studies like the Tuskegee Syphilis Experiment, which represents a case of extreme medical racism and abuse by the U.S. government, increased the distrust in western health actions until today (Goertzel, 1994). These racist experiences might even explain why the hypothesized relationship between income inequality and conspiracy belief is not applicable in some cases. An additional analysis shows that when Nigeria and Kenya are excluded from the studies, the effect of income inequality becomes more significant. These results and the knowledge from the past underline the country-based differences in the causes of conspiracy beliefs. While the concept of inequality might be able to explain COVID-19 conspiracy beliefs in countries from the Global North, it might not be sufficient to predict conspiracy beliefs in countries from the Global South.

Other countries worth looking at are the United States and Brazil. While the United States registered the highest number of deaths from COVID-19, with more than one million

fatalities, Brazil takes second place (World Health Organization). Besides the high numbers of causalities, both countries have something else in common: during the pandemic, they were led by populists. Although Donald Trump only was president until January 2021, he did influence the perception of the pandemic to a large extent. Trump repeatedly accused China of spreading COVID-19 (Chalfant & Elis, 2020). Moreover, he continuously downplayed the virus as regular flu (Shabad, 2020) and the positive effect of wearing face masks (Syal, 2020) and keeping social distance (Perez, 2020). Similar reactions were recognizable in the behavior of Brazil's president Bolsonaro. He dismissed the pandemic as hysteria and a little cold (Eisenhammer & Spring, 2020). Moreover, Bolsonaro positioned himself resolutely against lock-downs since they would harm the economy (Mandl & Benassatto, 2020). The cases of the United States and Brazil show the close relationship between populism and misinformation. With the avoidance of lock-downs to save jobs and the economy, they addressed feelings of economic insecurities. Based on this, it is surprising that they rate lower than the average on the COVID-19 Conspiracy Index.

These findings show many strengths of this thesis. One and foremost, it sheds light on income inequality – one of the most relevant sociopolitical indicators. Hence, it contributes to research on contextual factors of conspiracy belief. Moreover, this study investigates conspiracy beliefs in European and non-European countries. Most studies related to conspiracy beliefs have been focused on one country, particularly on the United States or European countries. Thus, this study is one of a few investigating conspiracy beliefs globally. Lastly, by investigating COVID-19 conspiracy beliefs, this bachelor thesis shows high timeliness. Its outcomes help improve the understanding of health-related conspiracy beliefs, and the knowledge proves particularly relevant for decision-making in future crisis management.

However, not all questions that came up during the analysis can be answered. To some degree, this is due limitations of this study. Conspiracy belief is investigated with the help of quantitative data. Working with quantitative data can often not answer questions about individuals' motives. With that related, the relationship between income inequality and the belief in COVID-19 conspiracy theories is studied with the help of aggregated data at the country level. With every aggregating step, important information gets lost. Moreover, due to the small sample size of 23 countries, it is difficult to find significant effects.

Additionally, some data quality problems in the YouGov survey can be noticed. First, the survey classifies the belief in the United States as lower than other empirical findings suggest. For instance, Oliver and Wood (2014) concluded in their widely cited study that every second American citizen believes at least in one conspiracy theory. Second, the survey shows

a relatively high overall acceptance of the general conspiracy beliefs. More than one-third of the respondents believe in the general conspiracy item. Considering the broad sociopolitical consequences of conspiracy belief, these results seem especially alarming for liberal democracies. However, keeping in mind that the survey was conducted online, the results of the analysis might not be directly translatable to the country level.

These limitations must be considered when interpreting the bachelor thesis results. However, together with the results of the analyses, they also reveal possible starting points for future research. First, the relationship between income inequality and the belief in COVID-19 conspiracy theories should be further investigated. Thereby, more data on the individual level, such as income, should be considered. Moreover, the relationship between income inequality and other conspiracy theories could be an interesting base for upcoming studies. The testing of the hypothesized mechanisms between inequality and conspiracy belief has not been done within this research but also proves highly relevant.

And last but not least, the results of the bachelor thesis reveal two striking and unexpected outcomes. Economic wealth seems to be a powerful predictor of conspiracy belief. Surprisingly, however, its effect has not been studied in terms of conspiracy belief. Hence, further research should explore it more in detail. Beyond that, it is shown that the relationship between income inequality and the belief in COVID-19 conspiracy theories might not be applicable to certain Global South countries. These results underline country-based differences, and more importantly, they show that a universal approach cannot explain COVID-19 conspiracy beliefs. Hence, future research needs to respect and pay special attention to the diversity of national preconditions.

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Appendix

Correlation Matrix with unemployment (log)

	1.	2.	3.	4.	5.	6.	7.
1. COVID-19 Conspiracy Index	1.00						
2. Objective Income Inequality	0.59[**]	1.00					
3. Subjective Income Inequality	-0.47[*]	-0.46[*]	1.00				
4. Unemployment (Log)	0.34	0.28	0.22	1,00			
5. Democracy	-0.73[**]	-0.47[*]	0.35	-0.05	1.00		
6. Corruption	-0.85[**]	-0.61[**]	0.41	-0.19	0.90[**]	1.00	
7. Economic Wealth	-0.83[**]	-0.58[**]	0.41	-0.20	0.80[**]	0.93[**]	1.00