



LUND UNIVERSITY

School of Economics and Management

Master's Programme in Economic Growth, Population and Development (Demography Track)

## The Fear of Immigration

### Its Roots and Underlying Dynamics in East Germany from a Socio-Economic Perspective

by

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The topic of immigration and its management is very controversial and highly discussed. Hence, it continues to have a huge impact on the today's societies and the political climate. The purpose of this study is to analyze the impact of the following socio-economic factors: satisfaction, security and dynamics regarding the fear of immigration in East Germany. The main goal is to investigate the differences depending in socio-economic backgrounds. Aside from the analyses of the overall impact of the factors, the study is concerned with the impact of macroeconomic shocks. The analyzed macroeconomic shocks are the global financial crisis and the introduction of the minimum wage. The objects of interest are analyzed by applying a panel logistic regression design. The data for this study is obtained from the Socio-Economic Panel. Three main conclusions regarding the fear of immigration can be drawn from this study. First, individuals from higher classes within the used data set are on average more likely to fear immigration. Second, the extent to which people fear immigration fluctuates more for people from lower classes and is more vulnerable to external economic shocks and changes. Third, the improvement of the socio-economic situation through the introduction of the minimum wage shows a statistically negative impact on the fear of immigration. In contrast, the financial crisis shows a statistically positive effect. It can therefore be concluded that policy implications with the aim to increase equality and to improve economic endowment, as well as economic stability could help to counter the refuse of minority groups.

Key words:

*Immigration, East Germany, Socio-Economic Background, Minimum Wage, Financial Crisis, Socio-Economic Panel, Goldthorpe, Economic Security, Economic Satisfaction*

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# 1.Introduction

## 1.1 Background and Research Motivation

“The humane quality of a society cannot be recognized by debates on ethics in the arts pages opinion-forming print media or on talk shows, but in dealing with weak groups.”

(Heitmeyer, 2005: p.5)

The political developments of recent years were marked by the rising popularity and power of populist and right-wing forces, as well as by the growth in broader and more controversial rifts within society. For the case of Germany, one expression of the increasing success of populist groups is the election of the party "Alternative für Deutschland" (AfD), which is, according to a study by Lewandowsky et al. (2016), the only existing right-wing populist party in Germany. In the last Bundestag elections in Germany in 2017, the AfD received 12.6% of the votes cast and thus entered the Bundestag for the first time since its foundation. This corresponds to an increase of 7.9% compared to the election in 2014. Therefore, the AfD had the most substantial increase in votes among all parties (Bundeswahlleiter, 2017).

One of the most prominent topics of all right-wing populist parties across Europe is how society deals with refugees, especially those coming from crisis areas. Particularly since 2015, after a large number of refugees came to Europe, mainly from Syria. In Germany, there were 39 332 people from Syria who applied for asylum in 2014. In 2015, the number was 136 273 (Hanewinkel, 2015). Populist groups often use immigration and the fear it evokes within society to acquire votes and increase their approval. This is also true for the AfD. The main content of the party's policies is its rejection and defamation of international immigration (AfD, 2017). They thus form a reservoir for fears and anti-immigration attitudes. History has shown that fear can be a powerful force in giving rise to movements that can overturn entire societies and question existing morals and rules.

In Germany, there has been an increasing number of terrorist attacks from right-wing groups for several years. During the years 2014 to 2018, there were 6498 registered attacks associated with the right spectrum, while it was 4272 in the five years before (Janson, 2019). The question is, how can it be possible for a society with such a fatal history to be moving in

these directions again, and accept tendencies long believed to be a taboo? One reason could be that the power of fear also has a fundamental function within this development. Would it be possible to counter the fear of immigration as root of right-wing terrorism and populism by analyzing it from a socio-economic perspective and implement economic policy measures? This work aims to get to the bottom of the socio-economic causes underlying the fear of immigration. It aims to investigate which dynamics are most influential, whether differences regarding the socio-economic background of individuals exist, and what influence external factors have.

The connection between xenophobic attitudes and economic factors is already much discussed in science. This master's thesis does not examine the connection between xenophobic attitudes and economic factors but starts at the root of these political attitudes: fear, thereby contributing to existing knowledge. The aim is to gain insight into which fundamental factors, from a socio-economic perspective, influence the emergence of fear, which, in extreme cases, can lead to active xenophobia. This study takes East Germany as its observation region to connect the history with today's developments. 30 years ago, a large part of the people living there were themselves immigrants to a new system, with different structures, to a large extent also with a different culture as well as different political and economic backgrounds and maxims. It is therefore especially interesting to see how the fear of something that individuals have recently experienced themselves can arise and what influences it from a socio-economic perspective.

## 1.2 Research Aim and Questions

The research aim of the thesis is to investigate the relation between socio-economic factors and the fear of immigration to get a deeper insight into the roots of xenophobia in terms of anti-immigration behaviors, and its socio-economic background. Therefore, three research questions are posed and answered by taking into account existing literature and complemented by the outcomes of the empirical part of this study. The three research questions are:

1. Does the fear of immigration differ between socio-economic classes?
2. Is the fear of immigration and its socio-economic explanation impacted by macroeconomic shocks and economic policy implications?

3. Is the extent to which external economic and political events have an impact on the fear of immigration dependent on the socio-economic class?

This thesis aims to answer these research questions in order to give a better understanding of the underlying reasons for the fear of immigration. Also, it intends to provide a basis on which political tendencies within society can be influenced by targeted economic policy measures.

## 1.3 Thesis Outline

The master thesis begins with an overview of existing literature and empirical results on the topic, as well as with a short description of the selected region which will form the basis of the analysis. Next, the used data set is briefly described. The subsequent empirical investigation is divided into four parts. First, the relationship between socioeconomic factors and the fear of immigration is analyzed for the period of 2000 – 2018. Second, it is investigated whether macroeconomic changes have an influence on this relationship. Third, the empirical part is rounded off with a sensitivity analysis and fourth, an investigation of external correlations which influence the outcome and could therefore lower the value of the results of this study is made. The last part of this thesis focuses on the analysis of the results found and integrates them into the existing theoretical and empirical knowledge base. Throughout the whole work, the analysis will focus on the differences between higher social classes and lower ones.

## 2.Theory

### 2.1 Definition and Underlying Dynamics of the Fear of Immigration

Several definitions of xenophobia and the fear of immigration exist in the literature, as well as different approaches to explain people's attitudes towards immigration. According to Heitmeyer (2005), xenophobia is a kind of group-focused enmity, which is the determination and discrimination of people belonging to a particular group that is defined as unequal. The development of it is a consequence, so Heitmeyer (2005), of the perceived threat of cultural differences and competition for scarce resources. Group-focused enmity itself, according to Groß et al. (2012), is the legitimation and marking of the inequality of groups or individuals, which makes their discrimination and refusal more likely. According to Johnson (1996), the fear of immigration is an expression for the fear of change and protection of the social and economic status quo. Frindte (1999: 19) defines the fear of immigration as a result of the tendency that locals see their own habitats threatened by immigrants. Semyonov et al. (2004) concludes that a higher number of immigrants positively correlates with the fear of it, since people feel more at risk in their economic and social security if there are more immigrants. This is supported by Weber (2016), who claims that an increase in migrants leads to an increase in media attention, which then leads to more discussions about distributive justice and the competition for social and economic goods. Frindte (1999: 17) argues the opposite. He establishes the concept of mobility, which refers to travelling or getting to know individuals from unknown groups. According to him, mobility can decrease the fear of immigration. Considering all the approaches for xenophobia and the fear of immigration, it seems to be a result of perceived differences as well as the need for stability and security. Since the economic endowment of individuals and the feeling of security can be a significant factor, a central part of this study is to analyze the extent to which the endowment of socio-economic factors influences anxious attitudes towards immigrants.

A high amount of theories discussed aim to explain the underlying reasons for the fear of immigration. In Lengfeld and Dilger (2018), two theories are presented: the losers of modernization theory and the cultural backlash theory. In economic terms the modernization theory means that individuals from a lower socio-economic group are against immigration because they fear more competition on the labor market and less social benefits as a



consequence of a higher number of migrants within the country. This hypothesis is also supported by Semyonov et al. (2004), who argue that individuals who are more vulnerable in social and economic terms are more likely to be anxious. This perceived competitive situation supports xenophobia and the fear of immigration. To analyze the applicability of the theory for East Germany, the individuals that took part in the survey are grouped according to the Goldthorpe Scheme from which, among other things, conclusions about vulnerability can be drawn.

In Semyonov and Rajiman (2006), it is argued that economic conditions are one of the main determinants for the fear of immigration and they state that minority groups are often instrumentalized as a reason for declining economic performance. According to Dörre (2016: 260), the new right-wing populism, together with the fear of immigration, refers to the social question of equality, which is instrumentalized in a fight about allocation and is carried out between different groups. He also argues that the fear or the refusal of other groups, in this case immigrants, is always also a defense of one's own status. This is in line with the argumentation of the self-interest-theory. Therefore, people who think that they will be harmed by inward migration, are also more likely to refuse and fear it (Rensmann & Miller, 2010). In Kinloch (1974, cited in Semyonov & Rajiman, 2006), it is highlighted that an improvement of the economic conditions of individuals could lead to a decrease in these attitudes. This is supported by Tienharra (1974, cited in Semyonov & Rajiman, 2006), who finds for the case of Canada that discriminatory behavior is more robust in times of high unemployment. Semyonov and Rajiman (2006) find in their analyses for Europe that the affects of economic conditions regarding the refusal of immigration have not changed over the years. They assume that the underlying reason for this is the stable economic prosperity in Europe over the years before their study, conducted in 2006, meaning shortly before the global financial crisis. On the contrary, for the time after the crisis, Groß et al. (2012) find an increasing application of stereotypes, prejudices, and more discrimination against minority groups. They also stress empirical findings that suggest that thinking in categories becomes more and more common in today's societies, which in turn leads to attitudes like "us vs. them" or "the winners vs. the losers". Eva von Redecker (2020) uses the term of phantom possession to explain negative attitudes towards foreigners. Phantom possession describes the erroneous assumption of ownership of a good or right. Following von Redecker (2020), the reason why property is so crucial for humans is that it provides social protection. The defense of the phantom possession is often directed against migrants or other groups from a weaker status in socio-economic concerns. Within the theory of phantom possession, those weaker groups are often used as an

explanation for the economic loss of the society or other groups. Seidelsohn (2018: 109) supports the explanation of the fear of immigration through the theory of phantom possession and elaborates the explanation by saying that it is not the possession of a factor itself, which makes people more anxious but the fear of losing that factor. At this point, it is especially interesting to note how the fear of immigration is impacted by economic factors in East Germany since people there experienced the loss of their socio-economic factors, jobs and a changing system during the reunification of Germany. This fact makes it particularly interesting to see how and if people with this experience instrumentalize foreigners for socio-economic changes.

While the factor of economic endowment and participation itself already has a significant impact, the increasing economization of the society, meaning the categorization and justification of individuals after their economic utility, reinforces the refusal of immigration and degradation of certain groups (Groß et al., 2012). They also argue that this development impacts the tendency of discriminative behavior towards minorities, especially in bad times or in times of economic insecurity. Their finding that people with a stronger economic orientation in their daily lives are also more likely to discriminate against minority groups, supports their argumentation. The economization of the society increases the discriminative behavior towards groups that are stigmatized as concurrent or as a group that exploits the welfare state. Highly vulnerable people in terms of discrimination are often people that are long-term unemployed, migrants, Muslims, and homeless people. Dörre (2016, pp. 264-265) points out that the continuing need to assert oneself in the economized society reinforces the refusal and fear of certain groups like migrants for example because of impatience with weaker groups due to the urgency of a good economic performance. According to Heitmeyer (2005) the economization of society is one consequence of authoritarian capitalism and brings along ideologies of inequivalence. This in turn, leads to the degradation of groups that are weaker and less useful for the economy in terms of productivity (Rosa, 2006). The explanation that Heitmeyer (2005) invokes about why migrants are often degraded is the inequality of opportunities among people from different backgrounds. Therefore, migrants are often worse-off when it comes to factors like access to education. This in turn, is followed by an under-representation on the labor market and a higher likelihood of being unemployed. Seidelsohn (2018, p.72) notes that despite the competition theory, it is not only people from lower socio-economic groups who show xenophobic values, but also people from the middle and upper classes. Heitmeyer (2012 cited in Seidelsohn, 2018, p. 72) finds that this development can be seen especially after the global economic and financial crisis. He finds a positive correlation between the self-perceived threat

of the crisis and the refusal of immigration, which he uses as an explanation for why also people from higher classes also became more anxious. In Boehnke et al. (1998), it is stressed that in a time where feelings and dynamics like insecurity, competitiveness, materialism, and individualism are increasing, xenophobia also increases. One reason for this could be the fact that people define themselves by their position in their class or their economic value. Therefore, it becomes more critical for individuals to protect their position in their class (Hagan et al., 1998). The outcome of the study run by Heitmeyer (2005) supports the competition-related argument. He finds that 36% of Germans share the opinion that foreign people should leave Germany if it comes to the point that jobs become scarce.

From an institutional perspective, another reason for increasing xenophobic attitudes is the existence of right-wing parties (Semyonov & Raijman, 2006). Heitmeyer (2005) agrees to this point and finds a correlation between the openly communicated xenophobic values and the existence of right-wing groups. He argues that xenophobic attitudes become more likely if there are groups that are mobilizing against certain other groups.

According to Müller (2014: 113-119), the term of labor immigration is of particular importance for Germany due to the German social security system. This refers to the pension system for the retired-population, which is based on the pay-as-you go system. This means, that the working population pays the pensions for the retired population. In Germany, this system is facing its limits since the population is aging and there is a decreasing amount of skilled labor. In addition to a rise in the number of educated people who are ending up in a labor market situation that would need institutional change in terms of economically favorable migration. One instrument that has already been implemented is a higher retirement age in order to increase the working population in relation to the not working population. But that policy implication also has its limits. As another option, labor immigration could support the system and makes it more sustainable (Müller, 2014: 113-119). Therefore, in the long-run, the fear and refusal of immigration by a large share of the German population acts as a barrier towards an improvement and a stabilization of the German social security system.

## 2.2 Research Region: East Germany

There are economic and political reasons as to why East Germany, excluding Berlin, has been chosen as the region for the investigation. The first is the demographic composition.

Salomo (2019) finds in her analysis of the socio-demographic roots of xenophobia that there is a positive relationship between demographic homogeneity and political attitudes in a region. Therefore, if there is a higher outward migration, more elderly people, more people from the majority nationality, and a less balanced sex ratio, the region is more likely to have a higher average rate of critical attitudes towards migrants. According to Slupina et al. (2016), the East German states have experienced a broad structural and demographic change following the reunification of Germany. Today, there is an aging and homogenous population and about 40% fewer inhabitants than in times of the separated Germany. This is a consequence of the emigration of about 1.8 million young and qualified people in the time after 1990. The average age in East Germany in 2016 was 46.3 years, significantly higher than in West Germany where it was 44.1 years. In 1990, it was the other way around: the average age in East Germany was at about 37,9 years and at about 39,6 years in West Germany. Consequently, it rose substantially faster in the East (Brautzsch, 2019). According to a report of the IW Köln (Institut der Deutschen Wirtschaft Köln), a higher share of men, especially between the ages of 20 and 44, exists in all the East German federal states (Geis & Orth, 2017). All these development show that the demographic composition in East Germany is more homogenic than in West Germany.

The second reason is the economic background. The main fact that impacted East Germany's weaker economic performance compared to West Germany is that many companies had to close after the reunification, which in turn led to a high outward migration (Slupina et al., 2016). Therefore, the so-called brain drain, the tendency for well-educated people to move away, became a reality for many East German regions right after the reunification (Michelsen et al., 2017). In 2018, the economic power of East Germany was 75% of the economic power of West Germany and the gross wages were 25% lower (BMW, 2019). The gap in the employment rates is decreasing but still substantial. The average unemployment rate in 2019 was 6.4% in East Germany and 4.7% in west Germany (Statista, 2020c). Several authors including Schmidtke & Zaslove (2014: 195) point out that individuals from economically strong regions that do not face a high labor shortage are less likely to see labor immigration as a chance for supporting the social security systems. Therefore people from East Germany should have a lower fear of immigration, since it could be one solution for their demographic and economic struggles. Together with the demographic composition, the economic development is exacerbating competitive behavior, the existence of phantom ownership, and fears of loss (Slupina et al., 2016).

The third reason for investigating the case of East Germany is historical. In Poutrus et al. (2000), two existing theories are introduced that try to explain the refusal of immigration in

East Germany owing to its history. One explanation pertains to executive deficits since the reunification. The other one refers to difficulties with the transformation of it. They add that it is particularly important to take into account the specific requirements that existed in the former GDR (German Democratic Republic) and how socialization impacts today's attitudes. Michelsen et al. (2017) further argue that there were relatively few immigrants in the GDR who did not come from Soviet states. Therefore, for many East Germans, the process of immigrants coming to the region from other parts of the world is a process that they have not, to a similar extent, experienced before. After the reunification of Germany in 1990, the people of the former GDR had to adapt to a new system. This was to a considerable degree accompanied by cutbacks on the individual level as well as changes in society. Today, people from East Germany are still more critical towards the existing economic system of the free market economy and democracy (BMWl, 2019). Another fact which makes the case of East Germany interesting is that people from there were suddenly exposed to new social conditions after the reunification (Brenke & Zimmermann, 2009). This in turn is likely to lead to different attitudes towards competition and more fear since the changes had a substantial impact on most sectors and the socio-economic situation of individuals.

The still existing inequalities are one reason for different political attitudes and different perceived economic securities and satisfaction. An astonishing outcome is that about 57% of the people living in East Germany say that they feel left behind compared to people from West Germany (BMWl, 2019). This could also be attributed to expectations that were not fulfilled after the reunification since economic rather than political performance was the main focus of the transformation process (Michelsen et al., 2017). For the case of East Germany and the term of the phantom possession, Michelsen et al. (2017) find that especially people from lower socio-economic groups are concerned with the fact that the government spends financial resources on migrants that did not seem to be available for public institutions and social projects before.

Today, 30 years after the reunification of Germany, there are still significant differences between East and West. Economically, psychologically, and socially, albeit not physical, an internal border still exists in Germany. For this reason, East Germany was chosen as the object of the analysis, as its historical background and current development makes it a particularly exciting and versatile area for research.

## 3.Data

### 3.1 The Socio-Economic Panel

The data that is used for investigating the object of interest is the socio-economic panel (SOEP). The SOEP is a longitudinal survey that is constructed and performed by the German Institute for Economic Research (DIW) and has been conducted since 1983. Around 30.000 people in about 15.000 households are interviewed annually regarding their economic and social situation. The study covers topics such as social inequalities, distribution of public goods, subjective well-being and satisfaction, political attitudes, and changes in values as well as demographic developments (DIW, 2020). For this reason, the SOEP constitutes a very suitable database for this study. A significant advantage of the SOEP data is that it allows direct observation of a person's political attitude over several years. The use of panel data has three important benefits compared to cross-sectional data. It is possible to analyze the time sequence of changes, to estimate intra-individual changes, and it lowers the probability of unobserved heterogeneity (Brüderl, 2010).

The study population consists of 45.521 observations and includes the years 2000 – 2018. The years before 2000 were excluded since the outcome variable was not part of the survey then. The high number of individuals that are still contained in the sample supports the validity and reliability of the dataset.

### 3.2 Presentation of the included Variables

To answer the research questions, particular variables are included in the empirical models. The outcome variable is the individual's answer to the question whether they fear immigration. In the original dataset, the variable is distributed ordinally. If individuals said that they fear immigration to a high extent, the variable has the value one. Fearing immigration a bit has the value two. Not fearing it at all has the value three. For the purpose of this study, the variable is transformed to a binary nature. Fearing immigration to a high extent or fearing it a bit are both assigned to value one. Not fearing immigration at all is assigned the value zero. This is done because this study is not concerned with the extent, but the existence of the fear of immigration. The new coding also reduces the probability of the self-selection bias: people may

prefer to say that they fear migration only a bit instead of admitting that they fear it to a great extent. Moreover, the degree of the self-perceived fear is difficult to assess, while “yes” or “no” is compared more easily. For this study, it is assumed that the fear of immigration is one part of xenophobia and that it might be a first sign of possible xenophobic attitudes. This is the reason as to why the question is used as an outcome variable and is supposed to deliver good results in investigating the roots of xenophobia from a socio-economic point of view.

The explanatory variables that are included can be categorized into three groups. The first group consists of variables that measure the impact of the socio-economic dynamic of people on their fear of immigration. The variables are if a person has received a new job since the year before (0=no/1=yes), if the person has a long-term contract (0=no/1=yes) and the person’s terms of employment (1=full-time, 2=part-time, 3=occasionally). The second group of variables measures the impact of satisfaction. Variables that are included here are the individual’s satisfaction with work and with the household income (0=not satisfied/1=satisfied). The third group consists of variables that give information on how secure a person feels. The variables are if a person is worried about their financial and job security (0=not concerned/1=concerned).

*Table 1: Descriptive Statistics of the included Variables*

Variable	Obs	Mean	Std.Dev.	Min	Max
Fear of immigration (0=not feared, 1=feared)	45521	0.684	0.465	0	1
Socio-economic classes	29085	2.297	1.683	1	5
Age	43204	47.141	16.517	17	96
Sex (1=men, 2=women)	45375	1.536	0.499	1	2
Having a new job (0=no, 1=yes)	24411	0.2	0.4	0	1
Having a long-term contract (0=no, 1=yes)	23380	0.766	0.423	0	1
Contract form (1=full time, 2=part-time, 3=occasionally)	45521	1.637	0.493	1	3
Satisfaction with work (0=not satisfied, 1=satisfied)	24918	0.508	0.5	0	1
Satisfaction with job (0=not satisfied, 1=satisfied)	43774	0.512	0.5	0	1
Job security (0=not concerned, 1=concerned)	24660	0.555	0.497	0	1
Financial security (0=not concerned, 1=concerned)	45467	0.721	0.449	0	1

Since the main interest of this thesis is to evaluate the differences between socio-economic groups, the samples are categorized using the Goldthorpe Scheme (Bergman & Joye, 2001)<sup>1</sup>.

The categorization is:

- 1) White-collar workers: Higher and lower managerial and professional workers, routine clerical workers, routine service & sales worker
- 2) Petty bourgeoisie: Self-employed with and without employees
- 3) Self-employed farmers
- 4) Skilled labor
- 5) Semi- and unskilled labor

For the group of self-employed farmers, there were not enough observations for valid and reliable outcomes. Hence, the group is excluded from the investigation. This does not affect the answering of the research questions of the study, since the question is how the fear differs for people from a lower socio-economic group (skilled, semi- and unskilled workers) compared to people in a higher group (white-collar workers and self-employed people).

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<sup>1</sup> The Goldthorpe-5-Class-Scheme is one out of many existing different class schemes. The reason why that one is applied is that it is included in de database and allows to separate the sample after social mobility and inequality in terms of the extent to what individuals possess their manpower.



# 4. Empirical Analyses and Results

Within this chapter, the applied methods as well as the results are presented. The reason why there are no separate parts for the methods and the results is that there are three different estimations in order to answer the research questions. It is therefore easier to connect the methods and the outcomes if they are described subsequently.

For the estimation of the factors impacting xenophobic attitudes, a logistic regression with random effects is applied. The reason for this choice is the binary distribution of the outcome variable and the assumption that the implemented explanatory variables vary over time. In a model with random effects, the impact of time-invariant variables is taken into account. Therefore, the effect is also measured if there is no change in the socio-economic condition of an individual. Moreover, not only the within-individual differences are interesting for the study but also the differences between individuals. For the interpretation of the output, coefficients that are not statistically significant are also analyzed. The reason for that is that the assumption of high p-values as zero effect is not always right and could lead to wrong interpretations of the results (Bernardi et al., 2016). It is crucial to keep in mind that despite the outcomes of statistically significant coefficients being more reliable, they are not the only truth since there is an effect for at least some people.

## 4.1 Impacts of Economic Factors on the Fear of Immigration

The regression is performed as a panel regression taking into account the years 2000 – 2018. The regression equation for the estimation is:

$$Y_i^s = a^s + \beta_1^s C_i + \beta_2^s D_i + \beta_3^s B_i + \beta_4^s N_i + \varepsilon_i^s \quad (1)$$

The binary distributed outcome variable  $Y$  is one if the person  $i$  of the socio-economic group  $s$  said that they fear immigration and zero otherwise. The estimated value for this denotes the average answer that people with the considered characteristics gave. The included control and

explanatory variables are all on the individual-level basis. The vector  $C_i$  includes the control variables sex and age of the individual  $i$ . The included variables are grouped into three categories: variables that measure the impact of the job dynamic (vector  $D_i$ ), variables that measure the satisfaction with the socio-economic situation (vector  $B_i$ ), and variables that investigate the impact of the self-perceived economic security ( $N_i$ ). The parameters  $\beta_1^s - \beta_4^s$  are estimated within the model for each socio-economic group  $s$  and denote the impact of the respective factor. The term  $\varepsilon_i^s$  is the error term.

The descriptive analysis shows, that people from higher classes are on average more anxious.

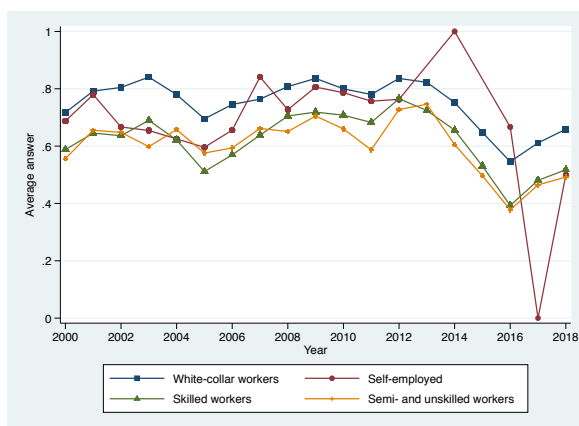


Figure 1: Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on the Socio-Economic Group (2000-2018)

In the regression output, it can be seen that the coefficients of the explanatory variables differ across the groups in their substantial and statistical significance.

Table 2: Regression Output Panel Estimation 2000 - 2018

Fear of immigration	White-collar workers	Self-employed	Skilled labor	Semi-and unskilled labor
age	0.004 (0.005)	-0.021 (0.019)	-0.009 (0.007)	-0.012* (0.007)
1.Sex	-0.447*** (0.122)	0.353 (0.402)	0.289 (0.228)	-0.252 (0.169)
1.New job	-0.029 (0.089)	0.327 (0.399)	-0.138 (0.143)	-0.06 (0.137)
1.Long-term contract	-0.225** (0.104)	0.357 (0.43)	-0.586*** (0.183)	0.135 (0.157)
2.Contract form	-0.04 (0.089)	0.386 (0.547)	-0.265 (0.204)	0.286* (0.154)
3. Contract form	0.625 (1.67)		-1.025 (1.283)	1.954** (0.728)
1.Satisfaction with work	0.053 (0.067)	0.148 (0.28)	-0.058 (0.116)	0.064 (0.111)
1.Satisfaction with income	0.089 (0.073)	0.271 (0.313)	0.094 (0.121)	0.085 (0.114)
1.Job security	-0.252*** (0.074)	-1.009** (0.325)	-0.289** (0.133)	-0.212* (0.121)
1.Financial security	-0.394*** (0.083)	-1.041** (0.486)	-0.571*** (0.158)	-0.3** (0.156)
Constant	2.735*** (0.312)	3.091 ** (1.168)	1.811*** (0.418)	1.423** (0.417)
Constant	1.601 (0.07)	1.334 (0.333)	1.3 (0.127)	1.124 (0.127)
Observations	12503	661	3243	3364
Prob > chi2	0.000	0.001	0.000	0.002

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The interpretation of the relation between the implemented explanatory variables and the fear of immigration is made separately for the three vectors job dynamic, economic satisfaction and economic security.

### Job dynamic

According to the regression output, the impact of the variables that measure the impact of the current job dynamic, is almost exclusively negative for white-collar and skilled workers. However, for self-employed people and semi- and unskilled workers the relationship is more positive. The following interpretation is based on the table that shows the marginal effects of the explanatory variables within that vector on fearing immigration.

Table 3: Marginal Effects of the Variables within the Vector of Job Dynamic

Job dynamic	White-collar workers	Self-employed	Skilled labor	Semi-and unskilled labor
<b><u>New job</u></b>				
Within-variation with average group characteristics (new job = 1)	-0.0039 (0.012)	0.0468 (0.057)	-0.0312 (0.0324)	-0.0176 (0.0324)
Within-variation with average characteristics among groups (new job = 1)	-0.0071 (0.01)	-0.0075 (0.010)	-0.0103 (0.014)	-0.0106 (0.014)
Between-variation between white-collar workers and the others (new job = 0)		-0.0133 (0.028)	-0.1377*** (0.019)	-0.1541*** (0.0189)
(new job = 1)		-0.0137 (0.029)	-0.141*** (0.02)	-0.1576*** (0.019)
<b><u>Long-term contract</u></b>				
Within-variation with average group characteristics (long-term contract = 1)	-0.0302** (0.014)	0.0511 (0.062)	-0.1345*** (0.042)	0.0348 (0.037)
Within-variation with average characteristics among groups (long-term contract = 1)	-0.0252** (0.01)	-0.0266** (0.012)	-0.0374** (0.015)	-0.0384** (0.016)
Between-variation between white-collar workers and the others (long-term contract = 0)		-0.0122 (0.0256)	-0.1286*** (0.0186)	-0.1442*** (0.0184)
(long-term contract = 1)		-0.0136 (0.029)	-0.1408*** (0.02)	-0.1575*** (0.019)
<b><u>Contract form</u></b>				
Within-variation with average group characteristics (contract form = 2)	-0.0005 (0.012)	0.0496 (0.063)	-0.0615 (0.481)	0.0674* (0.036)
(contract form = 3)	0.0672 (0.14)		-0.2491 (0.311)	0.323*** (0.064)
Within-variation with average characteristics among groups (contract form = 2)	0.0016 (0.019)	0.0017 (0.011)	0.0023 (0.015)	0.0024 (0.015)
(contract form = 3)	0.1177*** (0.042)	0.1256*** (0.047)	0.1931** (0.077)	0.201** (0.082)
Between-variation between white-collar workers and the others (contract form = 1)		-0.0127 (0.028)	-0.1387*** (0.019)	-0.1536*** (0.019)
(contract form = 2)		-0.0125 (0.028)	-0.1366*** (0.019)	-0.1513*** (0.019)
(contract form = 3)		-0.0122 (0.027)	-0.1345*** (0.021)	-0.1491*** (0.02)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Having a long-term contract, for example, decreases the probability of being afraid of immigration by 3.02% for otherwise average people within the group of white-collar workers, and by 13.45% for skilled workers. Both values are statistically significant. The chance of semi-and unskilled workers fearing immigration would rise by 3.48% and by 5.11% for self-employed people, but without statistical significance. Comparing average individuals among the whole sample within the classes leads to a slightly different pattern. A semi- or unskilled worker with a long-term contract is then 3.84% less likely to fear immigration compared to a person without a long-term contract from the same group. For white-collar workers, the likelihood is 2.52%. These differences are statistically significant for all the groups. Analyzing the between-variation shows that the most considerable difference exists between the group of

white-collar workers and the group of semi- and unskilled workers. Therefore, semi- and unskilled workers with a long-term contract are statistically significant 15.75% less likely to fear immigration. For people without a long-term contract, the likelihood is -14.42%. The smallest can be seen between self-employed people and white-collar workers.

The explanatory variable that measures the impact of the contract form only shows statistically significant values for semi- and unskilled workers with average group characteristics. Within this group, part-time employed individuals are statistically significant, 6.74% more likely to fear immigration than full-time employed people. Individuals that have occasional employment contracts, like vocational training, military service, voluntary service, or not employed, are statistically significant 32.3% more likely to fear immigration. The highest within-variation exists for semi- and unskilled workers and the least for white-collar workers, which is also supported by the comparison of comparable individuals among the groups. For example, a semi- or unskilled person with the lowest job stability is statistically significant, 20.1% more likely to fear immigration than a comparable person from the same group that is full-time employed. The respective probability for skilled workers is 19.31%. For self-employed it is 12.56%. of fearing immigration when having a volatile job is statistically significant 11.77% higher than the probability for a full-time employed person. The differences between partly-employed individuals and fully-employed with average characteristics among the groups are not statistically significant for any of the groups and are also not very high in substantial terms. The most robust difference exists between the group of white-collar workers and the group of semi- and unskilled workers. A semi- or unskilled worker with an occasional job is statistically significant, 14.91% less likely to fear immigration than a similar person with a comparable job that is a white-collar worker. The highest difference among all is the difference between full-time employed white-collar workers and semi- and unskilled workers. At this point, comparable individuals from the group of semi- and unskilled labor are 15.36% less likely to fear immigration than full-time white-collar workers.

Having a new job does not have any statistically significant impact in the investigated time frame. In terms of substantial impact, whether a person has a new job has the highest within-variation for self-employed individuals, where the relation between having a new job and being afraid of immigration is positive, and a person with a new job is 4.68% more likely to fear immigration than a comparable person from the same group without a new job. For the other groups, the relation is negative, implying that having a new job leads to a lower probability of fearing immigration. The differences among comparable individuals within the groups are only very small. For example, semi- and unskilled worker that have a new job are

1.06% less likely to fear immigration than people who do not have a new job. The highest difference exists between white-collar workers and semi-and unskilled workers. The latter individuals that have a new job are 15.76% less likely to fear immigration than comparable people who are white-collar workers with a new job. For the people without a new job, the difference in the probability is 15.41%. The differences between self-employed people and white-collar workers are least substantial and statistically not significant.

### Satisfaction with the economic endowment

The set of variables used to measure the impact of satisfaction with the socio-economic condition and endowment include two variables: one for the satisfaction with income and one for the satisfaction with work. The interpretation is based on the table including the marginal effects of the level of satisfaction on fearing immigration.

Table 4: Marginal Effects of the Variables within the Vector for Economic Satisfaction

<b>Economic satisfaction</b>	White-collar workers	Self-employed	Skilled labor	Semi-and unskilled labor
<b><u>Work satisfaction</u></b>				
Within-variation with average group characteristics (work satisfaction = 1)	0.0071 (0.01)	0.0213 (0.041)	-0.0131 (0.026)	0.0684 (0.111)
Within-variation with average characteristics among groups (work satisfaction = 1)	0.0058 (0.007)	0.0061 (0.008)	0.0084 (0.011)	0.0086 (0.011)
Between-variation between white-collar workers and the others (work satisfaction = 0)		-0.0128 (0.028)	-0.1394*** (0.02)	-0.1544*** (0.019)
(work satisfaction = 1)		-0.0125 (0.028)	-0.1368*** (0.019)	-1.1515*** (0.0188)
<b><u>Income satisfaction</u></b>				
Within-variation with average group characteristics (Income satisfaction = 1)	0.0119 (0.01)	0.0389 (0.045)	0.0215 (0.0275)	0.0194 (0.027)
Within-variation with average characteristics among groups (Income satisfaction = 1)	0.0158** (0.008)	0.0166* (0.009)	0.023** (0.012)	0.0235** (0.0118)
Between-variation between white-collar workers and the others (Income satisfaction = 0)		-0.0131 (0.029)	-0.1421*** (0.02)	-0.1573*** (0.0192)
(Income satisfaction = 1)		-0.0123 (0.027)	-0.1349*** (0.019)	-0.1495*** (0.0187)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

In terms of substantial significance, the highest impact of work satisfaction can be found for semi- and unskilled workers. Within this group, comparable individuals who are satisfied with their work are 6.84% more likely to fear immigration than those who are not satisfied. On the contrary, the respective probability for white-collar workers is 0.71%. If one compares comparable individuals among the groups within the classes, all the differences are also minimal in substantial terms and not statistically significant. For example, a satisfied semi-

or unskilled worker is 0.86% more likely to fear immigration than a comparable person who is not satisfied. For white-collar workers, that probability is 0.58%. The differences between the groups are statistically significant between white-collar workers and semi- and unskilled workers. In substantial terms, they are also highest. For example, a semi- or unskilled worker who is satisfied with his/her work situation is 15.15% less likely to fear immigration than a comparable satisfied person who is a white-collar worker. For not satisfied, the difference is marginally higher and is 15.44%. Between skilled worker and white-collar workers can similar differences be seen.

For income satisfaction, the within variation is highest for self-employed people. According to this, satisfied individuals from this group are 3.88% more likely to fear immigration than comparable not satisfied individuals from this group, but without statistical significance. This is the case for all the within-group variations with average group characteristics. However, if one compares individuals within the groups that have comparable characteristics among the classes, the within differences are statistically significant. The highest within variation can then be found for semi- and unskilled workers. A person from that class that is satisfied with his/her work situation is statistically significant 2.35% more likely to fear immigration than a not satisfied person. The respective probability is lowest for white-collar workers where the difference is about 1.58%. The highest between-variation can be found for the group of white-collar workers and the group of semi- and unskilled labor. A satisfied semi- and unskilled worker is 14.95% less likely to fear immigration than a satisfied white-collar worker. For not satisfied individuals, that difference is even higher at a rate of -15.73%.

The relation between the satisfaction with income and the fear of immigration within the groups is not very unlikely to be biased because of the relation between the age and fear of immigration and the age and satisfaction with the income situation. Indeed, both is increasing with the age. For the job situation a relation like this, which questions the outcome of the study, does not exist since the satisfaction with work decreases.

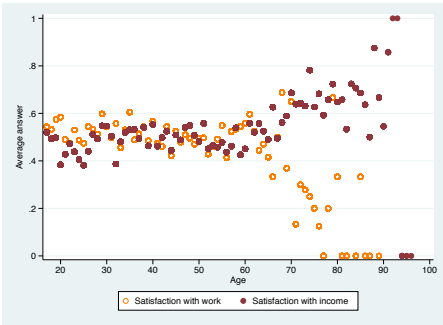


Figure 2: Satisfaction with Work and Income depending on the Age

## Self-perceived economic security

The variables with statistically significant values in each panel estimation are the variables which consider the individual's self-perceived socio-economic security. This in turn, leads to the assumption that self-perceived economic security is an essential factor in investigating the socio-economic roots of the fear of immigration. For all the groups, the factors are also most significant in substantial terms. The relation between self-perceived security and the fear of immigration is positive for all the specifications thereby implying that good self-perceived economic security increases, on average, the likelihood of fearing immigration for the individuals in the sample. The table containing the marginal effects of the self-perceived economic security on fearing immigration is used for the subsequent interpretation.

Table 5: Marginal Effects of the Variables within the Vector for Economic Security

<b>Economic security</b>	White-collar workers	Self-employed	Skilled labor	Semi-and unskilled labor
<b>Job security</b>				
Within-variation with average group characteristics (job security = 1)	-0.0338 *** (0.01)	-0.1445*** (0.048)	-0.0655** (0.03)	-0.0502* (0.029)
Within-variation with average characteristics among groups (job security = 1)	-0.0401*** (0.008)	-0.0422*** (0.01)	-0.0588*** (0.012)	-0.0602*** (0.012)
Between-variation between white-collar workers and the others (job security = 0)		-0.0115 (0.026)	-0.127*** (0.018)	-0.1415*** (0.018)
(job security = 1)		-0.0136 (0.03)	-0.1461*** (0.02)	-0.1616*** (0.02)
<b>Financial security</b>				
Within-variation with average group characteristics (financial security = 1)	-0.0528*** (0.011)	-0.1491** (0.069)	-0.1296*** (0.036)	-0.0743** (0.037)
Within-variation with average characteristics among groups (financial security = 1)	-0.0577*** (0.009)	-0.0609*** (0.011)	-0.0864*** (0.013)	-0.0886*** (0.014)
Between-variation between white-collar workers and the others (financial security = 0)		-0.0103 (0.023)	-0.1167*** (0.017)	-0.1298*** (0.017)
(financial security = 1)		-0.0135 (0.03)	-0.1453*** (0.02)	-0.1607*** (0.02)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

In terms of substantial significance within the groups, the greatest impact of economic security on the fear of immigration can be found for self-employed people. The robust relation between economic security and the fear of immigration is reflected by the fact that a person with average characteristics from that group is, with a probability of 14.45% less likely to fear immigration when he/she is concerned about his/her job security. For white-collar workers, this probability is 3.38%, 6.55% for skilled workers and 5.02% for semi-and unskilled workers. If one compares individuals with overall average characteristics from each group, it can be seen



that the differences between people that feel secure with their job situation and people that feel insecure are statistically significant independently of the socio-economic group. A semi- or unskilled worker concerned with his/her job security is 6.02% less likely to fear immigration than a person from that group who is not concerned. For white-collar workers, the probability is 4.01%, for skilled worker it is 5.88%, and for self-employed people it is 4.22%. If one compares the individuals between the groups, the highest difference can be found between the group of white-collar workers and the group of semi- and unskilled workers. A concerned semi- or unskilled worker is 16.16% less likely to fear immigration than a comparable concerned white-collar worker. The corresponding difference between not concerned individuals is 14.16%.

The financial security has a higher impact. The within variation is again highest for self-employed people. A concerned person from this group is 14.13% less likely to fear immigration. If one compares the within variation of people with the same average characteristics among the groups, the difference is highest for semi- and unskilled workers. A person from this group is statistically significant 8.86% less likely to fear immigration if he/she feels insecure with regards to the financial situation. Comparing the groups to each other again shows, that the highest difference can be seen between individuals from the group of white-collar workers and the group of semi- and unskilled worker. A concerned semi- or unskilled worker is therefore statistically significant 16.07% less likely to fear immigration. The probability is 12.98% for not concerned.

The differences between financially concerned and not concerned people are higher than the differences between individuals that are concerned and not concerned about their job security. Investigating the means of each group within each class shows that the higher difference comes mostly from the fact that not being concerned about their financial situation people are much more likely to fear immigration. Exceptionally substantial is the difference between both security variables for not concerned semi- and unskilled workers. The average answer from feeling financially secure individuals on the outcome variable is 0.70, while it is 0.65 for individuals who feel secure about their job situation. The most considerable difference between concerned people can be seen for self-employed people. Financial security seems to be more crucial.

After all, economic security has the most statistically significant impact on people's attitudes towards foreigners. It has an impact on people's political attitudes, independent of their socio-economic background. The only thing that differs is to what extent it has an impact.

Economic security and stability are the factors that differ most among comparable individuals between the groups. Since economic security is the term that seems to be most important among the included factors, a possible confounding factor because of the age is examined under 4.3.2 as part of the study.

## 4.2 Impact of Macroeconomic Shocks on the Fear of Immigration

In this part of the thesis, whether macroeconomic shocks had an impact on people's attitudes towards immigration and how the impact of the included explanatory variables changed is investigated. The focus lies on the differences between the socio-economic groups. Self-employed people are excluded in this investigation since the sample size is not big enough to obtain reliable and valid results. Moreover, only individuals that took part in the survey at least two times within the investigated time frames are included in the samples.

### 4.2.1 Impact of the Global Financial Crisis

The global financial crisis had a massive impact on most countries worldwide and affected the world economy and societies to a high extent in macroeconomic and microeconomic terms. The first year in which the crisis had a notable impact on the economic performance of Germany was the year 2009 (BMW 2019). Key indicators such as Gross Domestic Product (GDP), exports, imports, and domestic demand fell abruptly at the end of 2008 (Horn et al., 2009). The GDP fell by about 5.7% year-on-year (Statista, 2020d), and the unemployment rate rose after years of decline, from 7.8% in 2008 to 8.1% in 2009 (Statista, 2020b). The total economic production also fell sharply by 3.8% compared to 2008, especially in the first quarter of 2009 (Horn et al., 2009). Consequently, the first effects of the financial crisis in Germany became apparent between the end of 2008 and the beginning of 2009. Since the economic condition of people and especially economic security is assumed to have a high impact on political attitudes, it is of particular interest to investigate the impact of the global financial crisis on the fear of immigration. The aim is to investigate whether there was a change in fear of immigration and the factors influencing it after 2009. For the investigation, the following logistic regression equation is used:

$$Y_i^S = f + a^S + \beta_1^S C_i + \beta_2^S D_i + \beta_3^S B_i + \beta_4^S N_i + \beta_5^S (f * a^S) + \beta_6^S (f * C_i) + \beta_7^S (f * D_i) + \beta_8^S (f * B_i) + \beta_9^S (f * N_i) + \varepsilon_i^S \quad (2)$$

The implemented vectors are the same as in (1). Interaction terms are included in the equation to estimate the effect of the financial crisis on political attitudes. With these, it is possible to interact the individual characteristics with the time variable  $f$  and thus see what influence the respective factor had before and after the financial crisis. The time variable is binary coded and takes the value one for the year 2009 and the following year and zero for the years before. In order to prevent the results from being biased by long-term developments, only the time frame from 2007 to 2010 is included in the analysis, so there are two years before the first notable economic shocks impacted the German economy and two years after. The year 2009, which is the threshold year, is seen as the first year. The reason for taking two years after the outbreak instead of only analyzing the change in 2009, is that the impacts of the financial crisis were of a long-term nature. Consequently, there were many scale effects in the years after the first shocks. Distortion from too broad a time frame could arise, for example, if the ratios of the explanatory variable and the outcome variable return to their pre-crisis levels after a certain period, thereby distorting or smoothing the results downwards. The parameters  $\beta_1^S$  to  $\beta_9^S$  reflect the influence of the respective interaction term.

Before analyzing the relation empirically, it is essential to take a look at the descriptive statistics. The table shows that the samples before and after the crisis are almost balanced so that there should not be any existing biases due to different sample sizes.

Table 6: Sample Size depending on Socio-Economic Group (2007-2010)

Year	White-collar workers	Self-employed people	Skilled workers	Semi- and unskilled workers
2007	431	30	108	94
2008	442	36	114	94
2009	437	40	115	89
2010	393	31	97	83

After the first economic shocks occurred in Germany in 2009, the average response increased very sharply but decreased in the following years.

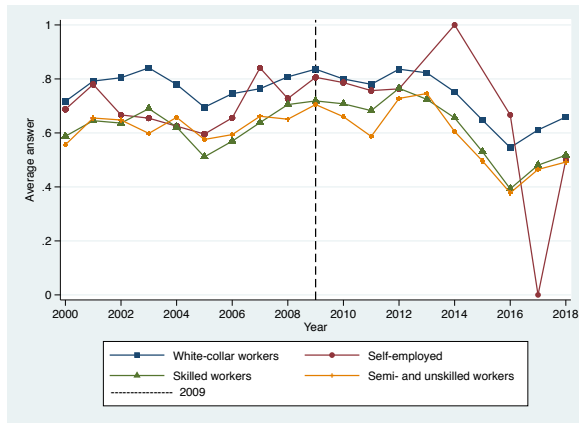


Figure 3: Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on the Socio-Economic Group with 2009 as Threshold for the Financial Crisis

While all groups saw the same developments in terms of direction, the strength of this is different. Following the descriptive statistics, the strongest fluctuations before and after 2009 can be seen for the group of semi- and unskilled workers while the development is quite similar for the other groups. The probability of fearing immigration after the outbreak of the financial crisis for white-collar workers was 3.58% higher than before. For skilled workers, it is 8.39% higher, and for semi- & unskilled workers, it is 11.02%.

Table 7: Marginal Effects of the Within- and Between-Variation before and after the Crisis

Outbreak of the financial crisis	White-collar workers	Skilled labor	Semi-and unskilled labor
Within-variation with average group characteristics (after the financial crisis)	0.0358*** (0.011)	0.0839* (0.047)	0.1102** (0.0539)
Between-variation between white-collar workers and the others (before the financial crisis)		-0.1326*** (0.05)	-0.118** (0.049)
(after the financial crisis)		-0.0819** (0.033)	-0.0724** (0.03)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Therefore, the financial crisis might have had the most crucial impact on the fear of immigration of semi- and unskilled workers. In terms of substantial significance, the financial crisis had an impact on all the groups, which is shown by the regression output. Only for the group of white-collar workers it is statistical significant.

Table 8: Regression Output Panel Estimation 2007 – 2010 with Interaction Terms for the Impact of the Financial Crisis

Fear of immigration	White-collar workers	Skilled workers	Semi- and unskilled workers
Age	0.017 (0.016)	-0.002 (0.03)	-0.036 (0.032)
1. Sex	-0.263 (0.338)	-0.082 (0.792)	-0.551 (0.792)
0.Financial Crisis (f)	-1.227 (0.663)*	0.950 (1.284)	-0.694 (1.549)
1.New job	0.216 (0.499)	-0.764 (0.877)	0.562 (1.119)
1.Long-term contract	0.551 (0.435)	0.816 (0.98)	1.269 (1.248)
2.Contract form	0.299 (0.376)	0.489 (1.014)	0.604 (0.97)
1.Satisfaction with work	-0.314 (0.314)	-0.951 (0.607)	-1.161 (0.707)
1.Satisfaction with income	0.227 (0.322)	0.654 (0.634)	0.267 (0.681)
1.Job security	-0.108 (0.34)	-0.707 (0.743)	-0.3 (0.777)
1.Financial security	-1.381 (0.473)***	0.584 (0.874)	-2.318 (1.366)*
0.f##0.new job	0.418 (0.623)	-1.682 (1.152)	1.07 (1.37)
0.f##0.long-term contract	0.673 (0.505)	0.908 (1.106)	1.995 (1.559)
0.f##2.contract form	0.337 (0.394)	-0.830 (1.11)	0.127 (0.899)
0.f##0.satisfaction with work	-0.116 (0.394)	-0.393 (0.764)	-1.194 (0.861)
0.f##0.satisfaction with income	-0.088 (0.394)	0.203 (0.813)	-0.451 (0.829)
0.f##0.job security	0.317 (0.423)	-0.030 (0.963)	-0.609 (0.906)
0.f##0.financial security	0.045 (0.592)	-0.212 (1.099)	-1.89 (1.537)
Constant	3.392 (1.048)***	1.731 (1.798)	5.49 (2.472)**
Constant	1.719 (0.190)	1.867 (0.374)	1.708 (0.385)
Observations	1647	379	333
Prob > chi2	0.000	0.801	0.613

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The focus of this part of the thesis is to investigate the impact of the chosen macroeconomic shocks on certain socio-economic factors that are used as independent variables to explain the fear of immigration from a socio-economic perspective. The statistical significance of the change due to the financial crisis is not very strong for any of the interaction terms with the time variable, independent of the group. The estimate result for the overall impact of the factors on the fear of immigration shows that economic security, especially financial security, has the most statistically significant impact and is also substantially higher than most of the other explanatory variables. Therefore, the change in security following the financial crisis is estimated subsequently. An underlying assumption of the relation between the financial crisis and the fear of immigration is that the macro- and microeconomic scale effects of it might have escalated the economic situation of people due to job losses, inflation, lower production levels, and uncertainty of the future.

Table 9: Marginal Effects of the Financial Crisis on the Economic Security related Fear of Immigration

<b>Economic security</b>	White-collar workers	Skilled labor	Semi- and unskilled labor
<b>Financial security (= 1)</b>			
Within-variation with average group characteristics (before the financial crisis)	-0.0789*** (0.019)	0.1018 (0.116)	-0.149* (0.082)
(after the financial crisis)	-0.0453*** (0.012)	0.0692 (0.083)	-0.0821* (0.047)
<b>Job security (= 1)</b>			
Within-variation with average group characteristics (before the financial crisis)	-0.0197 (0.018)	-0.0779 (0.074)	0.0005 (0.088)
(after the financial crisis)	-0.0114 (0.011)	-0.0503 (0.049)	0.0003 (0.051)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The first output is that the financial crisis had the most substantial impact on economic security-related fear of immigration for skilled, semi- & unskilled workers. Within all the groups, the change was most considerable in percentage for the perceived financial security when compared to job security. Before the financial crisis, the probability of fearing immigration was 7.89% less for concerned white-collar workers, compared to the people from the same group that were not concerned. After the financial crisis, that probability decreased to 4.53%. For semi- and unskilled workers, the respective probabilities are 14.9% (before the crisis) and 8.21% (after the crisis). Interesting to note is that the relation between felt financial security and fear of immigration seems to have changed for skilled workers. For the investigated period between 2007 to 2010, people were more likely to fear immigration if they were concerned about their security. Before the financial crisis, they were 10.18% more likely, and after it, the probability was 6.92% higher compared to otherwise similar people that are not concerned. However, this result is not statistically significant, and the 95%-CI is very broad so that no clear pattern can be seen in the relationship. Independent of the class, the differences decreased and the probability that people that are concerned fear migration came closer to the one for people that are not concerned. The explanation for that is that the average answer of white-collar workers and skilled workers increased for the concerned and the not concerned but that the increase was higher for the concerned individuals. Within the group of semi- and unskilled workers, it is the other way around. The change in the probabilities was greatest for semi- and unskilled workers, which shows that the macroeconomic shock of the financial crisis and its aftermaths had the highest impact on people's attitudes towards foreigners within that

group. The change was the smallest for white-collar workers.

For the self-perceived job security, the changes are less substantial, and the differences between individuals who are not concerned and those who are concerned are only minimal for both periods, prior to and after the crisis. Before the financial crisis, white-collar workers who were concerned about their job security and otherwise had average characteristics were 1.97% less likely to fear immigration than comparable individuals who were not concerned. After the crisis, this difference was 1.14%. For skilled workers, the respective probability decreased from 7.79% to 5%. A positive relation between felt job insecurity and fear of immigration can be seen for semi- and unskilled workers but only to a minimal extent. Before the crisis, people from that group were therefore 0.05% more likely to fear immigration if they felt insecure and 0.03% after the crisis. Next to the smaller substantial significance compared to the financial security; the statistical significance is also different; all the results are not statistically significant, and the 95%-CI includes a broad field and the zero effect.

Besides the analyses of the within variation in the three classes, it is also interesting to see how the differences of the attitudes towards foreigners changed between the groups. Before the financial crisis, semi- and unskilled workers were statistically significant 11.83% less likely to fear immigration than comparable individuals from the group of white-collar workers. After the financial crisis the respective probability was 7.35%. The differences between skilled workers and white-collar workers were even stronger in substantial and statistically significance terms. The differences therefore decreased. Investigating the average answer before and after the crisis for each group shows that the reason for the decreased differences comes from the fact that all the groups became more anxious about immigration but that the increase for skilled, semi- and unskilled workers was stronger than for white-collar workers.

To sum up, the financial crisis had a more robust impact on individuals from the socio-economic groups of the skilled and semi- and unskilled labor than on individuals from the group of white-collar workers. Among all the groups, people were more likely to fear immigration after the crisis than before it, while the most substantial change can be seen for semi- and unskilled worker.

#### 4.2.2 The Impact of the General Minimum Wage's Introduction

The first statutory minimum wage in Germany was introduced on January 1st, 2015 and amounted to €8.50. It is anchored in the Minimum Wage Act and applies to all employees over

18 years of age (BMAS, 2019). Negative consequences of the minimum wage, which have been repeatedly discussed, included a potential subsequent loss of jobs and an associated increase in the number of those unemployed, which in turn would have an impact on the purchasing power and expenditure of the state. Particularly in the area of social welfare. Finally, numerous studies have shown that unemployment and employment have not changed significantly, as shown for example in a study by Bonin et al. (2018). However, this study observed a reduction in the contractually agreed working time of employees that are subject to social security contributions. As a result, in the first half of 2015, these contributions fell by about 5%, which means by about 1.5 hours. However, the actual time worked only fell by about half. Another factor that was discussed as a negative consequence of the introduction was the associated intervention in market pricing by public authorities, which, according to neoclassical theory, may be accompanied by efficiency losses.

In East Germany, the region on which the empirical analysis of this paper is based, 20.8% of the workforce was employed at a wage level below the target minimum wage of 8.50€/hour in 2014. The average wage gap to the value of the minimum wage was € 0.334/hour (Bonin et al., 2018). Of the 5.058.000 employment relationships in East Germany in 2015, approximately 549.000 were within the scope of the minimum wage act, and approximately 182.000 were excluded from the scope of the minimum wage based on particular regulations (Destatis, 2020). Therefore, the introduction of the minimum wage affected a considerable amount of people and influenced different areas of life and status groups due to its macro- and microeconomic effects.

Within the model on which the work is based, the introduction of the minimum wage would be expected to have a particular impact on the explanatory variables relating to economic security and satisfaction. For this reason, it is interesting to see whether it also had an impact on attitudes towards migrants.

$$Y_i^s = r + \alpha^s + \beta_1^s C_i + \beta_2^s D_i + \beta_3^s B_i + \beta_4^s N_i + \beta_5^s (r * \alpha^s) + \beta_6^s (r * C_i) + \beta_7^s (r * D_i) + \beta_8^s (r * B_i) + \beta_9^s (r * N_i) + \varepsilon_i^s \quad (3)$$

The vectors used, as well as the result variable, are the same as those of the model (2). The only thing that has changed in the model from (2) is the implemented time variable with which the explanatory variables interact. The new time variable is  $r$ , which takes the value one for the years from the introduction of the minimum wage in 2015 and is zero for the years before. Similar to the model (2), the model framework only consists of two years before the event, and



two years after it. The year of the event, the introduction of the minimum wage, 2015, is seen as the first year. The reason for this bandwidth is again that biased results due to long-term development are to be avoided. Furthermore, the minimum wage was increased in 2017, so that new macro- and microeconomic changes occurred which may have affected the outcome variable. This in turn, would make it more challenging to examine the introduction of the minimum wage isolated from similar events that took place later in time within a panel framework. Another way to estimate the relationship between the introduction of the minimum wage and the fear of immigration could be to take the fact if a person gets the minimum wage as an interaction variable instead of the time variable. This analysis will be conducted at a later point as part of the sensitivity analyses under 4.3. The reason why the time variable is used for the primary analyses is that it is assumed that the introduction of the minimum wage did not only impact the people who received it. Also, people that had to pay it as employers or were affected by the impacts of macro- and microeconomic scale effects. The political attitude of these people should also be measured since such a considerable political implementation impacts several areas of life and is therefore assumed to change political attitudes and concerns of people regardless if they were actually paid the minimum wage or not.

The descriptive statistics show an almost balanced sample size within the classes before and after 2015. However, the sample size of white-collar workers is much bigger than those of the groups of skilled, semi- and unskilled workers.

*Table 10: Sample Size depending on Socio-Economic Group (2013-2016)*

Year	White-collar workers	Self-employed people	Skilled workers	Semi- and unskilled workers
2013	455	31	119	131
2014	767	47	198	206
2015	765	47	199	206
2016	725	51	191	200

The average answer to the question if people fear immigration has already been in decline since 2012/2013.

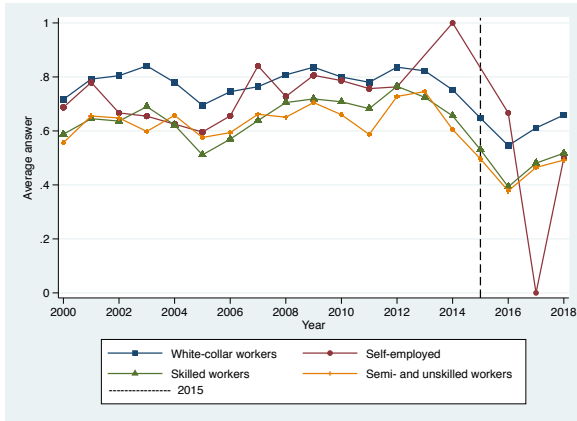


Figure 4: Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on the Socio-Economic Group with 2015 as Threshold for the Introduction of the Minimum Wage

After the lowest point in 2016 for the whole period between 2000 and 2018, the average answer increased until 2018. No change can be seen in the distribution of the outcome variable after the introduction of the minimum wage, which is the first result of the analysis. The question is now if a change in the impact of the explanatory variables occurred after the introduction, which cannot be seen in only analyzing the descriptive statistics. The outcomes of the regression suggest that the most substantial impact of the interaction terms can be found for skilled, semi- and unskilled workers. The results are more statistically significant for skilled workers and white-collar workers.

Table 11: Regression Output Panel Estimation 2013 – 2016 with Interaction Terms for the Impact of the Introduction of the Minimum Wage

Fear of immigration	White-collar workers	Skilled workers	Semi- an unskilled workers
Age	-0.01 (0.011)	-0.021 (0.017)	-0.024 (0.016)
Men	-0.47 (0.231)**	0.683 (0.491)	-0.367 (0.357)
0.Minimum wage (r)	1.598 (0.455)***	0.519 (0.757)	2.722 (0.792)***
1.New job	0.191 (0.281)	0.09 (0.452)	-1.061 (0.498)**
1.Long-term contract	-0.022 (0.335)	-0.782 (0.564)	-0.438 (0.534)
2.Contract form	-0.006 (0.228)	-0.675 (0.588)	0.233 (0.402)
3. Contract form		0.332 (1.63)	0.922(1.989)
1.Satisfaction with work	0.06 (0.188)	0.256 (0.347)	0.123(0.324)
1.Satisfaction with income	-0.076 (0.216)	0.232 (0.36)	0.466(0.325)
1.Job security	-0.550 (0.207)***	-0.458 (0.375)	-0.942(0.342)***
1.Financial security	-0.6 (0.214)***	-0.617 (0.416)	-0.356(0.388)
0.r##0.new job	0.480 (0.399)	0.471 (0.666)	-1.085 (0.671)
0.r##0.long-term contract	0.245 (0.45)	-1.542 (0.731)**	-0.461 (0.736)
0.r##1.contract form	0.177 (0.273)	-0.748 (0.691)	0.219(0.450)
0.r##0.satisfaction with work	-0.314 (0.271)	0.967 (0.521)*	-0.046(0.447)
0.r##0.satisfaction with income	-0.49 (0.293)*	0.326 (0.515)	0.225(0.457)
0.r##0.job security	-0.143 (0.293)	-0.219 (0.544)	-0.664(0.494)
0.r##0.financial security	0.013 (0.318)	0.231 (0.651)	0.25(0.608)
Constant	1.451 (0.684)**	0.073 (1.926)	0.767(2.193)
Constant	1.639 (0.134)	1.427 (0.262)	1.13(0.265)
Observations	2606	690	725
Prob > chi2	0.000	0.000	0.000

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The time variable itself has the most substantial statistically significant impact on semi- and unskilled workers compared to the other classes and among all the explanatory variables within each model. Therefore, for individuals who classify as semi- and unskilled workers, the probability of fearing immigration was 35.55% lower after the year of the introduction of the minimum wage. For white-collar workers, the respective probability is 24.54%, and for skilled workers, it is 32.07%.

Table 12: Marginal effects of the Within- and Between-Variation before and after the Introduction

<b>Introduction of the minimum wage</b>	White-collar workers	Skilled labor	Semi-and unskilled labor
Within-variation with average group characteristics (after the introduction)	-0.2454*** (0.023)	-0.3207*** (0.05)	-0.3555*** (0.048)
Between-variation between white-collar workers and the others (before the introduction)		-0.0843*** (0.03)	-0.0931*** (0.03)
(after the introduction)		-0.1606*** (0.05)	-0.1741*** (0.049)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Since the variables for economic security showed a particularly strong impact in the model framework of (1), their influence interacted with the time variable is part of the analyses.

Table 13: Marginal Effects of the Introduction of the Minimum Wage on the Economic Security related Fear of Immigration

<b>Economic security</b>	White-collar workers	Skilled labor	Semi-and unskilled labor
<b>Financial security (= 1)</b>			
Within-variation with average group characteristics (before the introductions)	-0.0498*** (0.015)	-0.1054** (0.049)	-0.0756 (0.052)
(after the introduction)	-0.1302*** (0.038)	-0.164** (0.079)	-0.1033 (0.077)
<b>Job security (= 1)</b>			
Within-variation with average group characteristics (before the introduction)	-0.0456*** (0.017)	-0.0663 (0.049)	-0.1288*** (0.048)
(after the introduction)	-0.1132*** (0.039)	-0.0962 (0.072)	-0.1653*** (0.062)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Before the introduction of the minimum wage in 2015, white-collar workers who were concerned about their financial security were less likely to fear migration than comparable individuals with average characteristics that did not worry about their financial security, with a probability of 4.98%. After the introduction of the general minimum wage, the respective probability was 13.02%. These results are statistically significant and show that after the introduction, the difference between the individuals became stronger. For skilled workers, an increase in the difference can be seen as well, but the substantial significance was less intense but still significant (5.86%). The same holds for semi- and unskilled workers. However, here the differences are not statistically significant and, in substantial terms, not as strong as those for white-collar and skilled workers. Analyzing the average answers to the outcome variable of each group, concerned and not concerned individuals became less anxious about immigration

but that the change for the concerned was more substantial. This development is true for all three investigated groups. Therefore, there might be a correlation between the introduction of the minimum wage and a decreased fear of immigration, especially for concerned people.

The same result can also be found for the felt security concerning the employment situation. The most significant increase of the difference between the concerned and not-concerned individuals can be seen for white-collar workers, where the increase was again a result of a lower average answer after 2015 of the concerned. For semi- and unskilled workers, it is the same pattern. The average fear of immigration decreased after the introduction of the minimum wage to a greater extent for the people that are concerned about their job security than for the people that are not concerned. The absolute average decrease was stronger in substantial terms for semi- and unskilled workers than for white-collar workers (change in the average answer of 0.207 against 0.275).

The introduction of the minimum wage may also impact people's attitudes towards immigration through levels of satisfaction. Within the panel regression under 3.2.2, no statistically significant impact of the satisfaction with work and the income was found. In terms of substantial significance, a result could only be found for self-employed people and semi- and unskilled workers. Within the logistic regression model that is used for estimating the impact of the minimum wage, a statistically significant impact can only be found for the interaction of the time variable with the satisfaction with work for skilled workers and for the satisfaction with income for the white-collar workers. For the other satisfaction related interaction terms, only substantial significances can be found. The group where the difference of the probabilities of fearing immigration regarding the interaction terms was substantially strongest, is the group of white-collar workers.

Table 14: Marginal Effects of the Introduction of the Minimum Wage on the Economic Satisfaction related Fear of Immigration

<b>Economic Satisfaction</b>	White-collar workers	Skilled labor	Semi-and unskilled labor
<b><u>Work satisfaction (= 1)</u></b>			
Within-variation with average group characteristics (before the introductions)	0.0166 (0.014)	-0.018 (0.047)	0.0312 (0.047)
(after the introduction)	0.0423 (0.035)	-0.026 (0.067)	0.0394 (0.059)
<b><u>Income satisfaction (= 1)</u></b>			
Within-variation with average group characteristics (before the introduction)	0.0133 (0.016)	0.007 (0.049)	0.0665 (0.047)
(after the introduction)	0.0336 (0.04)	0.0101 (0.07)	0.0836 (0.059)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The probability for the satisfied with work individuals from that group to be more anxious about immigration than comparable not satisfied individuals was 1.66% higher before 2015 and 4.23% after 2015. The respective probabilities for skilled workers are -1.8% and -2.6% and 3.12% and 3.94% for semi- and unskilled workers. It can be inferred that the introduction of the minimum wage might have had the most defining impact on the relationship between satisfaction and fear of immigration for white-collar workers. For the impact of the introduction on the satisfaction with the income, a similar pattern can be seen. Before the introduction, satisfied white-collar workers were 1.33% more likely to fear immigration compared to individuals with the otherwise same average that were not satisfied. After the introduction, that probability was 3.36%. Semi- and unskilled workers who were satisfied were 6.65% more likely to be anxious of immigration before the introduction and 8.36% after it. For skilled workers the probabilities are 0.7% before and 1.05% after. This finding means that the introduction of the minimum wage might have led to a higher impact of satisfaction on fearing immigration. Investigating the average answers of skilled, semi- and unskilled workers shows that the not satisfied individuals with income and work became, to a greater extent, less anxious about immigration than the satisfied. For white-collar workers, the same holds regarding their satisfaction with work. However, the reverse applies to satisfaction with income.

Within the used model which measured the impact of the interaction terms between the time variable and the included explanatory variables, the most substantial difference before and after the introduction can be found for skilled, semi- and unskilled workers. The investigation of only the change of the satisfaction-related fear and security-related fear shows that the most

defining change in the differences between the satisfied/ not satisfied and concerned/not-concerned happened within the group of white-collar workers. The differences within the groups became stronger for all of them. It is also worth comparing the differences in the probability of fearing immigration before and after the introduction of the minimum wage between the three groups. This shows that before the year of the introduction of the minimum wage in 2015, the probability for a semi- or unskilled worker to fear immigration was 9.31% less compared to a similar person from the group of white-collar workers. After 2015 the likelihood was even -17.41%, a similar pattern can be seen for skilled workers. The investigation of the average answer of each group in the period before and after 2015 shows that the large decrease of the fear of immigration for individuals from the lower classes is mainly the reason for the increase in the differences.

To conclude, the introduction of the minimum wage had a more substantial impact on the difference between the concerned and not-concerned as well as the satisfied and not satisfied for individuals from the group of white-collar workers. The more substantial impact if the introduction itself can be found on people's overall economic-related fear of immigration for skilled, semi- and unskilled workers. A reason could be that the introduction of the minimum wage amounted more to the economic endowment of people who were in the class of unskilled workers. In fact, in group one, 16.34% in 2015 and 17.52% in 2016 had a contract with the legally binding minimum wage in it. Within the group of semi- and unskilled workers, the respective shares were 30.09% and 33%. These numbers support the afore made assumption.

### 4.3 Confounding Factors as Channels of Causality

The following section will be analyzed if there are possible confounding which impact the relationship between the explanatory variables and the outcome variable. Thereby leading to a correlation but lowering the probability of an existing causality. Here, three different kinds of confounding backgrounds are analyzed in four estimations: demographic, economic, and political.

### 4.3.1 Demographic Composition of the Groups

One outcome of the thesis is that there are differences in the rate at which people fear immigration to Germany, depending on the socio-economic group. The demographic composition of a group has a considerable impact on its particularities. Characteristics like age and sex have an impact on people's political attitudes. Hence, the first channel of causality analyzed is the age and gender composition of each socio-economic group. In the boxplot, it can be seen that on average the youngest socio-economic group is the group of skilled workers and that on average the oldest is the group of semi-and unskilled workers.

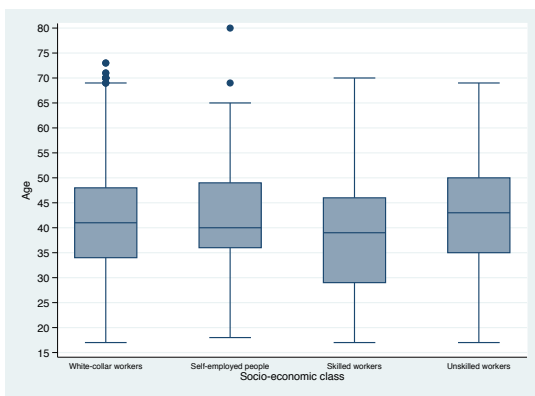


Figure 5: Age Distribution in the Socio-Economic Groups (2000 - 2018)

The average age in every group lies between 38 and 43 years. The broadest age distribution can be found in the group of skilled workers, while the sample is most homogenous for the age in the group of self-employed people. Despite this also being the group with the most extreme values. According to the extreme values, the oldest people in the whole sample are mostly in the group of white-collar workers. The difference in age distributions between the socio-economic groups could therefore signify a channel of causality that would question the outcomes of the thesis. For the distribution of the average answer depending on the age, a clear pattern can be seen. According to this, individuals aged  $\geq 66$  years are most likely to fear immigration. The age group between 36 and 55 is least likely.



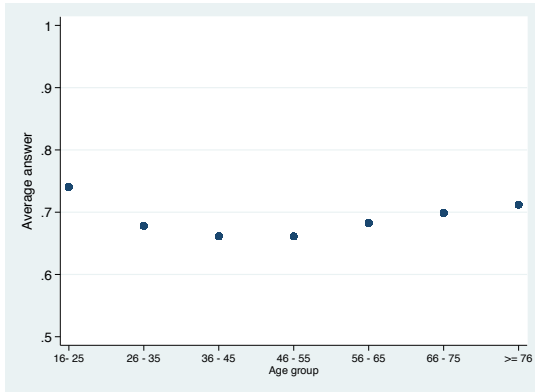


Figure 6: Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on the Age Group (2000 – 2018)

Although there is a difference in the age distribution of the groups and the average fear of immigration depending on the age, the age distribution of the groups is not very likely to explain the differences in the average fear of immigration. For example, the average age is highest within the group of semi- and unskilled workers, but this group also has the lowest average fear. Moreover, the extreme values concerning the age within the group of white-collar workers are not very likely to have a considerable impact on the average answer of the outcome variable.

The sex ratio within the groups shows that no group is balanced concerning the share of men and women. The share of women is smaller in each class except for the first one.

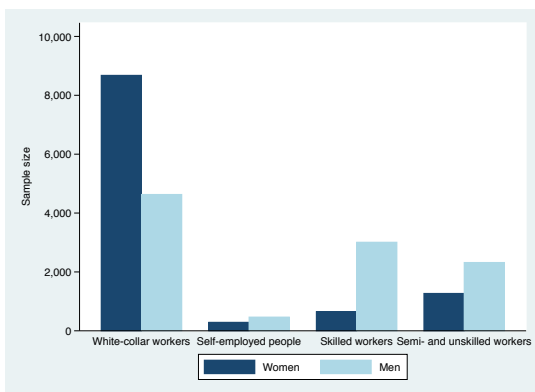


Figure 7: Sex Distribution in the Socio-Economic Groups (2000 – 2018)

Here possible confounding factor could be found if the answers to the outcome variable would significantly differ between women and men. The descriptive analyses of the average answer to the outcome variable, depending on the sex, shows that it is marginally higher for women than for men.

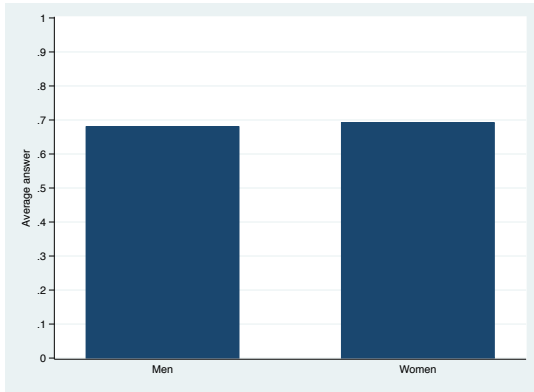


Figure 8: Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on sex (2000 – 2018)

Therefore, within the sample for East Germany, women are a little bit more likely to fear immigration but only to a minimal extent, which does not show a very substantial significant difference. Concerning the two demographic factors, age and sex, cannot be said to be channels of causality which question the outcomes of the study.

### 4.3.2 Age as Confounding Factor for the Impact of Economic Security

Within all the groups, it was found that the relation between the economic security and the fear of immigration is against the prediction of existing theories, but statistically high significant. For this reason, the possibility of age as a confounding factor is analyzed. It was found that people concerned about economic security were more likely to fear immigration than those not concerned. A possible confounding factor for this could be the age of a person since older people were less concerned about their economic situation but also more likely to fear immigration.

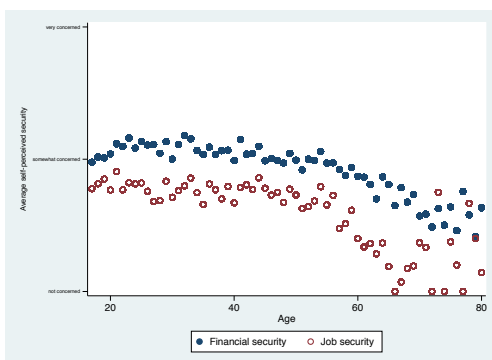


Figure 9: Self-perceived Economic Security depending on the Age

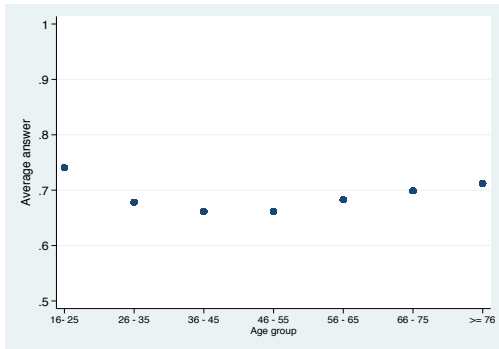


Figure 10: Average Answer to "Do you fear Immigration to Germany?" depending on the Age Group

However, the findings also revealed that young people were more likely to be concerned about economic security and less likely to be anxious about immigration. This spoke against age as a confounding factor since the estimation in 4.3.1 showed that individuals get less concerned as they get older, but also get more anxious. The interactions of the perceived security and the age groups show that, independently of the age and socio-economic group, individuals are more likely to fear immigration when they are not concerned about their financial and job security.

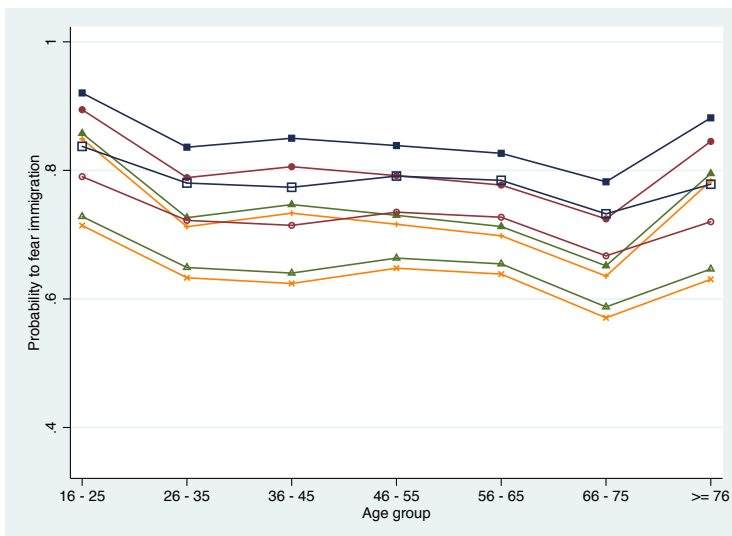


Figure 11: Probability to fear Immigration depending on the Age and perceived Financial Security per Socio-Economic Group

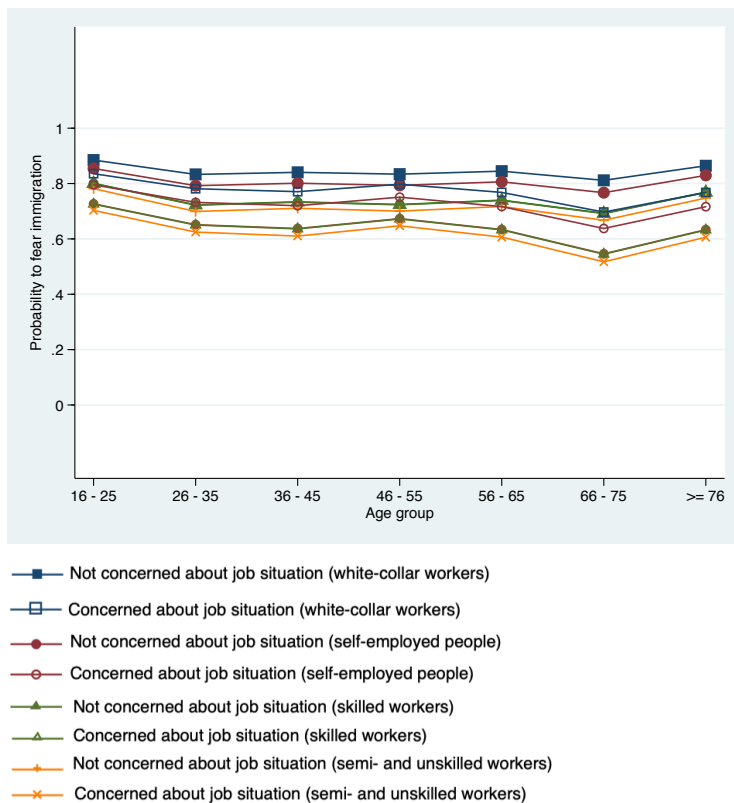


Figure 12: Probability to fear Immigration depending on the Age and perceived Job Security per Socio-Economic Group

The investigation of the interaction between age and self-perceived security does not lead to a biased outcome due to the relation between age and the fear of immigration. This result indicates that the difference in the security related fear between the groups is not very likely to be biased due to the slightly different age distribution of the groups. The decreasing relationship between financial security and the fear of immigration over age could lead to the assumption of generational differences.

### 4.3.3 Economic Developments in the Years around the Introduction of the Minimum Wage

The statistically negative development of the average rate of anxiety between 2012/2013 and 2017 could also be a consequence of the overall development of the German economy and not of the introduction of the minimum wage in 2015. The average unemployment benefit was highest in 2012 but declined thereafter. As this benefit was still at a higher level than previously, this could be one channel of causality.

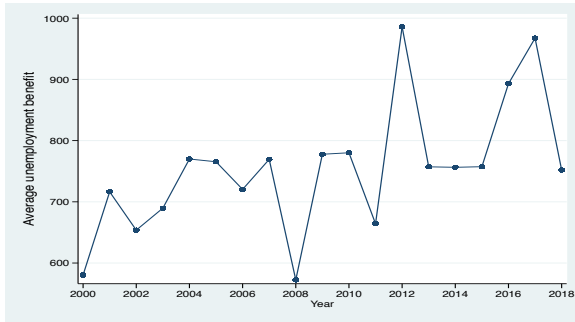


Figure 13: Average Unemployment Benefit per Year

The unemployment rate of East Germany was highest in 2005 and continued sharply declining until 2008. After 2009 it declined again, but at a more stable rate. No substantial changes can be seen between the years 2013 and 2016.

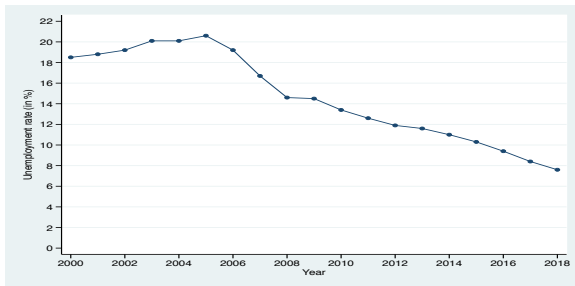


Figure 14: Unemployment Rate East Germany per Year (Statista, 2020b)

Due to this, the unemployment rate is not likely to be a channel of causality.

The average net income was historically subject to fluctuations for all the groups although they were highest for white-collar workers. After a low point in 2010, incomes rose, which might also be a reason for the changing impacts of the explanatory variables in the introduction period. The marginal decrease of income for skilled workers is not likely to have impacted the fear of immigration, especially since individuals from that group that were concerned about their security and also not satisfied with their socio-economic situation were generally also less anxious about immigration.

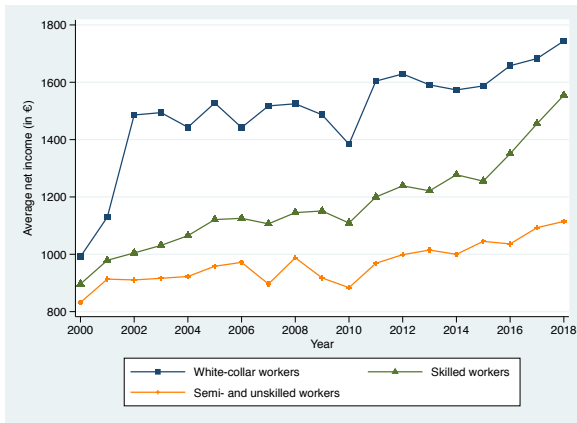


Figure 15: Average Net Income depending on Socio-Economic Group (2000-2018)

### 4.3.4 Rate of Immigration as main Impact on the Fear of Immigration

The political channel of causality that is tested is the number of immigrants that came to Germany during the period of analysis. This influx might have had impacted the average fear of immigration to a greater extent than the explanatory variables. The descriptive analysis shows that the rise of immigrants was exceptionally substantial in the year 2015, which was also the year of the introduction of the minimum wage.

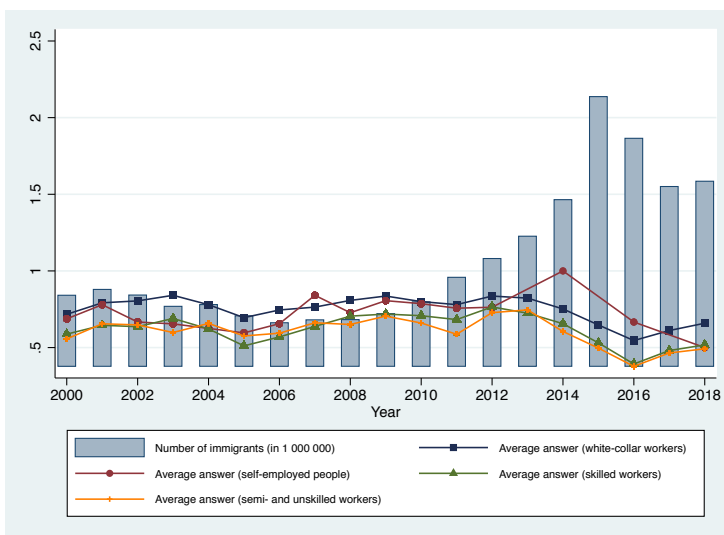


Figure 16: Number of Immigrants per Year and Average Answer to “Do you fear Immigration to Germany?” (0=no, 1=yes) depending on Socio-Economic Group (2000 - 2018) (Statista, 2020a)

If the development of the average answer is compared to the development of immigration, one can see a similar pattern in the years between 2000 and 2012. A higher number of immigrants was often accompanied by a higher average answer and, therefore, more people that fear

immigration. However, after 2013 the pattern cannot be seen any more in any year. Only for self-employed people did the pattern hold until 2014. It seems that there has been a downstream reaction of white-collar, skilled, semi- and unskilled workers to the number of immigrants between 2013 and 2015. While the number of immigrants rose sharply in 2015, the average answer still declined and then increased after 2016 at a steady pace.

To see if the number of immigrants has a more statistical and substantial significant impact on people's attitudes towards immigrants, a regression was performed that includes both the already introduced explanatory variables and the absolute number of new immigrants per year.

Table 15: Logistic Regression with the Number of Immigrants as explanatory Variable (2000 - 2018)

Fear of Immigration	White-collar workers	Self-employed people	Skilled worker	Semi and unskilled worker
Age	-0.001 (0.005)	-0.021 (0.019)	-0.006 (0.007)	-0.011* (0.007)
1.Sex	-0.407*** (0.122)	0.351 (0.4)	0.363 (0.229)	-0.214 (0.169)
Number of Immigrants	-1.435*** (0.079)	-0.313 (0.871)	-1.171*** (0.137)	-1.097*** (0.128)
1.New job	-0.053 (0.09)	0.333 (0.399)	-0.127 (0.145)	-0.056 (0.138)
1. Long-term contract	-0.132 (0.105)	0.383 (0.436)	-0.508* (0.185)	0.244 (0.159)
2.contract form	0.053 (0.09)	0.399 (0.547)	-0.259 (0.206)	0.393** (0.155)
3.contract form	0.502 (1.687)		-0.397 (1.283)	1.960** (0.735)
1.Satisfaction with work	-0.059 (0.068)	0.151 (0.279)	-0.124 (0.118)	0.022 (0.112)
1.Satisfaction with income	0.253*** (0.074)	0.276 (0.313)	0.182 (0.123)	0.216* (0.116)
1.Job security	-0.457*** (0.076)	-1.009*** (0.324)	-0.513*** (0.137)	-0.361** (0.123)
1.Financial security	-0.549*** (0.086)	-1.050** (0.486)	-0.634*** (0.16)	-0.388* (0.158)
Constant	4.745*** (0.337)	3.330** (1.344)	3.163*** (0.453)	2.732*** (0.447)
Constant	1.584 (0.07)	1.323 (0.334)	1.291 (0.127)	1.101 (0.128)
Observations	12503	661	3243	3364
Prob > chi2	0.000	0.002	0.000	0.000

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

The table shows that the number of immigrants does have a statistically significant impact on the outcome variable except for self-employed people. In terms of substantial impact, it is in each of the model frameworks the variable with the most definite impact compared to the other implemented explanatory variables. The outcome of the logistic regression suggests a negative

relationship between the number of immigrants and the fear of immigration independently of the socio-economic group. However, since the reaction seems to have been delayed in recent years, the impact of immigration should not be interpreted yearly but with a broader view of the development over the years. Therefore, the sharp increase of immigration in 2015 is not very likely to have biased the outcome of the thesis concerning the impact of the introduction of the minimum wage and the fear of immigration.

## 4.4 Sensitivity Analyses

### 4.4.1 Analysis of the Year 2017

For answering the research questions of the thesis, a panel framework is applied, which has various advantages compared to using data of only one year. However, one disadvantage is that the impacts of the explanatory variables are balanced out over the years and that sub-developments within some years might be overlooked. To address this shortcoming, the first sensitivity analysis evaluates if taking only one year into account would lead to significantly different outcomes. The reason why 2017 was chosen is that it contains the most samples. Self-employed people are excluded from the analyses due to a lack of samples.

Performing the logistic regression only for 2017 does not lead to more or less statistically significant coefficients for white-collar and skilled workers. For semi- and unskilled workers, however, there is one more statistically significant coefficient. For all the groups there are changes in what coefficients are statistically significant.



Table 16: Regression Output Estimation for 2017

Fear of immigration	White-collar workers	Skilled workers	Semi- and unskilled workers
Age	-0.014** (0.006)	0.001 (0.011)	-0.014 (0.01)
1.Sex	-0.361** (0.145)	-0.279 (0.34)	-0.523** (0.254)
1.New job	-0.185 (0.184)	-0.008 (0.349)	0.209 (0.291)
1.Long-term contract	-0.236 (0.211)	-1.2 (0.423)	0.754** (0.351)
1.Contract form	0.159 (0.143)	0.043*** (0.372)	0.498** (0.243)
1.Satisfaction with work	-0.126 (0.135)	0.031 (0.248)	-0.485** (0.239)
1.Satisfaction with income	0.298** (0.15)	-0.184 (0.254)	0.113 (0.241)
1.Job security	-0.511*** (0.144)	-0.525* (0.268)	-0.129 (0.249)
1.Financial security	-0.435*** (0.16)	-0.675** (0.3)	-0.998*** (0.329)
Constant	1.993*** (0.445)	2.037** (0.796)	0.872 (0.698)
Observations	1093	302	356
Prob > chi2	0.000	0.001	0.001

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

It is interesting that the satisfaction with income situation delivers statistically significant estimates for white-collar workers. Similarly, in satisfaction with work situation for semi- and unskilled workers. There was no statistically significant impact of the satisfaction vector variables within the panel regression. Moreover, the factor of the self-perceived job security becomes statistically insignificant for semi- and unskilled workers. In contrast, economic security was the most robust explanation for socio-economic condition-related reasons for fear of immigration within the panel model. Within the model for 2017, the included explanatory variables have a more substantial impact on individuals for all the groups compared to the panel model. This supports the assumption that a panel model balances out the impact of the independent variables. The direction of the impacts of the explanatory variables changed for some of them within each group but only for the coefficients that were close to the zero effect already. All in all, it needs to be noted that although this investigation into 2017 alone delivers slightly different outcomes, they are not so strong that they would lead to entirely different interpretations.

#### 4.4.2 Another Threshold for the Financial Crisis

The second sensitivity analysis refers to the chosen threshold of 2009 in the investigation of the impact of the financial crisis. In the sensitivity analyses, the chosen threshold is 2008. The reason for that is that in other parts of the world, the first outbreaks of the financial crisis already occurred in 2008. This could already have changed people's security feelings and attitudes, since they knew that there might also be effects of it on the German economy. While there has not been any statistically significant impact of the interaction terms on the outcome variable within the framework that used 2009 as the threshold year, there are statistical ones within the new model framework.

Table 17: Regression Output Panel Estimation 2006 – 2009 with Interaction Terms for the Impact of the Financial Crisis and 2008 as Threshold

Fear of immigration	White-collar workers	Skilled workers	Semi- and unskilled workers
Age	0.024 (0.016)	-0.006 (0.029)	-0.054 (0.037)
1.Sex	-0.184 (0.34)	-0.745(0.736)	-0.179 (0.889)
0.f	-1.331(0.672)	-3.684(1.4)**	0.748 (1.542)
1.New job	0.572 (0.513)	1.467(0.979)	-1.593 (1.095)
1.Long-term contract	0.357 (0.432)	1.136 (0.873)	-0.085 (1.391)
2.Contract form	0.448 (0.379)	-0.858(0.966)	0.342 (1.08)
3.Contract form			1.538 (2.48)
1.Satisfaction with work	-0.022 (0.301)	0.016(0.57)	-1.272(0.718)*
1.Satisfaction with income	-0.11 (0.319)	-0.124(0.615)	1.809(0.77)**
1.Job security	-0.951 (0.339)***	0.23(0.65)	-0.776(0.767)
1.Financial security	-0.64(0.407)	0.175(0.752)	-1.374(1.137)
0.f##0.new job	0.901 (0.619)	2.437(1.194)**	-1.479 (1.375)
0.f##0.long-term contract	0.411 (0.496)	1.991(1.097)*	0.159(1.547)
0.f##2.contract form	-0.146 (0.375)	0.078 (1.037)	-1.462(1.057)
0.f##0.satisfaction with work	0.289 (0.382)	0.536(0.731)	-2.338(0.963)**
0.f##0.satisfaction with income	-0.654 (0.392)*	-0.374(0.803)	1.849(0.945)*
0.f##0.job security	-0.32 (0.418)	1.073(0.896)	-1.641(1.037)
0.f##0.financial security	0.448 (0.545)	1.107(1.075)	-0.449(1.403)
Constant	2.608 (1.073)**	2.07 (2.028)	2.536(3.441)
Constant	1.896 (0.177)	1.817 (0.359)	2.285 (0.383)
Observations	1773	402	361
Prob > chi2	0.000	0.356	0.253

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Also, the direction of the impact of some interaction terms on the outcome variable has changed. The most substantial impact on the interaction terms can still be found for skilled, semi- and unskilled workers like it also was within the actual framework that took 2009 as threshold year. Another outcome of the sensitivity analysis is that the impacts of the interaction terms become more substantial, especially for skilled, semi- and unskilled workers. That means that the differences between comparable people that only differ in the particular characteristics that are interacted with the time variable became stronger. Taking only into account the impact of the time variable shows that difference in the probability of fear immigration before and after the new threshold year did not change within the groups. However, the between variation has changed. The difference after the financial crisis became less substantial between white-collar workers and skilled workers.

Table 18: Marginal Effects of the Financial Crisis when the Threshold Year is 2008

<b>Outbreak of the financial crisis</b>	White-collar workers	Skilled labor	Semi-and unskilled labor
Within-variation with average group characteristics (after the financial crisis)	0.0385*** (0.012)	0.1215** (0.051)	0.1056* (0.057)
Between-variation between white-collar workers and the others (before the financial crisis)		-0.087* (0.045)	-0.1227** (0.052)
(after the financial crisis)		-0.0534* (0.0289)	-0.0768** (0.035)

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

To conclude, the result is changing if one takes another threshold year, and the interaction terms become more significant both in substantial and in statistical terms. Therefore, even though the first effects on the German economy on the macro-level occurred in 2009, the emerging of the global financial crisis, which was already in 2008, might have had a bigger impact. This finding is a very interesting outcome which relates to the research field of financial psychology.

#### 4.4.3 Another Interaction Variable for the Minimum Wage

Due to a lack of observations, a sensitivity analysis on if a person gets the minimum wage instead of the time variable was performed for all the groups together. The model is the same as the model (3) but with a binary variable that is one if the person got the minimum wage

and zero if not. The regression does not deliver any statistically significant coefficients for the interaction terms.

Table 19: Regression Output Panel Estimation 2013 – 2016 with Interaction Terms for the Impact of getting the Minimum Wage

Fear of immigration	All groups
Age	-0.02(0.014)
1.Sex	-0.266(0.288)
0.mw	0.263(1.24)*
1.New job	-0.52 (0.521)
1.Long-term contract	-0.914 (0.576)
1.Contract form	-0.169 (0.356)
1.Satisfaction with work	0.144 (0.312)
1.Satisfaction with income	-0.019 (0.33)
1.Job security	-0.982 (0.337)***
1.Financial security	-0.717(0.384)*
0.mw##0.new job	0.402 (0.948)
0.mw##0.long-term contract	-0.541 (1.092)
0.mw##2.contract form	0.497 (0.586)
0.mw##0.satisfaction with work	-0.183 (0.508)
0.mw##0.satisfaction with income	-0.481 (0.583)
0.mw##0.job security	-0.393 (0.59)
0.mw##0.financial security	-0.706 (0.572)
Constant	0.188(0.984)
Constant	1.134 (0.39)
Observations	724
Prob > chi2	0.033

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , standard deviation in parenthesis

Also, the interaction variable is not statistically significant and smaller in substantial terms compared to the time variable. In terms of substantial significance, the original model delivers on average more substantially significant estimates. The model with the interaction variable of a person getting the minimum wage or not is not particularly close to any regression output of the three groups. The outcome of the sensitivity analyses is that the estimation with the time variable as interaction delivers more substantially and statistically significant values. Therefore, there either was an event in 2015 that impacted the socio-economic related fear of immigration stronger than the minimum wage or the assumed impact on different sectors and also on people that did not get it holds true.

# 5. Discussion and Conclusion

## 5.1 Research Outcomes and existing Literature

### **Research Question 1: Does the fear of immigration differ between socio-economic classes?**

The thesis comes to the result that skilled, semi- and unskilled workers are, on average, less likely to fear immigration than self-employed people and white-collar workers.

The theory of phantom possession in Seidelsohn (2018) von Redecker (2020) states that even if your possessions are not in direct threat, you may still fear losing something. This could explain why better endowed people are on average more likely to be anxious. Even though there should not be a strong feeling of competition concerning jobs and social benefits between people from higher classes and immigrants, the fear of losing something or facing higher competition is stronger than the actual existence of it. Therefore, it is not primarily the actual threat to the possession itself that influences the fear. That leads to the conclusion of the study, that the phantom possession theory could be more relevant for explaining economic factors related xenophobia than the competition theory, and also that the material background is less important than the psychological background. This is particularly true in the case of East Germany, where people historically faced losses to a vast extent and had to adapt to a new system.

The fact that in every group more than a half of the individuals fears immigration underlines the higher importance of the psychological background than the materialist background. The reason for this conclusion is that, according to the outcome, the fear of change and the willingness to self-protect the own status, as pointed out in Dörre (2016) can be found independently of the socio-economic endowment.

Depending on the exact meaning of mobility, the mobility theory of Frindte (1999) could explain the differences between the groups. The interpretation of the mobility theory as the pure contact with people from minority groups is supported by the outcomes of the study. Individuals within the working-class population are more likely to have a circle of friends where more than a half of them is from another country, which could explain the study outcome<sup>2</sup>. However, what is not supported is the interpretation of mobility as the actual movement.

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<sup>2</sup> Appendix A.1

Individuals from higher classes are, probably because of their monetary endowment, more likely to travel regularly, and to get to know other cultures while people from the lowest class are least likely to travel on a regular basis<sup>3</sup>. Therefore, according to the mobility argument, the fear of immigration should be lower for white-collar workers and self-employed people, which is not the case. Therefore, the interpretation of mobility as the pure contact and not the actual movement, seems to better reflect the reality.

The outcome of the study, that people within higher classes are more likely to fear immigration, could also support the economization of society theory of Groß et al. (2012). Therefore, the assumption must hold that white-collar workers and self-employed people think more about topics related to money and finances, giving them a higher meaning in their life's. That could be a consequence of their better endowment with economic goods or because of their daily work. If that reflects the real situation, then this could explain why people from higher classes within the sample are more hostile against immigrants, who are, especially in the beginning, supposed to be economically weaker.

Connecting the outcome of the study with the theory of labor immigration as solution for the existing threat on the social security systems due to an aging population (Müller, 2014: 113-119), delivers another explanation for the on average higher fear of immigration within higher classes. Self-employed people are particularly less dependent on the social security systems like the payment of the pensions, since they have to work for their retirement pensions themselves. Moreover, white-collar workers are probably more able to ensure a part of their elderly welfare independently of the state in terms of private pension insurance. That, in turn, makes the lower groups of skilled, semi- and unskilled workers more dependent on the social security system of the state and its long-term effectiveness. Therefore, the argumentation of the economic need of immigrants could reach more understanding in those groups, which lowers the probability that they refuse immigration.

The within-group variation of the outcome variable of comparable individuals among the groups is always highest for semi- and unskilled workers and lowest for white-collar workers. That shows that the economic situation has a more substantial impact on people's attitudes towards foreigners when they are semi- or unskilled workers and that the impact is least for white-collar workers. The outcomes of the between-variations support this result that the included factors have a more substantial impact on the fear of immigration when the individuals are in the groups of skilled, semi- and unskilled workers compared to white-collar

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<sup>3</sup> Appendix A.2

workers. The difference is always highest between semi- and unskilled and white-collar workers. The higher within variation in the lower classes shows that even though Lengenfeld and Dilger's (2018) modernization losers theory does not hold between the groups, it holds within the groups. For example, the difference between a person with a long-term contract and without is higher within the group of semi- and unskilled workers than within the group of white-collar workers. That shows that there is a higher difference in lower classes between less well-endowed people and those that are better endowed. The theory is especially supported by the varying differences among comparable individuals from the groups concerning their job volatility. Therefore, semi- and unskilled workers that have a volatile job have a much more substantial higher probability of fearing immigration compared to full-time employed than white-collar workers with an unstable job compared to full-employed individuals. Also, the different statistical significances lead the interpretation in that direction.

The fact that people with a volatile job are more likely to fear immigration can be supported by Heitmeyer (2005), who points out the competition of scarce resources can be an explanation for the fear of immigration. For people with a precarious job, they might regard stability and security is a scarce resource. An assumption that could connect this theory and the outcome of the study could be that immigrants are more likely to compete with people that are having an unstable job, due to for example labor market discrimination and unequal opportunities, than with people that are having a stable job.

Concerning the direction of the relation between the explanatory variables and the outcome variable, a similar pattern can be seen for white-collar workers and skilled workers. Both groups also have similar results in terms of statistical significance. In terms of substantial significance, the result is that the socio-economic factors have a principally stronger impact on the skilled workers than on the white-collar workers. For self-employed people and semi- and unskilled workers, there is a similar pattern as well. In terms of substantial significance, the assumption can be drawn that there is a stronger relationship for individuals that are self-employed. If one thinks about the job descriptions, possible explanations can be found around why there are similar patterns for self-employed and semi- and unskilled workers. The group of semi- and unskilled labor is doubtless the most vulnerable since they are easily substitutable and are less endowed with socio-economic factors. Another group that is more vulnerable and has to generate economic security and stability itself is the group of self-employed people since they are less supported by an external institution than for example white-collar workers. Existing empirical and theoretical outcomes suggest that people who are more economically vulnerable are more likely to have anxious feelings towards immigration (Semyonov et al.,

2004). That could be an explanation of why there is a similar pattern between the groups of self-employed and semi- and unskilled workers as well as between white-collar and skilled workers. White-collar workers have a less vulnerable position within the economy and are also mostly well-endowed with socio-economic factors. The similarities between groups are primarily supported by the direction in which the included socio-economic factors lead. The differences in the substantial significance show that despite the same tendencies, there are still differences in the strength of the impact of the factors on the fear of immigration.

A very interesting and surprising outcome of the study is the impact of felt economic security and satisfaction on the fear of immigration. Independently of the group, people that are more concerned about their economic security showed to be less likely to fear immigration. This finding contradicts many theories that are dominating the discourse about the roots of the fear of immigration. This is also true for the relation found between satisfaction and the fear of immigration. At this point, more satisfied individuals are also more likely to fear immigration. A reason for the relation between economic security and the fear of immigration could be that older people are, on average, more likely to fear immigration and are also more likely to feel secure with their economic endowment. However, this confounding factor was analyzed within the study and no evidence for a strong channel of causality was found. The relation between job satisfaction and the fear of immigration also seems not to be biased by the age, since the job satisfaction decreases for older age groups. For the term of income satisfaction, it could be the case since for the older ages their satisfaction with income increases with the age. On the contrary, for lower ages it can also be denied, since it is lowest for the youngest age group which is the group with the second-highest fear of immigration.

## **Research Question 2: Is the fear of immigration and its socio-economic explanation impacted by macroeconomic shocks and economic policy implications?**

In substantial terms, the introduction of the minimum wage as well as the financial crisis had an impact on the influence of the explanatory variables on the fear of immigration. The statistical significance leads to the assumption that the minimum wage had a more reliable and valid impact than the financial crisis. A reason for that could be that people were more directly impacted by the minimum wage than by the financial crisis or that the impact of an improvement of the socio-economic situation has a stronger impact than a deterioration of it. More insight in an explanation for that outcome could be obtained by analyzing the impact of both macroeconomic events depending on age. For example, if mainly people in the middle



ages were impacted by the financial crisis, it could explain the more marginal change since they are anyway less likely to fear immigration. The impact direction of the time variables for the financial crisis and the introduction of the minimum wage shows that there is mostly a statistically positive correlation between the financial crisis and the fear of immigration, meaning that it increased after the crisis. That outcome delivers an empirical foundation for some theories discussed in the literature part, for example of Boehnke et al. (1998) and Groß et al. (2012), who say that in times of crisis, prejudices and the refuse of immigration increases. For the introduction of the minimum wage, the relation is statistically negative, implying that people became on average less likely to fear immigration after the introduction. That in turn shows that economic equality impacts people's fears and attitudes towards immigrants. Combining the outcomes of the two events leads to the assumption that increasing equality and fair conditions on the labor market have a bigger impact than negative economic developments. Therefore, the fear might be more impacted by existing conditions than by occurring shocks that suddenly lower the socio-economic endowment of people.

**Research Question 3: Is the extent to which external economic and political events have an impact on the fear of immigration dependent on the socio-economic situation?**

The impacts of the investigated macroeconomic shocks show that they have a more substantial impact on the probability of fear of immigration in skilled, semi- & unskilled workers compared to white-collar workers. Therefore, in substantial terms, economic factors and changes in them have been more influential for individuals from lower socio-economic classes.

For the case of the financial crisis, the differences in the likelihood to fear immigration between lower and higher groups decreased. The reason for that was that the average answer to the outcome variable increased more for individuals from the lower classes than for individuals from the higher classes. After the introduction of the minimum wage, the differences in the probability to fear immigration between the lower and upper classes increased. The reason for that was that the average answer to the outcome variable decreased more for individuals from the working classes than for white-collar workers. Therefore, the outcome of Kinloch (1974, cited in Semyonov & Rajiman, 2006) and Tienharra (1974, cited in Semyonov & Rajiman, 2006), that the refusal of immigrants decreases when the socio-economic situation of a person gets better can be supported for the case of East Germany, especially for the lower classes. This

study reinforces existing scholarship by showing comparison with the reverse situation due to the financial crisis. That supports their outcome and even gives it more reliability and relevance since the opposite situation leads to the statistically opposite result. Nevertheless, since the average fear of immigration was already declining before the introduction of the minimum wage, it is highly questionable whether there is a high correlation between the introduction of the minimum wage and the outcome variable. The development after the introduction could also have been just the proceeded trend from before.

The investigation of the economic-security related fear of immigration shows that the financial crisis had the most substantial impact on skilled, semi- and unskilled workers. Also, financial security played a more influential role here than job security. The outcomes for the impact of the security-related fear of immigration combined with the introduction of the minimum wage show that the policy implication had a more powerful statistically negative impact on people that are concerned about their financial situation. A similar development can be recognized for the impact of job security related to fear of immigration. Also, the outcomes concerning the impact of the introduction of the minimum wage lead to the assumption that the change can mainly be attributed to the more comprehensive reduction of anxiety within the group who are worried about their economic situation.

## 5.2 Limitations and future Research

A consideration of the limitations of the study is necessary to assess how reliable and applicable to the general public the results are. It also makes it possible to pay attention to these points in future research work in order to refine and improve the found results. The used outcome variable of fear of immigration to Germany was a question that the participants had to answer. Therefore, the self-selection bias is a problem the study had to face. For example, people would maybe not admit their fear of immigration due to societal expectations of moral attitudes or because they worry that a specific political direction will be imposed on them. Moreover, some of the explanatory variables are questions that are not easy to compare since people, for example, have different understandings of what satisfaction means. The study design itself delivers another limitation. Since there is a high amount of questions within the survey, answering it is very time intensive. Therefore, people that have the time or find the study valuable are more likely to answer it. That, in turn, could reduce the overall transferability

of the outcomes to the society as a whole. Another limitation of the study is that the group sizes differ a lot, especially between the first group and the other groups. Therefore, the outcomes for the first group might be more reliable than for the others, which questions the comparability of the groups. In another study, one could equal the sample sizes through a random selection of the same number of individuals within each group.

For future research, it would be interesting to analyze to what extent the fear of immigration follows in the election of right-wing parties and in supporting populist and anti-democratic groups. For obtaining a more profound insight here, one could combine the outcomes of this study with the actual voting decision of the individuals. Therefore, using a panel dataset, forecasts could also be delivered on future voting of individuals that fear immigration today. Taking together those perceptions and combining them with the outcomes of this study, could deliver a broad overview about the underlying dynamics of voting behavior, xenophobic attitudes and susceptibility for right-wing populist groups from the very beginning of the emergence of psychological and economic dynamics that are finally leading in the direction of social exclusion. Another interesting supplement would be to compare the federal states in West Germany with those in East Germany to obtain an insight into what extent the different demographic and economic developments impact the explanation of the fear of immigration with socio-economic factors. The outcomes of the study concerning the relationship between satisfaction as well as security and the fear of immigration are very surprising. In a future study it would be interesting to go deeper in that relationship and to analyze more possible confounding factors in their existence or capability to explain that outcome. Especially at this point would it be very valuable to compare it with the outcomes of a different dataset to see if the survey design might have had an impact as well.

### 5.3 Practical Implications

The empirical analyses show that there are different developments on how socio-economic factors influence the fear of immigration and how in turn macroeconomic shocks impact those factors and therefore the fear of immigration. One result is that people from higher classes are on average more likely to fear immigration, but in all the classes it is more than half of the population that fears it. Another result is, that the political attitudes of people from lower socio-economic classes are more vulnerable to external changes. The policy implication of the introduction of the minimum wage had a statistical negative impact on the fear of immigration.

These findings lead to the assumption that improvements of the socio-economic condition of individuals could also lead to more solidarity and understanding of minority groups. This is a tendency that is not generally considered and included in the political decision making of our modern capitalist societies. Taking into account, firstly that the findings of this thesis are only suggesting correlations and no causalities, secondly that the sample size only reflects a very small share of the whole German society and thirdly that the analyses is only for a certain region, could one outcome and practical implication be, that today's problems and the strengthening of right-wing parties could be countered by improving the social policy towards a more on equality and distribution targeted politic. The increasing economization of the society and the associated growing identification with economic goods and individual performance requires economic policy decisions that also take psychological aspects into account and, for example, incorporate the results and theories of fear research into the decision-making process. To encounter today's challenges from a political perspective, it is more important than ever to have interdisciplinarity as one main maxim.

The impact of the financial crisis shows that global failing, uncertainty and invisible and incomprehensible political decisions support negative attitudes towards foreigners and make our societies more vulnerable and fragmented. Therefore, a politic that is made for the population needs to be visible, accessible and understandable for the broad society. Global politics that are based on profit and growth and are vulnerable to fluctuations, cannot be the right strategy in the long run. The fact, that people who are more vulnerable in socio-economic terms, are less likely to fear immigration shows that it is not only a question of education or social background but more of a modern and ingrained problem that involves all classes. Moreover, the tendency that people from lower classes are degraded for their political attitudes and seen as a reason for the increasing success of right-wing populism is wrong and needs to be challenged. The current problems of society are much deeper.

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# Appendix A

Table A.1: Share of Individuals with a certain Number of Foreigners in their Circle of Friends

	Share of Individuals with certain Number of Foreigners in their Circle of Friends				
	All	Most	About Half	About a Quarter	Less than One-Quarter
Group 1	0.006	0.019	0.03	0.033	0.909
Group 2	0.02	0.02	0.02	0.02	0.912
Group 4	0.003	0.039	0.027	0.018	0.897
Group 5	0.018	0.013	0.042	0.033	0.88

Table A.2: Share of Individuals with a certain Number of Excursions and Trips

	Share of individuals with certain Number of Excursions and Trips			
	Weekly	Monthly	Less frequently	Never
Group 1	0.034	0.341	0.571	0.047
Group 2	0.048	0.306	0.613	0.032
Group 4	0.061	0.238	0.537	0.14
Group 5	0.029	0.165	0.604	0.183