



# THE SOCIAL WELFARE STATE AND POPULISM

How does the social welfare state affect populism?

## Abstract

This paper is focusing on the social welfare state and how their components influence the political backlash created by globalization. The political backlash, which is the rise in populism as a result of globalization, becomes a problem when the power of populist parties becomes too big. This paper tries to explain this relation between globalization and populism and why the political backlash could be dangerous for developed countries. Furthermore, it tries to give a solution for these problems by investigating the influences of the social welfare state on this political backlash. The results of this paper show us that the unemployment tempers the effect of globalization on populism and that unemployment has a direct, negative relation with populism. This paper also shows that income inequality has an amplifying effect on the political backlash, provided that the income inequality grows in the middle segment of society.

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## 1 Introduction

Globalization, “*a situation in which available goods and services, or social and cultural influences, gradually become similar in all parts of the world*” (Cambridge, 2013). A quick search on the internet gives you this as the definition of Globalization. Globalization is going on for ages, but the last few decades, the rate in which globalization is happening is extraordinary (Osterhammel & Petersson, 2005). Main reasons for this are improved transport, technology, mobility of capital and the rise of global trade blocks (Osland, 2003). All contributing to a decline of costs and barriers, which stimulates not only the economic trade, but also social interactions between different cultures.

Globalization also brings problems. After decades of prosperity and globalization, the financial crisis struck in 2008 which resulted in a crisis on global scale. Due to the worldwide intertwining and the deregulation of the (financial) markets (Crotty, 2009), markets all over the world were hit. Together with the downfall of many firms, the public opinion towards globalization turned a bit (Noury & Roland, 2020). Since the crisis of 2008, the call for less globalization and more economic and political independence is growing. This is also shown by the rise of populism in many European countries. In almost every Western European country, populist parties grow in numbers, e.g. AfD in Germany, Lega in Italy and PVV in the Netherlands. That populism and the anti-globalization sentiment are growing, is not a coincidence, due to the complementarity of them. Populism, which can be defined as the political ideas and activities that are intended to get the support of ordinary people by giving them what they want (Cambridge, 2013), focusses on national interest rather than international benefits (Rodrik, 2018). Although populism was not always against globalization, they turned to a more anti-globalization approach simply because it gains votes (Zaslave, 2008). Reasons for populism to adopt anti-globalization in their agenda are: globalization is elite driven, globalization limits state sovereignty, globalization is linked to the growing power of the EU and economic globalization destroys the organic nature of civil society (Zaslave, 2008, p. 174). Populism is therefore a good outcome for the anti-globalization movement.

The growth in populism due to the growth in globalization is seen in the literature as the political backlash (Rodrik, 2018). The political backlash can be defined as the shift of the voters from traditional parties to more populist parties, caused by globalization. There are two conditions in order to refer to the rise in populism as a political backlash (Rodrik, 2018). First, the political backlash is mostly present in the more developed democracies, as voters

have to have the ability to change the sitting government by fair elections. As mentioned before, countries like Italy, Germany and other European countries do have to deal with the political backlash, as they have a well-developed democracy. Second, the rise in populism has to be the result of growing globalization, but not at every level of globalization the political backlash occurs. In the early stages, in which a country opens up, this effect is not present at all (Milner, 2018).

A more detailed explanation for the creation of the political backlash, is given by Rodrik with the globalization paradox. In his book “The Globalization Paradox” (Rodrik, 2012), he claims that globalization comes with a paradox. The three pillars of the paradox; (economic) globalization, national sovereignty, and democracy, are causing frictions between the institutions within and between the countries. Institutions play a central role in the paradox, as they are fundamentally different between countries due to the democratic process in each country. In the situation that a country wants to globalize further, they have to adjust their institutions to international standards. These changes can be small like taking down some tariff-barriers but can also be radical like joining the European Union. Either way, you have to hand in some national sovereignty in order to adjust to the international institutions.

The political backlash is the result of these changes in the institutions, as people are not willing to adopt to the international standards. The dissatisfaction with the course of events leads to a shift in votes towards populist parties. This trend can become problematic when populist parties are settled in the government. Many papers conclude that populism is a threat to the democratic process in a country (Allcock, 1971) (Gidron & Hall, 2019) (Fukuyama, 2018), and therefore a large shift towards populism is not desirable. So, you either choose for further globalization and benefit from the new economic situation, or you avoid the risk of the political backlash and hold on to your own institutions. This is the main idea of the globalization paradox.

Great example of this was the chlorine chicken debate in the Netherlands (Hekking & Knoop, 2020). During the CETA-negotiation, a major issue for the EU was the Canadian chlorine chicken. The Canadians washed their chickens with chlorine to remove the bacteria. Although several studies show that this is not harmful for humans, European politicians still decided that this should be prohibited in the EU. This decision meant that the EU has chosen to hold on to their standards, which hinders further globalization. If they had chosen for the international standards, you could have expected a backlash. Populist parties would have focused their attention to the deal that undermines national sovereignty, and therefore gain

more votes. This shows the paradox; do you choose for globalization or for sovereignty and hold on to your own standards and institutions to prevent the political backlash.

The paradox prevents you from fully profiting of globalization, which is of course not optimal. But what can we do to profit from economic globalization without the disadvantages of the political backlash? Literature shows multiple answers to this. One of the more common solution is the idea of Embedded Liberalism (Ruggie, 1982). The idea of Embedded Liberalism is that governments compensate the losses of globalization, economically as well as cultural. The state would become a welfare state in which citizens benefit of economic globalization and are protected against the downside of globalization. In this system, you still have to cut down in national sovereignty, but you will not have to deal with the political backlash that is created by the paradox (Milner, 2018) (Rodrik, 2018). In her research, Milner concluded that Embedded Liberalism does succeed in holding back the political backlash created by the globalization paradox, but that this effect loses his power when the government expenditures increases. However, her rapport did lack an explanation on how to improve the welfare state. Questions like “is the welfare state lost” or “are there any specific projects that are still effective, even in advanced globalized countries” are unanswered. Also, other literature regarding this subject is inconclusive on this issue. Rodrik himself does not have a permanent solution (Rodrik, 2012) and Garret does have the same result as Milner, but does not answer fundamental question (Garret, 1995). Milner and Garret have shown that the political backlash can be hold back by the welfare state, but they did not specify on different aspects. Can you better focus on unemployment or are there other factors?

Therefore, this paper will focus on this problem, which leads to the research question of this paper: How can the social welfare state stop the rise of populism, created by the political backlash of globalization? In this paper, I am going to answer this question as good as possible, by discussing the literature and performing an empirical analysis. In the literature part of the thesis, already existing literature will be discussed about the subject. Answers on what kind of problems globalization brings and why people turn to the populist parties will be discussed, together with possible solutions to the political backlash. Based on the literature, several hypotheses will be formulated and eventually tested with the help of regression analysis. The results will be analyzed and discussed which would lead to an answer to the research question and the hypotheses.

The structure of this paper is as follows. After the introduction, there will be a literature study in which the theory will be discussed, and the hypotheses will be formulated. Then, the

methods will be discussed, and the results of the research will be shown. Once the results are analyzed, there will be a discussion in which the results are being discussed and based on this, the hypotheses will either be accepted or rejected. If this is done, there will be a conclusion in which the research question will be answered.

## 2 Literature review and hypotheses

The political backlash is created by the globalization paradox, what makes it useful to look deeper into how the globalization paradox works and how the political backlash works. In this chapter, I will discuss the problems of globalization causing the paradox, the paradox itself, populism and eventually the hypotheses.

### 2.1 Problems of Globalization

First of all, the problems of globalization. Globalization comes with several problems, which are all related with the opening of countries and the increase of interaction between these countries. The deeper the globalization goes, the more problems it generates. The problems of globalization mostly take place in two dimensions of globalization, the economic dimension and the social dimension. In the upcoming section, some of the main problems in these dimensions will be discussed and highlighted, to get an impression of the disadvantages of globalization. The problems that will be discussed are mainly problems in developed countries, as the political backlash only occurs in the developed world.

#### 2.1.1 Economic problems of Globalization

For the economic dimension, the most often heard problem is the loss in jobs or the decline in wages in developed countries, which is partly true, as globalization leads to more competition on the job market. The low wages in developing countries and the increase of (working) immigrants suppress the wages in developed countries, especially in low-skilled labor jobs (Spence, 2011). The numbers of the Economic Policy Institute support this (Mishel, Gould, & Bivens, 2015). In the United States, during the period of 1979 to 2007, the real wages of lower-wages class (usually the jobs of lower skilled labor), declined with 5%. The middle-wages class had a real wage rise of 6% while the high wages class had a rise of 41%. If we take a closer look at the data, we even see that until 1996, the lower-class suffered a decline of 13% in real wages. Reasons for this are the decrease in labor demand (factories are shifting to Asia and traditional labor work is turned into machinery work) and the growing competition

of foreign competitors, who are able to produce at lower costs. This results in the stagnation of the growth of wages in the USA, at least in the lower and the middle-class. Not only do the real wages stagnate, they also show us that the inequality in the United States rose (Mishel, Gould, & Bivens, 2015). The salaries of the top 1% grew in the same period with 138% while the bottom 90% of the working class had only 15% growth in salary. CEO's earn now 296 times the amount of money than the typical worker earns (in 1970, this was only 20 times larger) and household would have had eighteen thousand dollars more to spend each year, if the inequality did not increase with 23%. The last remarkable statistic they give us is that although productivity grows with 74.4% in a period of 40 years, the hourly compensation only grows with 9.2%. The profit of the growth in the extra productivity, goes mainly to the owners.

An alternative explanation on why the inequality in wages has grown, is Skill Biased Technical Change (SBTC) theory (Violante, 2016). Together with globalization, the SBTC explains the rise in inequality. SBTC is a shift in the production technology that favors skilled over unskilled labor by increasing its relative productivity and, therefore, its relative demand (Violante, 2016, p. 1). High-skilled labor has a higher labor productivity, and in combination with the new technology, the relative production gain in comparison with the low-skilled labor only increases (Berman, Bound, & Machin, 1998). In addition, high-skilled labor is better in adopting the new technology than low-skilled labor. This makes the high-skilled labor more preferred over the low-skilled labor force which result in a higher demand of high-skilled labor. Ultimately, the wages of high-skilled labor rise while the low-skilled labor drops behind.

If we look at the data, we see this pattern in all OECD countries, and not only in the USA (OECD, 2017). In the data, we see clearly that middle-skilled class workers are the most affected by globalization and SBTC. Employment in the middle-class (think of car factories) is often outsourced over to other countries where the labor cost is lower or are replaced by robots. Low-skilled employment remains roughly the same. Explanation for this is that although low-skilled workers are easily replaceable, common workers like janitors and hairdressers are still needed. You cannot shift these professions to other countries. A small note to these numbers; the nature of low-skilled labor changed during the past decades (Spence, 2011). More low-skilled workers moved from the private sector to the public sector. This comes with a decline in productivity, as the public sector has overall a lower productivity as the private sector (Schmitz, 1997). Another reason for the hardly any change

in the low-skilled employment rate, is that low-skilled workers develop themselves, so they can take a middle-skilled or high-skilled job. The number of low-skilled employees declines which compensate the loss in jobs. Especially in developed countries, employees have a lot of opportunities to improve and educate themselves so they can take a more high-skilled job (Spence, 2011).

As said, productivity is lower in the public sector, and this gives an additional problem. The problem regarding Baumol's law, also known as the Cost-Disease model (Baumol, 1967), is particularly applicable in this situation. Baumol stated that the public goods have a lower productivity growth in comparison with private goods. E.g. the profession of schoolteacher has not seen equally great productivity gains as the production of cars in the last decades. In line with the productivity and inflation, the average wages will go up and because the private sector have a higher productivity gain, they will be able to offer a higher wage level. This forces governments to increase their wage level, in order to keep their employees, despite the fact that they do not have the same compensation in productivity growth as the private sector. This makes the factor labor more expensive as the productivity in the private sector grows. This problem is not only seen in the public sector, but also in other professions as hairdresser and artists. They do not produce more, but still have to deal with the rise in inflation.

### 2.1.2 Social problems of Globalization

Besides the economic problems, globalization has also a social impact on the developed world. As more and more people get connected to each other, problems arise when different cultures meet. Each country has his own culture created by the democratic process over time, resulting into different norms and values and different institutions. As mentioned in the introduction, the use of chlorine to remove the bacteria from chickens is a nice example of how countries have different norms and values. The European Union does not allow these kinds of methods, while Canada does allow this. These differences in culture lead to confrontation over the so-called Non-Tariff Barriers. Non-Tariff Barriers (NTB) are non-money related barriers that hinder the trade between two parties (WTO, 2020). These barriers originate out of different cultures. Examples of NTB are the norms and values of a country, legal issues, or the controversy on how the product is made. In other words, legal restrictions on both sides of an agreement is an impediment for free trade for both parties.

The most common heard social aspect of globalization is related to migration. Globalization leads to migration, as borders open up for workers from other countries. In the EU for example, people are free to travel within the borders of the EU since the beginning of the EU

in 1993. In the Maastricht treaty, they adopted the Schengen agreement of 1985 which made the free movement of people and product possible. With the migration within the EU, different cultures meet each other. For immigrants and the society of settlement, there are two fundamental issues: the preservation of the identity of society and the contact between immigrants and society (Berry, 2002). Although there are several differences in culture among the EU member states, big cultural issues did not arise. This does not apply to immigrants from outside the European Union, where cultures are fundamentally different than those in the EU. The cultural difference is even bigger in the USA, a country based on immigrants. With many different cultures, cultural groups are more clearly distinguishable which leads to more tension within society. That is why this is still a hot topic in the USA.

Back to the EU, where in 2004, ten Eastern European countries joined the EU. During that time, the fear was that the significant wage difference between Western and Eastern European countries lead to an increase of unemployment (Krings, 2009). In reality, there was no noticeable increase in unemployment, only a staggering of wages in low-skilled labor. However, problems arose in the social dimension with the presence of foreign workers, who made the tension between the different cultures higher. In the situation before 2004, where the immigrants worked in their own countries, the effect on the employment and wages were still the same, except now people see the “new” foreign workers take their jobs (Jones, 2005). This salience of new workers makes globalization and the consequences very visible. This have led to more support for populism in the EU (Mudde, 2012).

Globalization does not only affect OECD countries, but has an impact on the whole world. Example of this are the poor working conditions in Asia. By shifting the production to the lower wage countries, the working conditions changed as well. Employees have good Employment Protection Legislation (EPL) in the Netherlands (such as basic loan and payment when you are sick), but this does not apply to many Asian countries (Lee & Eyraud, 2008). Main reason for this is the institutional framework in Asian countries (Lee & Eyraud, 2008). Laws and the monitoring by the government are limited, so producers do not have an incentive to make the working conditions as good as in OECD countries, but rather focus on low production costs. This results in low prices for consumers but also big threats for workers. E.g. in 2013, the Rana Plaza disaster took place (Reinecke & Donaghey, 2015). 1100 workers were killed during a fire in the Rana Plaza, a clothes factory for several major brands in Bangladesh. People were trapped in the building, which had steel bars for the windows and a poor fire-escapes plan. This accident was extreme, but similar working conditions can be

found in other factories in Asia, which makes the work of employees hard and dangerous. In developed countries, the effect of these conditions is hardly noticeable (Egels-Zandén & Lindholm, 2015). The Fair Wear Foundation (FWF) is fighting for better conditions, but the results are limited (Egels-Zandén & Lindholm, 2015). Over the past decades, there is hardly any improvement in these garments' factories. Globalization does not only hit the clothes branch, also other low-skilled markets have similar poor working conditions (Lee & Eyraud, 2008).

Additional problem of globalization and the poor working conditions is that the shifting of production also allowed child labor. In OECD countries, child labor is prohibited, but not in some Asian countries or there is just a lack of control. In China alone, 7.74% of the children aged from 10 to 15 was working in 2010 (Tang, Zhao, & Zhao, 2018). The chance of dropping out of school increased, the wage is very low, and they work long days. It can be argued that child labor is a necessary evil, due to the low income of the parents (Udry, 2003). If the parents cannot provide enough food for the family, child labor could be a solution. Also, some low-skilled labor is just for kids, because they are cheaper (Doepke & Zilibotti, 2005). This contributes to the unemployment of adults, which makes it harder to provide for the whole family, and forces children into labor. This now becomes a vicious circle in which children have to work instead of going to school. Despite the disapproval of child labor by western countries, the problem is not easy to tackle. Local authorities do often not have the strength to fight child labor or are just not willing to.

Not only workers suffer from globalization, also the environment took a hit as result of globalization. As a country opens up, the economic benefits result in higher real income. The additional products have to be manufactured which results in more pollution. Biggest contributor to the carbon dioxide output, is the meat industry (Denny, 2019). China is the biggest reason for the rise in demand of meat. The real income of Chinese people increased and thereby also the meat consumption, as seen in the data over the past 30 years (Ritchie, 2017). In 30 years, the consumption of Chinese people rose with 200% to an average of 60 kg each year, per person. This had a massive impact on the production, which quadrupled in the past few decades.

Another environmental problem is the common-pool resources problem (Ostrom, 2002). Common goods, like fish, trees but also more abstract things like air pollution, do not have owners, but are still available for everyone. Globalization causes a run on these goods (Ostrom, 2002). Overfishing is a bigger problem than ever before (Zaneveld, et al., 2016),

deforestation for agriculture or palm oil and the bigger pollution of the air is only growing due to globalization. More demand for products means more production, which results in more pollution. The problem is that these resources have no ownership, so everyone is free to make use of it. This means that if you do not consume it, someone else will benefit from it instead of you. Good example hereby is overfishing. If you do not fish, you still experience the downside of the overfishing while not enjoying the economic benefits. This gives countries an incentive to fish, what accelerates the problem of overfishing only more.

To sum up the problems of globalization, the major economic issues are that globalization leads to less lower skilled and middle-skilled employment in developed countries like the USA (Spence, 2011), the real wages hardly increased (Mishel, Gould, & Bivens, 2015) and the inequality have risen in the past few decades (Berman, Bound, & Machin, 1998) (Violante, 2016). Also, the government increases in size while Baumol's law causes for additional costs for the government. In the social dimension, globalization leads to a clash of cultures, poor working conditions in developing countries and environmental problems.

## 2.2 Globalization paradox

Now that we have a clear view on which problems globalization creates, we take a look at the globalization paradox. As mentioned in the introduction, the anti-globalization movement is growing since the early 60's. Throughout the years, the movement only grows further (Inglehart & Norris, 2016). The further globalization advanced; the more problems occurred in Western countries. Several papers show us that the rate in which globalization is going, is problematic (Garret, 1995) (Milner, 2018). Problems as listed before, but also growing government expenditures are alarming. All this leads to an increase in the rise of populism, through the political backlash. This process is nicely illustrated by Rodrik, in his book "The Globalization Paradox" (Rodrik, The Globalisation Paradox, 2012).

The paradox that he suggests is the paradox between (economic) globalization, national sovereignty, and democracy. With the problems of globalization growing and the intertwining of the international market getting bigger, national sovereignty is under pressure. National sovereignty is the ability to make decisions on your own, as a sovereign state. If you want further globalization, you are forced to give in some of your national sovereignty to adopt to the international standards (think about the chlorin chicken example) (Rodrik, 2018). The reason for the difference in standards, is democracy. By having a different government,

society and cultures, institutions are most likely to differ from each other. This heterogeneity of the institutions is crucial in the paradox, which is explained by Rodrik as follows:

Every market needs non-market institutions to function properly. These institutions are required to support the markets and make them socially sustainable, meaning that firms and society cooperate with each other in an environment suited for both parties. The problem with these institutions is, according to Rodrik, that they are not focused on efficiency or the stability of the market, but rather adopt the needs of society (Rodrik, 2012). Due to the democratic nature of almost every country in the world, the institutions in each country are different and shaped according to the culture of society. Therefore, conflicts arise when markets open up to each other. Instead of reducing transaction costs, now institutions obstruct or at least inhibit full globalization and free trade. Even if all the institutions are harmonized, problems keep occurring. The result of these problems is the growing aversion against globalization, which results in the rise in populism, also called the political backlash (Rodrik, 2018). To back this up, the book gives several examples that even harmonized institutions would cause problems, and that the political backlash is inevitable if the globalization process proceeds.

Rodrik (2012) presents two situations, with two sets of institutions, one with institutions working for the economy and the other one for solidarity and harmony of society. In both situations, the national sovereignty is totally left out, as the institutions are completely shaped to the international standards and because domestic regulations cannot change the institutions without damaging the perfect harmonizing structure of the institutions. In the first situation, where the institutions are working for the economy, you would solve a lot of problems like agency problems, economic bubbles, systemic risk, and asymmetric information. Institutions would be optimized for economical profit, what would result in open borders, low transaction costs and a lot of trade. But Rodrik also finds problems with this set of economic institutions. Even if we have the same culture/preferences as everyone else, we still do not know what the best economic institution set is, because there is an ongoing debate over what the best economic theory is. There are a lot of different theories on how the economic and financial markets work, and all of them have flaws. Rodrik also argues that countries have difference in needs. Although the institutional factor is the same in each country, the economy is still different. Developed countries prefer different regulations than developing countries. These problems lead to resistance, as the population still have issues with globalization despite the

fact that institutions are complementary with other country's institutions. The discontent with this, would still result in the political backlash according to Rodrik.

Rodrik presents also a second situation, in which the institutions are focused on the social aspect of society rather than focusing on the economic progression in a country. As pro, the playing field is equal and rights for employers and employees are all the same. There would not be an issue regarding unfair competition or whatsoever. The con of this kind of system, is the level on which you want to regulate all of this. How much should the government determine the playing field in which society needs to act? Second point given by Rodrik, if a firm outsources production to another country, where the workers work in a bad environment, is this any different than importing these workers to the USA and let them work in good environment? From an economic point of view, there is no difference. From an ethical point on view, there is. Although everybody is equal according to the institutions, ethical problems remain. So, whether there is an optimal economic institution as well as social institutions, Rodrik argue that there will always be issues with globalization and therefore the political backlash will come, despite having perfect harmonizing institutions.

In the previous situations, countries had to give up the national sovereignty in order to get the perfect harmonized institutions, but even this does not lead to a perfect situation. The paradox also includes democracy. Democracy causes the difference in institutions between countries and suffers the effect of the political backlash, and therefore takes an important place in the paradox. Rodrik argues that democracy is indispensable, and he does not consider a world without democracy, as it is not desirable. But what happens if democracy would be removed from the paradox? If you would abandon democracy, you have full control in your country over globalization and national decision making. Institutions can be optimally developed to your economic needs, without the process of democracy. A real-world example would be China. One party reigning and making all the rules, without the concern of getting reelected next period. In real life, the independence of the Chinese government is not optimal. They still have to adjust to international standards, but without the threat of the political backlash as they cannot be voted out of power. On economic part, China is performing outstanding. The globalization in China started in 1978 with the Chinese Economic Reform (Chow, 2005). China was opening up their economy and exposed themselves to the international markets step by step. The growth of the economy was and is tremendous. In the last 25 years, the average annual growth of the Chinese economy is 9%, with the lowest growth being 6% (Q4 2019) (Trading Economics, 2020). These numbers are stunning, and still the growth goes on.

A side note to be taken, the Chinese economy was small and underdeveloped causing the big growth in the beginning, but still in large parts of China globalization is not yet arrived so there is still growth potential.

Without the presence of democracy, China is still affected by other countries due to globalization. Under international pressure (e.g. from the USA, UN, and WTO), China still depends on international organizations. E.g. rules of WTO and other economic organizations. Not only international pressure is a concern for a non-democratic country, but also domestic pressure. If the reigning party is not acting in the interest of the people, this could cause protest like the Tiananmen Square protest of 1989 in China (Onion, Sullivan, & Mullen, 2019). Conclusion, even if you abandon democracy, you will still have problems with sovereignty and full globalization. although the political backlash is not a threat, you still need to adopt international standards in order to profit from the globalization. Therefore, according to Rodrik, is democracy also a solution to several problems of globalization (Rodrik, 2014). For these reasons, abandoning democracy would be a bad idea.

Other scenario is the abolishing of (further) globalization. Rodrick did not make this assumption, as no globalization is not possible, as the outside world always have some sort of connection to your country. Nevertheless, what would happen if there is no globalization at all? In this theoretical world, countries would live next to each other without exchange of goods, products, information, or people. Every economy is completely self-sufficient, and every country has to invent the wheel themselves. This is clearly no desirable situation, so globalization is needed, or at least contact.

Rodrik himself is a believer in a weakened form of globalization. This brings other problems, like what is the optimal point. As discussed before, the optimal point is debatable. There are multiple economic theories on how to organize the economy and the institutions, but none of them is the ultimate theory as every one of them has their flaws. Or better, is there even an optimal point of globalization? Rodrik suggests in his book that democracy will solve this problem. Society will vote for the leaders who represent the majority wish, upon which the government would act. When the majority will change, or the government does not deliver, democracy will correct itself. This brings multiple problems. The majority wish is the wish of the majority, not from all the people. The minority has to accept the majority wish, even if this is not optimal. Alongside this, democracy is a slow process. Before a government is elected and settled could take months, after which the law has to be implemented. It could take years before the level of globalization changes. Another major concern is the

commitment of globalization (Douglas, 2017). When a country suddenly implements import tariffs, you risk that other countries follow their lead. E.g. Trump has set up some import tariffs to protect the domestic markets from international competition. In reaction on this, China followed with import tariffs on American products (Guo, Lu, Sheng, & Yu, 2018). This shows that there are consequences of pulling out of globalization, and not only for your own country.

As Rodrik concludes, for further globalization we have to harmonize the institutions to become one market and remove the bumps that causes the frictions between the countries. This is not happening now due to the many differences in cultures and identities in the world. These different cultures, arising from the democratic processes, causes the difference in institutions and so the obstruction for further and deeper integration of the market.

As said before, the paradox itself is not the biggest problem, but the political backlash of the globalization paradox is the problem in the whole story. What begs the question, is there a solution to this paradox? Can we benefit from the economic and cultural globalization of the world without the burden of the political backlash? Rodrik propose limited globalization. Globalization is good, but to a certain point. For every democracy, this point is different. It is to society to determine the optimal point, but full globalization is never the best outcome (Rodrik, 2012). The way society determines the optimal point, is through the democratic process. The democratic process is the cause and solution to the problem, according to Rodrik.

### 2.3 Solutions to the paradox

Besides Rodrik, several other people have taken a shot on taking down the paradox. A small compilation of ideas:

- introducing a fiscal union in Europe to overrule the national financial institutions (Weber, 2012), one financial institute would harmonize the financial sector in Europe. Although this would work for further globalization, harmonizing the European institutions is no solution to the paradox. It still gives the political backlash as outcome, as the national sovereignty is declining in this situation.
- Rosa Lastra suggests (as a reaction on the book of Rodrik) for less national laws and more international laws, based on international treaties (Lastra, 2013). These international treaties are set up by the democratic governments which grants the laws democratic legitimacy. Although it would be a solution, democratic legitimacy is

debatable because the representatives of the governments have only the domestic democratic legitimacy. Yes, they represent the country, but calling international laws democratic because they are set up by democratic leaders is incorrect. If the opinion of a country changes during the years, they lack the power to change the law, so they are restricted in their sovereignty. Also, in this idea, it does not fight the political backlash that is created by the paradox. Globalization would indeed be helped, but not the struggle of the rise in populism.

An idea which is plausible, and already used in the real world, is the idea of Embedded Liberalism (Ruggie, 1982). Embedded Liberalism is a global economic and political system in which free trade and national sovereignty is guaranteed, as long as the lower class is compensated for the economic loss of globalization. The idea of this embedded liberalism comes from Polanyi, with his book “The Great Transformation” (Polanyi, 1944). Polanyi stated that the world needs liberalism in which we get rid of the traditional market economy, where the goal is to make profit, and produce only to provide all the members in society. Embedded liberalism is somewhat similar but is applicable for the post-world war situation. Central in the theory is free trade, which stimulates globalization. According to the theory, the states should provide all members of society economic support, especially those who are weaker. With the deepening of globalization, the inequality in the world increases and governments are forced to compensate those who do not benefit from this globalization. States become welfare states, as a larger and larger government is required the moment globalization advances. Together with the growth of the government, the power of the government in the economy grows as well. This is something good, as markets without government regulation only causes inequality (Polanyi, 1944).

Embedded Liberalism does not solve the paradox, but it attacks the political backlash. By filling the needs of society, the shift towards populism should decrease. In order to implement this general idea of embedded liberalism, the state has to continually grow in order to keep up with the economy, what results in a continuously growth in government expenditures (Milner, 2018). The (obvious) question: is this sustainable and does it work? Back in the ‘90s, Garret said yes, this is possible, but there are some conditions (Garret, 1995). There has to be a left-orientated government and strong labor union in order to keep the situation sustainable. This requires a constant growing government to compensate the weaker members, as the globalization keeps progressing further and further. Same results are seen in the research by

Swank and Betz. In their paper they find evidence that the welfare state directly depresses the vote for radical right-wing parties in 16 European countries (Swank & Betz, 2003).

Milner had similar results (Milner, 2018). Trade and FDI have positive results on anti-globalization and anti-internationalism. Although social welfare spending does decrease the effect, social welfare spending seems less and less able to mitigate this relationship when the numbers grows. Also, the influence of labor unions is declining due to the weakening of the unions. Other remarks from this research is that democratic systems are taking a hit with further globalization. Milner found an indirect effect for this. Deindustrialization causing the shift in votes from left parties toward extreme right-wing populist (Milner, 2018, p. 40). This can be argued by the fact that many workers in the industry sector are lower skilled, what makes them more vulnerable to populism (Inglehart & Norris, 2016). Milner concludes her working paper with the question how to stop the trend of the threat of populism. Embedded liberalism was the only force that holds down populism, but now this effect is diminishing, and populism has, if the trend continues, free path to gain more power in many developed countries.

#### 2.4 Populism and globalization

Globalization has his problems, and further globalization leads to populism, which can be a threat to democracy. In the upcoming part, the relation between populism and globalization will be discussed in further detail and how populism threatens democracy.

To begin with, the definition of populism. In the literature, populism is often described as an anti-elitist movement with the goal of providing and reaching the average citizen. (Müller, 2016). In times of globalization, where inequality is growing within society, the elitism is often seen as the reason of the inequality, what would explain the shift to populism of the ordinary man. Another popular definition of populism is that nativism is the core of populism (Mudde, 2007). Preserve the national identity of a country and through the fear of losing it, close yourself out from the world. Globalization leads to openness and therefore to more danger to the national identity. This moves people more to populism. In both definitions, populism is seen as a protest movement rather than having an own philosophy.

Now, why is populism seen as a threat to democracy? Several papers have argued about this and have different opinions. First to address this topic was Allcock. Allcock sees populism as a threat to the law and the democratic system (Allcock, 1971). It is supposed to undermine the basic institutions of democracy and above all the democratic spirit. Couple of years later,

Laclau rejected this statement as he called populism the optimal form of democracy (Laclau, 1977). People who are not heard in normal society have now be given a voice. Populism stands for equality and against domination of the elite, what is for Laclau the best form of government. Later, in the 21<sup>st</sup> century, most papers are in line with Allcock; populism has an anti-democratic character (Mudde, 2007) (Riedel, 2017) (Galston, 2018) (Fukuyama, 2018). “Populism does not have to be anti-democratic, but it shows its destructive potential in phases where democracy is being consolidated and improved” (Riedel, 2017, p. 295). Therefore, in a mature democracy, less and less populism is required in order to develop itself. If populism managed to obtain the power, it can come with problems. E.g. the populist government in Poland and Hungary are threatening the democracy by undermining the rule of law and democracy (Bugarcic & Kuhelj, 2018) (Riedel, 2019). They fired judges to replace them with more favorable judges for the regime, placed friends on high ranked jobs and more things to improve their own position as government (Riedel, 2019). This undermines the nature of democracy and can be very dangerous. Riedel and Bugarcic & Kuhelj, as well as others like Mudde, emphasize at the same time that this is not the case for every country that faces populism, but the threat is present and therefore, a populist government is not desirable in an advanced democracy.

#### 2.4.1 Relation Globalization and Populism

The further globalization progresses, the bigger the anti-globalization sentiment by the population becomes. These people shift their votes to populist parties, but why is populism the answer for the anti-globalization movement? Zaslove concluded that populism has a lot in common with the anti-globalization sentiment (Zaslove, 2008). Although populist parties do not promote themselves as only anti-globalization, the general idea of the populist parties is indeed anti-globalization, as this is what the normal man wants according to those parties. Zaslove narrowed the program of three radical right populist parties in Europe down to four points on why populism is in favor of less globalization, and why people are shifting their votes to these populist parties.

First of all, globalization is elite driven, serving economic and political elite interests. The neo-liberalistic approach drives the power of banks, states, and international corporation to a higher level, and with it, the power to corrupt elite who only want more power. The agenda of the elite is in contrast with the national interests and threatens national sovereignty, according to radical right. Second, globalization limits state sovereignty. In line with previous argument, the international agenda is different from the national agenda. E.g. The European Union does

not incorporate for every decision the national interests, and thus limits the sovereignty of the national governments.

Third, Zaslove claims that populism sees globalization as the cause of the growing power of the European Union. This was not always a problem for populism, as in the 90's they hold on to the neo-liberal ideology. They saw that isolation was not the solution and that the EU could be a possibility to promote regional culture (Zaslove, 2008), so they welcomed the EU at first. This changed the moment the EU expanded, as new cultures came to theirs and they were threatened in their way of live. From that moment on, the EU is the embodiment of everything globalization causes. The final argument Zaslove made, is that the economic globalization destroys the organic nature of civil society (Zaslove, 2008). For Zaslove, this is the nationalism argument of the populist parties, where people have the right to grow up in their own culture and "our people first" mentality. Besides the lost in culture, they also fear for the change in the traditional economic structure of their country. Not only the loss of traditional professions, but also the transition to other professions and standards is seen as a threat to the national identity.

For Zaslove, these are the four main reasons for the link between globalization and the rise of populism. He based these points based on three countries, but other literature regarding this subject shows similar results. The argument that national sovereignty is being threatened by globalization is the most common seen (Rodrik, 2018) (Mudde, 2007) (Milner, 2018).

Besides Zaslove, more people wrote about the relationship between populism and globalization. Rodrik himself writes that the rise in populism is the main problem of globalization, but that this political backlash is acceptable provided that the economic benefits outweigh the cons. Or, as he calls it, the economic backlash on the political culture (Rodrik, 2018). He concludes: "The simple economics of globalization is not particularly auspicious with respect to its political sustainability" (Rodrik, 2018, p. 28), alluding to the fact that economic benefits do in fact destabilize the political environment. The growth in GDP results in more complex situations in which political decision making become harder and harder. The further the advancing stage of globalization, the harder it gets. Rodrik speaks of hyper-globalization, alluding to the most advance stage of globalization. In this stage, populism is a more attractive alternative, as they anticipate on the controversial decision, made by the government. In order to determine if a country is in the hyper-globalization state, Rodrik looks at the political/distributive costs to net economic gains ratio. This ratio, that indicates how much economic profit you gain from further globalization at cost of political stability, is

for Rodrik his guidance to whether or not further globalization is good or bad. In the stage of hyper-globalization, the ratio is so much unfavorable that further globalization should not be desired. (Rodrik, 2018)

There is also criticism on Rodrik. Although the economic reasons for the rise of populism is undeniable, the weight given by Rodrik on this effect is too big (Hoekman & Nelson, 2018). In a response to Rodrik, Hoekman and Nelson argue that there should be more emphasis on non-economic factors, like international capital flows, migration, and technological change. This would give a more reliable outcome to the ratio. The rise in populism is not only the result of the economic consequences, but more often than not the result of cultural change in countries (Hoekman & Nelson, 2018).

## 2.5 The social welfare state

These non-economic factors are highlighted in the paper by Swank & Betz, who also did research on the welfare state, populism and globalization (Swank & Betz, 2003). They distinguish three types of welfare state, universal welfare state, the corporatist conservative welfare states and the Liberal welfare states (Esping-Andersen, 1990). The universal welfare state is a system in which high level of social security, and a social wage for the low- and middle-skilled workers class come together with a high taxation system. In the universal welfare states, there is a well-developed labor market and low-risk culture based on trust. Corporatist conservative welfare states have generous occupationally based social protection, social insurance funding and relatively low levels of social service provision and active labor market policies (Swank & Betz, 2003, p. 224). In these corporatist welfare state, the hierarchical structure of the economy and culture is an important factor. This system is mostly seen in Latin American countries as well as some southern European countries. As last, Swank & Betz discuss the liberal market welfare state. The liberal market welfare state is based on individual freedom. Less social service provision by the government and more individual responsibility. These systems are often more vulnerable to the political business cycles but are very profitable in times of prosperity. In their paper, Swank & Betz argue that the universal welfare state is the most effective system to hold down populism, because this system provides the most help for the low- and middle- skilled workers class. By having relatively high EPL, employees are less likely to be fired as it comes with a high cost.

This universal welfare state is, according to Swank & Betz, the most effective form of welfare state. With universal welfare state, they referred to the “social democratic” system of Esping-Andersen (Esping-Andersen, 1990). In this system, government pursued equality of the

highest standards, where markets and state are connected instead of having operated next to each other. Unique of this welfare state is the high standards of living. In most of the welfare states, the minimal needs are being pursued and this leads often to problems in a crisis (Swank & Betz, 2003). In the social democratic system of Esping, the aim is to make sure that every individual is self-reliant, while other systems like the corporatist conservative welfare more focused on the family household as a whole. This dependence on the family household is cheaper to sustain but are more fragile in times of crisis. Therefore, a welfare state in which every individual is self-reliant, is more preferred (Esping-Andersen, 1990). The downside of this system is the high costs, and the universal acceptance that is required to implement this system. It only works if the vast majority supports this system. As an example of the social democratic system, Esping-Anderson gives Norway and Sweden as the two leading nations who heading towards the universal welfare state after WWII. They recovered fast from the second world war as they were not bounded to the church, which held back the reconstruction of the welfare state in countries like the Netherlands and Germany (Esping-Andersen, 1990).

#### 2.5.1 Components of the social welfare state

The social welfare state in Norway, Sweden and other Scandinavian countries, are the most efficient to prevent populism (Esping-Andersen, 1990) (Swank & Betz, 2003), but does not fully prevent the presence of populism. Yet, compared with other systems, the universal welfare state succeeds the best, but how? Which elements of the welfare state are leading in the fight against populism? According to the Esping-Andersen and Swank & Betz, the universal welfare state owes this to the equality in the countries, high standard of living, low unemployment, and individual independence. If we look at other papers, we see mixed results. To start with unemployment, which is expected to have a positive relationship with populism. According to the literature, people tend to vote more often for populism when they have no job. This has multiple reasons. First of all, you do not have a regular income and the lack of activity and social interaction during the day is not helping (Gidron & Hall, 2019). Also, unemployed people have often issues with decreasing pride, as they are embarrassed to be unemployed (Gidron & Hall, 2019). Globalization does not lead to more unemployment overall, it does hit the lower and middle-skilled class who are more vulnerable to the influence of populism (Inglehart & Norris, 2016). However, not all studies show the same outcome. Stoyanova shows that unemployment has a significant negative relationship with the vote share captured by Right-Wing Parties (RWP) (Stoyanova, 2016). When unemployment increases, the votes for RWP goes down. Milner in her research did not find any significant

relationship at all, which makes that there is not yet an universal acceptance on the relation between unemployment and populism.

Income inequality is also an important aspect of social welfare in Scandinavia. As seen before, inequality causes for opposition in societies between the elite and the normal civilian. As seen in the definition of populism, anti-elitism is one of the main priorities of populism, and is therefore something to avoid (Pastor & Veronesi, 2018). In the Scandinavian countries, inequality is significantly lower than in other OECD countries (OECD, 2020). The Gini-coefficient shows the inequality in a country, with zero as perfect equality and one as perfectly inequality. The Scandinavian countries all have a coefficient of 0.3 or lower, indicating that the income inequality in Scandinavian is pretty even distributed, and that elitism is less present.

Unemployment and inequality are both many times debated in the literature on how they are related to populism. However, other aspects of the social welfare state are less discussed by the literature. In the upcoming section there will be a small overview about this.

It is often argued that the elderly people are more in favor of a populist government than younger voters, as is often seen in elections (Goerres, 2009) (Mungiu-Pippidi, 2001). The reason for this, is that senior citizens have short-term thinking, growing sense of insecurity that comes with globalization and the nationalistic program of the populist (Campanella, 2018). And because almost all populist parties rely on their older voters (except for Marine Le Pen of France's National Rally), they will keep on fighting for the national interests. E.g. by the Brexit voting in the UK of 2016, the elderly citizens voted against EU to preserve their identity, what was the campaign of the populist parties in the UK. Reason for the UK to go out of the EU, is the rise in globalization and the immigration that came with it. Globalization made the call for nationalism stronger, and not only in the UK. With influences from outside, the need for a cultural identity become higher and higher (Berry, 2002). Therefore, elderly voters are important for the welfare state to prevent the political backlash of globalization.

Another aspect of the social welfare state is the health care system. A major priority of populist parties is the universal health care system. For most populist parties, it is a crucial point in their agenda (like the SP in the Netherlands), what makes the health care an important topic in the debates in prior to elections. It is known that the privatization of the health care system has contributed to the rise in populism (Simborg, 2010). Reason for this is the unethical profit making of big pharmaceutical firms. With the advancing of globalization,

these pharmaceuticals scaled their production up and gained more power in the medical sector, with the goal of making profit. Also, the people who are struggling to get proper health care, due to financial issues, are often used by populist parties as an example to point out the mistake in the health care system. A large group of voters is therefore drawn to populism (Pavolini, et al., 2018).

As said before, the Employment Protection Regulation (EPL) is high in the Scandinavian countries, given that they are a universal welfare state. A high EPL gives employees more job security, but employers are usually less liberal in hiring new personnel as firing is expensive. Benefit of this system is the low fluctuation in the unemployment rate, regardless of the state of the economy. In economical bad times, the unemployment would still go up, but this would be limited. With the growing globalization, populist parties are aiming for job security (Mughan, Bean, & I.McAllister, 2003). They see foreign competition created by globalization as the enemy of the way of live and the traditional labor in the country (Mughan, Bean, & I.McAllister, 2003). By constantly promoting labor regulation change, populist parties gain votes. As seen in previous studies, reforms in the labor market results often in a rise in voters for populism (Murillo, 2000) (Gibson, 1997). People who lost from the reforms are often tempted to shift their vote. This could be an explanation for why a high EPL does not stimulate populism, as there is no more reform to be done and the job security of people is sufficient.

Another topic for populist parties is the integration of immigrants. Immigration is in many countries a hot topic because it comes with several problems. People tend to have problems with communication with other groups and have fear to lose their identity as group (Berry, 2002). Some populist parties are mainly focused on immigration topic (e.g. PVV in the Netherlands, AFD in Germany and Rassemblement National in France), to emphasis the nationalism of the voters and to repel against more immigration. As globalization continues, we see a growth in migration. This migration does not only consist out of labor migration, but also families from immigrants. This creates a completely new community in another country. We see this for example in New York, where a complete city block is named after the Chinese inhabitants (Tchen, 2001). Not only in New York, also in other cities in Western countries are immigrants making a whole community. This is not a problem nor a rarity, as people of the same group are drawn to each other (Berry, 2002). Problems occur usually with the second generation of immigrants, the children of the immigrants, and not with the initial immigrants (Bourque, Ven, & Malla, 2010). The first generation is eager to work and they are often more

motivated as they have a reason for the migration to another country. The second generation has more problems with the integration. They have usually lower educational level, are less likely to get employed and faces often discrimination on the labor market, giving them a disadvantage (Algan, Dustmann, Glitz, & Manning, 2010). This leads to higher crime rates among the second generation immigrants than the first generation immigrants (Killias, 1989) (Bersani, 2014), and a growing aversion of indigenous people towards immigrants. Another big migration group are refugees, that also causes a big problem in European countries (Sola, 2018). During the migration crisis of 2015, where thousands of refugees came into Europe, many governments were having trouble dealing with the situation. Several populist parties took advantage of this and gained a lot of support (Pirro, Taggart, & Kessel, 2018). Although this is not a direct result of globalization, it is still part of the integration in society where populist parties seize the moment and try to win voters. It is to the social welfare state to prevent this from happening, but how? An example could be Sweden. Sweden was the only country in which the first generation had a higher crime rate than the second generation immigrants (Martens, 1997). Due to the financial security for immigration and the high tolerance towards immigrants, the second generation had a more equal change on employment as the rest of the Sweden population. This leads to less crime and more acceptance for the new citizens.

## 2.6 Hypotheses

The literature study shows us that globalization definitely has problems. Inequality, targeted unemployment, and other economic problems together with immigration and environmental problems makes globalization not indisputable. The dissatisfaction with globalization translates itself in the political backlash, through the globalization paradox. The political backlash is the rise in populism, as populism has an anti-globalization program and promotes nationalism. As shown by several papers, populism have anti-democratic elements and threatens democratic values in advanced democracies (Bugaric & Kuhelj, 2018). The political backlash is therefore something that should be avoided, if possible.

To prevent populist parties gaining votes of globalization, Polanyi proposed Embedded Liberalism. A system in which the government turns into a welfare state to help those who lose from globalization (Polanyi, 1944). Several studies have tested this, but this paper will focus on the components of social welfare with a relation to globalization. This results in the

research question: How can the social welfare state stop the rise of populism, created by the political backlash of globalization?

As seen in the literature study, the universal welfare state is the most effective welfare state of the three forms of welfare state (Swank & Betz, 2003). This welfare state focusses mostly on equality and unemployment, which leads me to the first three hypotheses, who are there to verify already existing literature on this subject.

H<sub>1</sub>: The social expenditure of a government influences the effect of globalization on the share of votes in elections for populist parties negatively.

H<sub>2</sub>: Income inequality has a positive effect on the share of votes in elections for populist parties.

H<sub>3</sub>: An increase in the unemployment rate has a positive effect on the share of votes in elections for populist parties.

First of all, the welfare state (expressed in the governments social expenditures) has a negative relation on the political backlash. The idea is that if the government spends more money, the effect of globalization on populism would be diminished. I want to test this to see if I have the same results as previous papers (Milner, 2018). Then, inequality is a recurring topic. Many papers emphasis on the importance of inequality and how inequality has a direct effect on the rise in populism. Inequality could therefore be an important factor to target by the government in order to get less populism (Bourguignon, 2017). Also, unemployment is an important factor, as work is not only an economic happening, but also a social happening. The interaction with other humans and the work you deliver, has a positive effect. Literature is mixed over the outcome the relation between unemployment and populism, but following the majority, I expect a positive effect of unemployment on the share of votes in elections for populist parties.

To test which components of the welfare state are the most successful to fight back the political backlash, the following hypotheses will be tested

H<sub>4</sub>: The quality of the pension system influences the effect of globalization on the share of votes in elections for populist parties negatively.

Senior citizens are the largest group who votes for most populist parties during elections. This makes them an important group to keep them satisfied. Reason for senior citizens to vote for populism is the threat of losing their national identity to globalization. Is it possible for the

social welfare state to create a pension system what compensated the fear of losing the national identity? I suspect that the better the pension system is, the less senior citizens would vote for populism when globalization advances, and that the share of votes therefore declines.

H<sub>5</sub>: An increase in the healthcare expenditure influences the effect of globalization on the share of votes in elections for populist parties negatively.

In the universal welfare state of Swank & Betz, the health care system is an important factor as it is part of a high standard of living. It is also an important issue in the populist program. Although globalization does not directly have a significant effect on the healthcare system, the privatization of health care system and growing influence of big pharmaceuticals is alarming and pushed by globalization as the costs of the health care system is growing. Thereby, many populist parties are focusing on the importance of the healthcare system. Therefore, I think it is justified to include this hypothesis in my research. I expect a negative relation of the healthcare system on the relation between globalization and the share of votes for populist parties

H<sub>6</sub>: higher integration of immigrants on the labor market influences the effect of globalization on the share of votes in elections for populist parties negatively.

As discussed in the literature, participation in society is important for the integration of immigrants. The contact between groups is difficult, but if you are more familiar with other cultures, the acceptance goes up (Berry, 2002). Besides this, employment give more benefits for immigrants as it gives them a stable income and occupation during the day. The argument of populism that they are stealing the jobs of the indigenous people should be negated by the positive effect of the employment. Based on this, I expect that higher participation of immigrants on the labor market has a negative effect on the relation between globalization and populism.

H<sub>7</sub>: an increase in labor market protection has a negative influence on the effect of globalization on the share of votes in elections for populist parties.

As argued, EPL has several benefits with job security as the most important benefit. This is especially in a globalized world, wherein technology and cheaper labor are competitors of the low-skilled and middle-skilled labor force, important to have. Other benefits are the low fluctuation in the unemployment rate, even in an economic recession. And because unemployed people are more often going to populist parties, the growth of these parties in a

recession would be limited. Higher EPL should cause therefore for less uncertainty if a country expands their globalization policy, which results in a negative effect of EPL on the relation of globalization and populism.

### 3 Method and Data

In order to answer the research question, I am going to look how the social welfare state and the components are doing their job in holding back populism. According to the embedded liberalism theory, this should be the case. In this section I will discuss the method that is used in order to answer the hypotheses, which variables will be used and why these will be used. Furthermore, the regression and the databases as well as the data will all be discussed in this section.

#### 3.1 Regression and tests

The regression that will be used has populism as the dependent variable and globalization as the independent variable. To answer the research question, I need to look at the change of the effect of globalization on populism, when a component is added to the equation. To do so, moderating variables will be added to the regression. These moderators are measuring the effect of the social welfare components (which are highlighted in the hypotheses) on the effect of globalization on populism. Together with the independent variables, they will form the regression. The regression can be found at the end of the method section.

How does the regression look like? In order to answer the research question, the data will come in the form of panel data, to measure change over time of several components. The time range of the data is from 1990 to 2017, as many variables have missing data before 1990. In addition to this, not all observations of variables are reliable before this time period, as is indicated in the dataset by some variables. The data itself contains 15 different countries, all members of the OECD. The countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Norway, Portugal, Sweden, Switzerland, and United Kingdom. These countries are not randomly selected but are countries with populist parties now or they have had it in the past. This is important for the measurement of the dependent variable, as we need to look at the change in populism and that cannot be done if a country does not have had any populist parties at all.

The selected countries are all European countries and almost all are members of the EU (except for Switzerland and Norway) during the period of measuring. An advantage of this is the relative homogeneity of the economic structure and institutional structure. The countries are rather similar to each other so less control variables are needed for a reliable outcome. Despite the similarities of the countries, there are still some fundamental differences. To see whether these differences matters, there will be a regression where the dummy variables are included, one for the EU and one for North/South European countries. Reason for this is that

countries in the EU have different institutions than non-EU countries, as they are not bounded to EU rules. This could lead different results, and therefore interesting to include in the regression. Also, as discussed in the literature, the North and South European countries are quite different, which could also result in different outcomes. Northern countries have a better system to fight populism according to the literature, which is why the northern economies (Norway, Sweden, Finland, Denmark, the Netherlands and Germany) will be compared to the rest.

With the countries set, the model can be discussed. The model needed in order to run the regression has to be determined by the Hausman Test. The Hausman test detects endogenous regressors in a regression model. If the p-value of the test is higher than 0.05, the Random Effects model (RE) will be used and otherwise the Fixed Effects model (FE). The difference between the two models is that in the FE, the unobserved variables are allowed to have a connection with the observed variables and in the RE not (Allison, 2009). FE controls also for the effects of time-invariant variables, which are variables who do not change over time, with time invariant effects (Williams, 2018). Downside of FE is that it is less precise as the RE, so if possible, I will use the RE.

Besides the Hausman test, the Pearson correlation test will be used to find out if there is any correlation between the variables in the model. If there is correlation between two or more variables, the test will show me. The next test is the Breusch-Pagan / Cook-Weisberg test for heteroskedasticity, to see if the dataset has heteroskedasticity. The last test to run is the Wooldridge test, to see if there is any autocorrelation. Auto-correlation is the correlation between different observed moments in time from the same variable. A commonly used tool to solve this is to implement time delay, the so-called autoregressive model (AR). The Wooldridge test should show us the answer for this.

### 3.2 Variables

This section should make clear why the variables selected are chosen and how they are measured. To start with the dependent variable for populism. Following on the papers of Milner and Burgoon, the dependent variable is going to be the share of votes to populist parties in elections, to capture power of populist parties in a country. This measurement is not only used by Milner and Burgoon, but is discussed to be the best measurement by 36 leading scholars (Barr, Clarke, & Lewis, 2018). They argue that this is the best measurement, but that it also has its flaws. The variable does not capture the populism sentiment in OECD countries perfectly. E.g. the electoral system in the UK is a district system, where the winner

in a district takes it all (the one seat in the house). If, let say, 40% of the voter's vote on a populist party, but they do not win, these 40% does not get included in the data. Also, the change of support for populist parties in between the elections cannot be captured, as elections are not held every year. Despite these disadvantages, it can be argued that the share of populist parties in elections is the only thing that matters. The political backlash is the rise of populism in the government, and not the support for them. The disadvantages of globalization only occur when populist parties are in power, expressed in the amount of influence they have on the decision making in a country. Therefore, the share of votes for populist parties is the best way to capture the rise in populism, as that is the political backlash created by globalization.

The data for the dependent variable includes the data of 65 different parties, from 15 different countries listed before (see Appendix 1 for the full list with parties). These 65 parties are selected by Milner in her research to similar topic (Milner, 2018). The parties on this list must meet two criteria. First of all, all parties are at least once categorized as populist by existing literature, for the obvious reason that the parties are indeed populist. Second, in order to get included in the dataset, the party should get at least one percent of the share of votes in an election. Parties who do not get the one percent threshold are simply too small and not in any way a factor in the decision making in a country.

A small look at the dataset, we see that the political scope of the parties is broad, as SP (the Netherlands) is left wing populism and Freedom party of Austria (Austria) is right wing populism. By having both sides of the political spectrum in my data set, I expect reliable outcome for this research. Another remarkable thing is that southern European countries like Italy and Greece have much more populist parties than Nordic countries like Norway and Sweden. As said before, a dummy variable will be included for North and South Europe so we can see if this really makes a difference or not. A last, more of a practical issue, is that not every country has elections in 1990. Therefore, the data of the latest election before 1990 will be used for the data of 1990 till the upcoming election. E.g. Italy did not have an election in 1990. The election of 1987 was the election prior to 1990 and so I use those numbers for my dataset. Another rare occasion is the event of two elections in one year (Greece 2012 and Greece 2015). The average in share of votes of both elections will be used to determine the value of the variable for that year.

The first independent variable in the regression is globalization. The most common way of capturing the globalization of a country is by using the KOF index (Dreher, Gaston, &

Martens, 2008). An alternative for this is the MGI, the Maastricht Globalization Index (Figge & Martens, 2016). The difference between the KOF and the MGI index is that the MGI index has included the environmental issues of globalization. It includes this by containing the ecological footprint of exports and imports as a share of bio capacity, as this is also an important aspect of the growing globalization. Despite the inclusion of the environmental issue of the MGI index, the KOF index will be used in the regression. The KOF index is internationally accepted as a good measurement for globalization and the MGI is still relatively new. Thereby, the MGI dataset is not publicly available, which makes it impossible for me to include this in my research.

The KOF index is an index based on three different dimensions of globalization, namely economic, political and a social dimension (Dreher, Gaston, & Martens, 2008). The political dimension is measured on political indicators, such as the number of embassies and high commissions in a country, amount of membership in international organizations but also trade in conventional arms as a share of military spending. The economic dimension is mostly based on trade, like imports and exports of goods and services, FDI's and capital flows. The social (and cultural) dimension contains migration and tourism. All this combined is the KOF index. The KOF index also provides the option of using only the economic, political, or social dimension of the KOF index. Although I will not include this in my main regression, there will be a separated regression in which all three dimensions are incorporated. This will be discussed in the discussion section and mentioned during the results.

The data of the KOF index are numbers between zero and hundred, with zero indicating a closed country and hundred for a country that is completely globalized. Looking at the data, we see that most European countries have a high KOF index number in 2017, and that the growth in the last 40 years was at least 20 points. Also, there are no missing datapoints which is always nice to see.

In order to answer the hypotheses, I need to test the effects of the social welfare states and their components on the relationship between the independent variable (IV = globalization) and the dependent variable (DV = share of votes in elections for populism). If the literature is correct, we see a positive relation from the IV on the DV. In order to test whether social welfare has any effect on this relation, a Moderator (M) has to be added to the equation. A moderator is a variable that affects the strength of the relation between the IV and the DV (Grace-Martin, 2020). For the upcoming variables, a moderator will be created with the globalization variable, the KOF index.

For the first moderating variable, the choice is between the indicator Social Spending (SS) (OECD Database) and social transfers as a percentage of GDP (Armingeon, et al., 2018). The first variable is an indicator provided by the OECD, which captures the social expenditure of the government, including tax breaks with social purposes, cash benefits and direct in-kind provision of goods and services. Private transfers are not included as it is not a government transaction. The other variable, used by Burgoon and Milner, is a similar variable that looks at the social welfare expenditures of the government (Burgoon, 2009) (Milner, 2018). This indicator also looks at the social expenditure of the government, like taxes and cash benefits, but does provide less explanation on how the data is obtained. It is suggested that part of Armingeon's data is derived from the OECD database. In addition to this, OECD provides a more detailed explanation on how they obtained the data and that Armingeon's data is partly derived from the OECD. Because of this, the social spending from the OECD will be used for this variable, as both indicators are very similar. In the study by Milner, she looked at social spending as direct effect on populism and as a moderating variable. This research will do the same, but the moderating variable is the most important one as this indicates the effect on the political backlash.

The next variable is income inequality. The most common used tool to measure income inequality is by the Gini-coefficient. The Gini-coefficient measures the income difference within a country, with help of the Lorenz curve. The Lorenz curve indicates how the income is distributed between the people in a country, as it is a graphical representation. The Gini-coefficient is a number which can be used in my research, but it does not specify where the inequality problem is. It is an overall number for inequality in a country. To target inequality effectively, we need to know where the inequality problems is the biggest. Therefore, I am going to use the Gini-coefficient for the top 1%, top 10%, middle 40% and the bottom 50% to see where the problem is. A value of one means that there is perfect inequality and zero perfect equality. The higher the value of coefficient, the bigger the inequality for the group. For the main regression, the top 1% variable will be used as the top 1% does represent the elite the best. The other three variables are mainly for the discussion to see if there is any difference.

Other tools that are regularly used to measure income inequality are the Theil index and the Palma ratio, but these are not as often used in studies than the Gini-coefficient. The Gini-coefficient is the most used indicator and satisfies all the criteria needed to be a good indicator. The data itself will be obtained from the World Inequality Database (WID). The

OECD database does also include the Gini-coefficient but does only have data starting from 2004. The WID does have the required data, starting from 1990.

The next hypothesis is about the unemployment rate, and the indicator used for this will be the harmonized unemployment rate. Unemployment is captured as the amount of people between 25 and 64 looking for work but are not currently employed (OECD, 2019). The rate indicates the amount of people unemployed in a country, as a percentage of the total labor force. The data will be obtained from the OECD database. For this variable, Milner measured in her research the relation between unemployment and populism, and not the effect of unemployment on the political backlash. In this research, a moderator will be added to see how unemployment effect the globalization/populism relation. To compare the results, there will be a regression with and without the moderator. However, for the hypothesis, the direct relation of unemployment on populism is the most important.

The fourth hypothesis asked the question if a better pension system would affect the political backlash. As the pension system is not an indicator, I will use a different indicator that shows how well a pension system is. You could define a good pension system if the moment you stop working, you do not fall back in income. The OECD provided us with this indicator as they call it “gross pension replacement rates”. This indicates how much percent of the pre-retirement earnings the pension system can provide to the elderly system. This is a nice indicator to show if a pension system is good. Unfortunately, the data regarding this indicator starts in 2014 and not in 1990. There is an alternative, as the OECD gives us the data to calculated this itself. The formula will be as follows:

$$\text{Gross pension replacement rate} = \frac{\text{average pension}}{\text{average income}}$$

Both average pension as average income can be obtained from the OECD database, what makes the Gross pension replacement rate the best indicator to evaluate the pension system in countries. Downside of this measurement is that pension funds are not included in the statistics, what could be an important factor as it is also a primary source of income for elderly people, besides the government.

The next variable needed is for the healthcare expenditure. For this, there are two indicators available. The “health spending” Indicator (OECD) and the “Health expenditure and financing” (OECD.stat). Health spending measures the final consumption of health care goods and services including personal health care and collective services. The expenditures of the

government and from private corporations, NGO's and households are included in this indicator. The indicator from OECD.stat is more to the point but less inclusive than the indicator of OECD by not taking private spending into account, what makes the indicator health spending the best indicator. If there is a change in expenditure by private corporations or household, this could affect the outcome. In the dataset of OECD.stat, only the government expenditure has influence. The data itself is measured as share of the GDP of the country.

For hypothesis number six, the indicator "Foreign-born participation rates" from the OECD will be used. This indicator measures the foreign-born participation rate as the share of employed and unemployed foreign-born persons aged 15-64 in the total foreign-born population. The hypothesis is about the integration on the labor market. This is not only the employment rate, but also the willingness to work so that is why I have chosen for the participation rate rather than the employment rate of foreign-born to use as moderated variable. Problem with this variable is the lack of data. For both indicators, the data is only available for the last 18 years(starting in 2000), instead of the full 28 years. This makes the amount of observations much lower, but other indicators do have similar problems.

The last hypothesis to test, is about Employment Protection Legislation or EPL. The EPL is a number between zero and six. A high number indicates a lot of legislation for workers and a low number vice versa. When a legislation is implemented, the EPL will change, but this comes with a problem, as the EPL barely fluctuates. For some countries, the EPL value stays the same for a total of 20 years. If there is no fluctuation in a variable, then the regression does not have any use for this variable. As a replacement for EPL, "Public spending on labour markets" will be used in the regression. This variable measures the government spending on the labor market to promote jobs, development and preserving employment opportunities. This captures the best the idea of EPL, namely protection and job security. Although this is not the same, it should be sufficient in order to answer the question. In addition, to see if there is any different in result, I will also check for the EPL. This will be discussed in the discussion section but will not be taken into account in the main regression.

For the control variables, GDP per capita and the HDI will be used. If a country has a high GDP per capita, people do not have an incentive to vote for populism. People with more money tend to have less reasons to vote for populism (Rodrik, 2018). The Human Development Index (HDI) is a well-know, internationally accepted index on the measurement of the living standard of people. It includes education, health care and income to measure the development of the country. The reason I take this as a control variable is because HDI is

correlated with the populism, as seen in (Sarabia, Crecente, Val, & Gimenez, 2019). They argue that a low HDI leads to more corruption, which is mostly done by populist parties.

The problem with these control variables is the extreme high correlation with the globalization variable, which is the KOF Index (see Appendix 2). This is easily explainable because economic growth usually goes hand in hand with the rise in GDP per capita as economic expansion is beneficial for the economy. Also, the HDI can be related with globalization, as globalization gives you more access to luxury, better healthcare, and higher income. It is therefore very logical to see such a strong correlation between the two variables. Also, the VIF test, which indicates whether or not there is multicollinearity, of GDP per capita and the HDI are rather big, if both are included in the regression.

In order to solve this problem, HDI will be removed from the regression and only GDP per capita will be used in the regression as control variable. This does not take away the correlation between GDP per capita and several other independent variables, but it results in a much better VIF and less influences on the other variables.

### 3.3 Regressions

With all the variables clear, it is time for the regression itself. The regression that will be run in order to answer the hypotheses, is as follows:

$$\begin{aligned}
 POP_i = & \beta_0 + \beta_1 KOF_i \\
 & + \beta_2 SS_i + \beta_3 HUR_i + \beta_4 HE_i + \beta_5 PEN_i + \beta_6 LS_i + \beta_7 GINI1 + \beta_8 KOF * SS_i \\
 & + \beta_9 KOF * HUR_i + \beta_{10} KOF * HE_i + \beta_{11} KOF * LS_i + \beta_{12} KOF * PEN_i \\
 & + \beta_{13} KOF * GINI1_i + \beta_{14} GDPcap_i
 \end{aligned}$$

**Table 1 Description of variables**

name	varlab
KOF	KOF index
POP	Populism
SS	Social Spending
HUR	Unemployment Rate
HE	Health Expenditure
PAR	Participation Rate
LS	Labor Market Spending
PEN	Pension System
GINI1	Gini coefficient top 1%
GDPcap	GDP per capita (log)

In the regression above, we see the main regression of this paper and all the variables with their names. The moderators are the variables with KOF plus the independent variable in their name. In the regression tables in the results section, the moderators will not have the \* in their name. E.g. in the regression above, the moderator for Social Spending is given as KOF\*SS and the same moderator will be shown in the tables as KOFSS.

The main regression of this paper is the regression shown above, and this is how the regression will be run in Stata. This regression will be named “Main” in the whole result section. Besides the main regression, there will be several other regressions. First of all, all moderators will be run separately to see how each moderator interact on their own, without other moderators in the regression. This should give a good indication on what to expect for the main regression and how each moderator effect globalization, *ceteris paribus*. After the main regression, there will also be several additional regressions for different Gini-coefficients, the dummies, EPL and the three different KOF indexes. These regressions are the robustness checks and simulate the regression if another proxy/indicator was used for the variable. These regressions should give us more information on how populism is affected by globalization and if the result would have been different if other indicators/proxies were chosen.

### 3.4 Data and database discussion:

For my research, I will make use of the OECD database, the KOF Time Series Database, the ParlGov Database, and the WID. The most used is the OECD database, referred to as OECD and OECD.stat, as OECD.stat is the database with more (and very specific) indicators while the OECD website has more general indicators such as health spending and GDP per capita. Both data sources are from the same institute, which is the OECD. This is a reliable institute, as it is a well-known international organization that pursue economic prosperity. It provides data over a lot of different indicators for years, so I trust that the data is well measured and therefore suited for a reliable outcome.

The KOF Time Series Database is the database for the KOF index, maintained by the KOF Swiss Economic Institute. This institute provides now since 2002 the globalization index and this index is widely used to measure the globalization. The database has information of almost 200 countries in the world and starts in 1970 and have data up to 2017, including the 15 countries.

The ParlGov database is a database created by the university of Bremen, in 2008. It contains information for all EU and most OECD democracies (37 countries total) it has 1700 different parties, 990 elections (9300 results) and 1600 Cabinets (3800 parties) (ParlGov, 2020). This database is also used by Milner in her research to populism, which gives me a sense of certainty regarding the reliability of the dataset.

The last databank that is used, is the WID. The world inequality database is started in January 2011 and its goal is to provide data information about inequality in the world. It has a wide spawn of income, wealth, and distribution of equality from many countries. With data going back to 1950, the WID is very complete. The team of WID exist of multiple researchers, coming from 70 different countries.

The problem of some databases is that they do not have all the data available for every country. We saw this with the pension system variable, where a better indicator exists but did not had the right data available. If we look at the data itself, we see that the current indicators have missing values for a couple of countries. In some cases, the amount of missing values is concerningly high. Italy for example, has almost no observations for labor market spending and misses a lot of data for the unemployment rate. The variable for the participation rate is constantly missing data between 1990-1999. Not one country has any data for this time span. This is the main reason why the participation rate will not be included in the main regression.

This variable will only be regressed in a regression starting from 2000 to 2017. All the other regressions, not including the participation rate, will start in 1990.

Solving the missing values issue with taking the mean of the variable of the specific country is a good and viable method for this problem, but this cannot be done for countries who have a structural issue with missing values. As said, Italy has almost no observations for labor market spending, and generating the missing values would harm the outcome of the regression. The only option left is to exclude the countries from the regression. This means that Italy, Greece and Switzerland will be removed from the regression, as they all have at least one variable in which they have structural issues with missing values. The total amount of observations is now 336, instead of 420 before.

With the data discussed, it is now time to look at the data itself. In table 2, we see the descriptive statistics of the data.

**Table 2 Descriptive Statistics**

Variable	Obs	Mean	Std.Dev.	Min	Max
Populism	336	10.18	7.32	0	29.7
KOF index	336	84.41	4.63	60.61	91.31
Social Spending	336	23.48	4.81	12.09	36.87
Unemployment Rate	332	6.85	2.69	1.66	16.58
Health Expenditure	335	8.57	1.57	4.92	11.57
Labor Spending	320	2.45	1.19	.44	7.07
Pension System	306	.46	.18	.17	1.13
Gini top 1%	336	.1	.02	.04	.17
Participation Rate	216	71.37	5.1	55.6	82.7
GDP per capita (log)	336	4.51	.18	4.07	5.05

In this table, we see the variables and an indication of the values of the variables. The timespan of the variables is 1990-2017, what results in a max of 336 observations per variable. Only the variable for the participation rate starts in 2000 due to the lack of data. This makes the total amount of observations for this variable 216. Besides the lack of data by the participation rate, no other indicator has this problem and therefore, the mean of the variable per country will be used to fill up the gapes.

To see if there is any correlation between the variables, the Pearson correlation test has to be done. This test indicates if there is any correlation between the variables within the model. The outcome of this test can be found in appendix 2. Every outcome with an asterisk is significant. The following assumptions (see table 3) will be used in order to define the outcome (Cohen, 1988)

**Table 3 Strength of Correlation**

<b>Coefficient Value</b>	<b>Strength of Association</b>
$0.1 <  r  < .3$	small correlation
$0.3 <  r  < .5$	medium/moderate correlation
$ r  > .5$	large/strong correlation

If we look at the correlation matrix in appendix 2, we see that several independent variables correlate between each other, what could be explained for the most variables.

- We see a strong correlation between the KOF and health expenditure (R=0.53). This relationship is pretty logical, as globalization leads to more expenditure overall. The growing trade of a countries increases the GDP which stimulates the health expenditure. In the model, these variables are not influencing each other, as the VIF test suggests (see appendix 3).
- Other strong relationships are only detected by the GDP per capita variable. It correlates with the KOF index and the pension system. Further globalization leads to more trade, which usually results in higher GDP and so a higher GDP per capita. For the pension system, it is roughly the same. Countries with a high GDP are often the ones with a better pension system, as they have money to invest in these systems. Note that the pension system is measured in income after retirement provided by the government in comparison with the annual average income in a country. Personal savings are not incorporated in the numbers.

## 4 Results

In this section, the results of the regression will be discussed by looking at the tables with the outcomes. The regressions are done as stated above. In the results, there will be not only attention for the main regression, there will also be a section for the robustness checks, to check if a different approach would have made a difference in the outcome.

### 4.1 Tests and main result

To start, there are several tests conducted in order to determine how to run the regression and if there are complications with the data set. These tests can be found and are discussed in appendix 3. Main conclusion of the tests is that the regression has to run on a random effects model and the regression has to be lagged due to autocorrelation. There is also heteroskedasticity in the dataset. This can easily be fixed by using additional options in the regressions. For the multicollinearity, the moderators are being standardized. This means that the mean is subtracted of the observations and that this outcome is been divided by the standard deviation. This has consequences for the interpretation of the outcome. The coefficient of the moderator tells us two things. First, it shows us how strong their influence is. A value of -1 indicates that the moderator has a strong negative relation on the globalization/populism relationship. Throughout the results, the moderators who are significant will always show a coefficient of at least 0.55 percent, as this is the threshold to become significant. The higher the significance of a variable, the higher the coefficient, and thus the bigger the influence of the moderators on the globalization/populism relation. The coefficient (0.7 as example) of the standardized moderators also tells us how much the moderators influence this relation, as an increase of one standard deviation of the moderator, result in an increase of 0.7 standard deviation of populism. For this research, the main focus will be on the sort effect (positive or negative) of the moderator and the significance of those, so the exact change that the moderator will generate will not be discussed. Nevertheless, the descriptive table of the moderators can be found in appendix 6 (table 13), so that the precise effect of the moderators on populism can be measured.

Before we go to the main regression, first it could be interesting to see how the different moderators perform on their own, without interference of the other moderators. In the regression, all independent variables are included as control variables, but the focus will be on the moderator with the matching independent variable. In the next table (table 4), we see the outcome of these regressions.

**Table 4 Regression with separated moderators**

	(1) Social Spending	(2) Health Expenditure	(3) Unemploy- ment	(4) Labor Market Spending	(5) Pension System	(6) Inequality	(7) Participation Rate
KOF index	-0.405*** (0.143)	-0.312* (0.163)	-0.490*** (0.130)	-0.300** (0.136)	-0.376*** (0.120)	-0.331*** (0.114)	-0.310 (0.200)
Social Spending	0.026 (0.091)	0.013 (0.093)	0.041 (0.092)	-0.001 (0.090)	0.031 (0.092)	0.047 (0.090)	-0.125 (0.112)
Unemployment Rate	-0.281* (0.155)	-0.289* (0.157)	-0.409** (0.178)	-0.257* (0.151)	-0.279* (0.158)	-0.388*** (0.151)	-0.821*** (0.245)
Health Expenditure	1.451*** (0.335)	1.406*** (0.322)	1.523*** (0.329)	1.508*** (0.297)	1.644*** (0.317)	1.944*** (0.284)	2.520*** (0.384)
Labor Spending	0.397 (0.384)	0.462 (0.392)	0.267 (0.395)	0.656* (0.354)	0.280 (0.398)	0.160 (0.379)	1.015* (0.611)
Pension System	-0.020 (0.030)	-0.014 (0.030)	-0.015 (0.029)	-0.017 (0.029)	-0.032 (0.029)	-0.015 (0.028)	-0.011 (0.035)
Gini top 1%	-0.381** (0.156)	-0.381** (0.153)	-0.361** (0.155)	-0.401*** (0.152)	-0.371** (0.157)	-0.394*** (0.148)	-0.507*** (0.191)
KOFSS	-0.037 (0.298)						
GDP per capita (log)	26.056*** (4.667)	24.872*** (4.722)	25.729*** (4.696)	24.593*** (4.449)	24.893*** (4.408)	17.134*** (3.828)	19.091*** (5.158)
KOFHE		0.321 (0.339)					
KOFHUR			-0.679** (0.341)				
KOFLS				0.587* (0.337)			
KOFPEN					0.427 (0.389)		
KOFGINI1						-0.903*** (0.277)	
Participation Rate							-0.189 (0.127)
KOFPAR							0.346 (0.731)
_cons	-81.231*** (16.786)	-83.654*** (16.833)	-72.649*** (16.700)	-84.156*** (15.615)	-79.581*** (15.254)	-50.804*** (12.881)	-46.738 (30.587)
Obs.	336	336	336	336	336	336	216
R-squared	0.261	0.252	0.284	0.276	0.267	0.356	0.463

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 4, we see the seven regressions in which each moderating variable is added plus all the independent variables, who are taken into the regression as control variable. In the regressions, we see a negative coefficient for the KOF index, indicating a negative relationship with populism. Almost all outcomes for globalization are significant, ranging from slightly significant to highly significant. The unemployment rate has the same outcome. The coefficient is constantly negative, and it is always significant, meaning it has a negative relation with populism. Health expenditure is also significant, but has a positive coefficient indicating a positive relationship. The Gini coefficient is the last independent variable that

shows consistent significance over the regressions, with a stable coefficient around the -0.4. Labor spending also shows one significant result, in the regression with the Labor Market Spending moderator. The control variable, GDP per capita, also shows a consistent significant result. If GDP per capita grows with one percent, we see an increase of populism with 0.25. If we look to the moderators, we see that unemployment has a medium, negative influence on the relationship between globalization and populism. The effect itself is not real strong, but the same effect can be found in the regression of the inequality moderator. This moderator shows also that it has a negative impact on the relation of globalization on populism. The last significant moderator is the moderator for the labor market spending, having a small positive effect on the globalization/ populism relationship.

The interesting part of table 4 is the fact that the significant results go partly against the theory discussed in the literature. Unemployment and globalization do have, according to the literature, a positive effect on populism, not negative. Possible explanation is multicollinearity, caused by the GDP per capita variable. Although the value is below six (see appendix 3), which is the critical level for multicollinearity, it could be a factor in the regression. Therefore, in table 5 you will find two regressions with the independent variables, one with and one without GDP per capita.

**Table 5 regressions with and without GDP per capita**

	(1) With GDP per capita	(2) Without GDP per capita
KOF index	-0.392*** (0.121)	0.097 (0.111)
Social Spending	0.015 (0.093)	0.073 (0.100)
Unemployment Rate	-0.278* (0.158)	-0.264 (0.183)
Health Expenditure	1.445*** (0.322)	1.553*** (0.363)
Labor Spending	0.408 (0.389)	-0.609 (0.567)
Pension System	-0.018 (0.029)	0.020 (0.026)
Gini top 1%	-0.392** (0.155)	-0.228 (0.153)
GDP per capita (log)	25.884*** (4.655)	
_cons	-0.392*** (0.121)	-8.572 (8.591)
Obs.	0.015	336
R-squared	(0.093)	0.156

Standard errors are in parenthesis  
 \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 5, we see the result of the regressions. In the first regression, GDP per capita is included and we see more significant results than in the second, without GDP per capita. The values of the significant results are roughly the same as in table 4. Thereby, the R-squared of the first regression is a bit higher, which increases the explanatory power of the regression. Because of the results in table 5, GDP per capita will be added to the regression as planned as table 5 gives us no reason to believe that GDP per capita might be the problem.

In table 6, we see besides the main regression also the regression with only the dependent variables (and control) and a regression over the time period from 2000 and 2017. The first regression is the same as the first regression in table 5 and is displayed to have a quick overview on the differences. For the main regression, all the variables are included and their moderators. The last regression in the table will be the regression between 2000 and 2017. In this regression, the participation rate will also be included but not the moderator of the participation rate. Regardless of standardization of the variables, the multicollinearity is still too high if the moderator is used. The independent variable does not have this problem, which is why it is included. On the next page, table 6 is been displayed with the regressions.

**Table 6 Main regressions**

	(1) Without interaction	(2) Main	(3) 2000-2017
KOF index	-0.392*** (0.121)	-0.302* (0.156)	-0.009 (0.292)
Social Spending	0.015 (0.093)	0.077 (0.089)	0.042 (0.153)
Unemployment Rate	-0.278* (0.158)	-0.518*** (0.182)	-0.333 (0.248)
Health Expenditure	1.445*** (0.322)	1.928*** (0.320)	2.737*** (0.608)
Labor Spending	0.408 (0.389)	0.110 (0.456)	-1.270 (1.171)
Pension System	-0.018 (0.029)	-0.027 (0.028)	-0.060 (0.043)
Gini top 1%	-0.392** (0.155)	-0.327** (0.155)	-0.029 (0.246)
GDP per capita (log)	25.884*** (4.655)	19.479*** (4.054)	19.376*** (6.426)
Participation Rate			-0.619 (0.590)
KOFSS		-0.470 (0.384)	0.132 (0.978)
KOFHUR		-1.317*** (0.393)	-3.067*** (0.908)
KOFHE		0.586 (0.399)	-0.762 (1.219)
KOFLS		0.961* (0.561)	3.295* (1.764)
KOPPEN		0.416 (0.380)	1.185 (0.752)

KOFGINI1		-0.482	-1.710**
		(0.319)	(0.813)
_cons	-81.309***	-63.874***	-94.467***
	(16.187)	(15.410)	(33.993)
Obs.	336	336	216
R-squared	0.251	0.426	0.638

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 6, we see the main regression displayed as well as the regression over the years 2000 to 2017. The main regression gives similar results as the previous regressions in table 4 and 5. The independent globalization variable is negative and significant just like the unemployment rate and the Gini-coefficient. Also, the Health expenditure is yet again positive significant and so is the GDP per capita. All with roughly the same coefficient as previous. For the moderators, we see highly significant result for the unemployment moderator, as it is minus 1.3 where it was before minus 0.6. In the main regression, we also see that the labor market spending moderator is significant. It has a positive effect on the effect of globalization on populism. Remarkable is the insignificance of the Gini moderator in the main regression. Where in previous regressions (table 4 regression 6) the moderator was positive, now it is negative. However, in the regression “2000-2017”, the same moderator is highly significant, indicating a negative effect on the globalization-populism relationship. Other remarkable things in the regression of “2000-2017”, are the insignificance of globalization and unemployment rate. These two variables were constant significant, but not for the last 18 years. This could indicate that the negative relationship was for the most part present in the ninetens, and not after 2000. We cannot speak of a positive relationship either, as both variables are insignificant.

#### 4.2 Robustness checks

In the upcoming tables you will find the results of all the additional regressions. These are all be done in order to check for different results if I would have chosen for a different method. In all the tables, the main regression is displayed as first to compare with the other regressions.

Table 7 contains four regressions besides the main regression. The first three regressions, the Gini-coefficient for the top ten percent, middle forty and the bottom fifty are included instead of the default option, the top one percent Gini-coefficient. The last regression will be the regression with the EPL instead of the variable “labor market spending”. EPL was excluded

due to the low variety in the data. Nevertheless, this regression should give us a view on how the results could have look liked if EPL was added to the regression.

**Table 7 Robustness check Inequality and EPL**

	(1) Main	(2) GINI10	(3) GINIM40	(4) GINIB50	(5) EPL
KOF index	-0.302* (0.156)	-0.292* (0.161)	-0.405** (0.166)	-0.323* (0.168)	-0.674*** (0.230)
Social Spending	0.077 (0.089)	0.032 (0.091)	0.051 (0.087)	-0.014 (0.092)	0.092 (0.091)
Unemployment Rate	-0.518*** (0.182)	-0.414** (0.189)	-0.488*** (0.184)	-0.390* (0.200)	-0.613*** (0.187)
Health Expenditure	1.928*** (0.320)	1.827*** (0.329)	1.752*** (0.332)	1.864*** (0.336)	2.087*** (0.360)
Labor Spending	0.110 (0.456)	0.111 (0.494)	0.172 (0.449)	0.372 (0.560)	
Pension System	-0.027 (0.028)	-0.021 (0.027)	-0.022 (0.028)	-0.030 (0.028)	-0.088** (0.037)
Gini coefficient	-0.327** (0.148)	-0.274** (0.124)	0.426** (0.194)	0.128 (0.209)	-0.310 (0.196)
Employment Protection Legislation					-1.350** (0.628)
KOFSS	-0.470 (0.384)	-0.625* (0.373)	-0.307 (0.380)	-0.484 (0.374)	-0.015 (0.492)
KOFHUR	-1.317*** (0.393)	-1.223*** (0.395)	-1.353*** (0.390)	-1.326*** (0.419)	-1.108*** (0.384)
KOFHE	0.586 (0.399)	0.549 (0.403)	0.224 (0.395)	0.445 (0.403)	0.421 (0.446)
KOFLS	0.961* (0.561)	0.985* (0.564)	0.874 (0.540)	1.095* (0.600)	
KOPPEN	0.416 (0.380)	0.407 (0.376)	0.487 (0.374)	0.459 (0.378)	-0.016 (0.499)
KOFGINI	-0.482 (0.319)	-0.369 (0.353)	0.757** (0.342)	-0.068 (0.392)	-0.472 (0.409)
GDP per capita (log)	19.479*** (4.054)	20.821*** (4.153)	22.685*** (4.630)	20.551*** (4.381)	28.339*** (6.384)
KOFEPL					0.154 (0.406)
_cons	-63.874*** (15.410)	-63.949*** (16.148)	-90.336*** (20.134)	-70.838*** (17.490)	-67.312*** (19.821)
Obs.	336	336	336	336	278
R-squared	0.426	0.392	0.406	0.285	0.416

Standard errors are in parenthesis  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 7, we see the results of the regressions and there is no major difference then with the regressions shown before. The most remarkable change is the Gini-coefficient for the middle forty percent of the population. It has a significant positive result, meaning that if inequality rise in the middle-income class, the support for populism grows. The moderator is also significant positive, unlike in all the other regressions where this moderator remains insignificant. The positive coefficient of the moderator means that inequality has a positive

influence on the relation between globalization and populism. A coefficient of 0.7 indicates that the effect of inequality is not big, but still significant. In the last regression of the table, we see the results of the EPL regression. The independent variable is negative with a coefficient of 1.3 saying that EPL has a direct negative effect on populism. The moderator of the moderator does not show any significant effect.

For table 8, there will be three regressions with the different globalization indexes (Economic, Social and Politic). The main regression with the overall globalization index will be shown in the first column.

**Table 8 Robustness check KOF index**

	(1) Main	(2) KOF Political	(3) KOF Economic	(4) KOF Social
KOF index	-0.302* (0.156)	-0.096 (0.066)	-0.114 (0.102)	-0.125 (0.156)
Social Spending	0.077 (0.089)	0.071 (0.088)	0.032 (0.091)	0.108 (0.095)
Unemployment Rate	-0.518*** (0.182)	-0.533*** (0.175)	-0.549*** (0.185)	-0.504*** (0.185)
Health Expenditure	1.928*** (0.320)	1.893*** (0.311)	1.707*** (0.297)	1.775*** (0.305)
Labor Spending	0.110 (0.456)	0.198 (0.441)	0.307 (0.478)	-0.018 (0.478)
Pension System	-0.027 (0.028)	-0.015 (0.026)	-0.020 (0.027)	-0.006 (0.026)
Gini top 1%	-0.327** (0.148)	-0.376** (0.150)	-0.292** (0.149)	-0.295** (0.148)
KOFSS	-0.470 (0.384)	-0.327 (0.359)	-0.416 (0.382)	-0.461 (0.392)
KOFHUR	-1.317*** (0.393)	-1.328*** (0.386)	-1.254*** (0.397)	-1.157*** (0.400)
KOFHE	0.586 (0.399)	0.606 (0.395)	0.834** (0.375)	0.890** (0.376)
KOFLS	0.961* (0.561)	1.070** (0.534)	1.059* (0.576)	0.902 (0.582)
KOPPEN	0.416 (0.380)	0.359 (0.368)	0.412 (0.379)	0.399 (0.383)
KOFGINI1	-0.482 (0.319)	-0.446 (0.330)	-0.613* (0.338)	-0.429 (0.321)
GDP per capita (log)	19.479*** (4.054)	14.076*** (3.476)	17.940*** (4.681)	17.146*** (4.842)
_cons	-63.874*** (15.410)	-56.321*** (17.230)	-71.364*** (15.871)	-68.947*** (15.551)
Obs.	336	336	336	336
R-squared	0.426	0.417	0.411	0.430

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 8, we see not much change in the outcome of the regression for each different KOF index. There are some changes in significance among the moderators, but no major changes

regarding the values. The moderator for health expenditure becomes significant in the economic and social KOF index regression (positive), the labor market moderator becomes insignificant in the social KOF index regression and the inequality moderator becomes significant for the economic KOF index. For the independent variables of KOF, we see that the significance turns into insignificance, in all three regressions. A possible explanation for the minor changes in the outcome of the regression, is the high correlation between the KOF index and the components of the index (as seen in appendix four). Values of the different KOF indexes are for the most part the same, what results in less fluctuation between the regressions.

In the last table, table 9, the regressions with the dummies will be shown. In the first regression, the regression with the North/South dummy will be shown and in the second the regression with the EU dummy. In addition to the two regression, there will be two more regressions wherein the dummy variable interacts with the independent variables, to see if some variables have more impact in one group than the other.

**Table 9 Robustness check Dummies**

	(1) Main	(2) Dummy North	(3) Dummy EU	(4) Interaction Dummy North	(5) Interaction Dummy EU
KOF index	-0.302* (0.156)	-0.336** (0.171)	-0.186 (0.160)	-0.184 (0.219)	-0.757 (0.677)
Social Spending	0.077 (0.089)	0.070 (0.091)	0.039 (0.088)	-0.030 (0.187)	0.266 (0.250)
Unemployment Rate	-0.518*** (0.182)	-0.613*** (0.202)	-0.484*** (0.182)	-0.724*** (0.256)	-0.614 (0.575)
Health Expenditure	1.928*** (0.320)	1.824*** (0.339)	1.861*** (0.317)	1.766*** (0.452)	-0.463 (1.320)
Labor Spending	0.110 (0.456)	0.577 (0.585)	0.119 (0.452)	0.326 (0.465)	-0.222 (1.949)
Pension System	-0.027 (0.028)	-0.034 (0.028)	-0.025 (0.027)	-0.003 (0.031)	0.073 (0.131)
Gini top 1%	-0.327** (0.148)	-0.415*** (0.157)	-0.287* (0.147)	-0.107 (0.171)	-0.543 (0.742)
KOFSS	-0.470 (0.384)	-0.257 (0.413)	-0.392 (0.380)	-0.297 (0.412)	-0.034 (0.426)
KOFHUR	-1.317*** (0.393)	-1.427*** (0.405)	-1.285*** (0.391)	-0.755** (0.366)	-1.597*** (0.412)
KOFHE	0.586 (0.399)	0.395 (0.397)	0.597 (0.397)	0.357 (0.428)	0.435 (0.399)
KOFLS	0.961* (0.561)	0.994* (0.600)	1.072* (0.558)	0.568 (0.535)	0.805 (0.637)
KOPPEN	0.416 (0.380)	0.369 (0.396)	0.339 (0.375)	0.596 (0.385)	0.551 (0.367)
KOFGINI1	-0.482 (0.319)	-0.400 (0.353)	-0.660** (0.321)	-0.389 (0.342)	-1.255*** (0.413)
GDP per capita (log)	19.479*** (4.054)	22.855*** (4.799)	17.957*** (3.918)	7.235* (4.219)	25.181 (20.099)

Dummy North		-3.338**		-168.411***	
		(1.691)		(36.330)	
Dummy EU			-2.975**		-31.718
			(1.489)		(65.630)
KOF index X Dummy				-0.632**	0.574
				(0.312)	(0.702)
Social Spending X Dummy				0.208	-0.252
				(0.224)	(0.266)
Unemployment Rate X Dummy				-1.879***	2.411*
				(0.671)	(1.360)
Health Expenditure X Dummy				0.055	0.136
				(0.341)	(0.571)
Labor Spending X Dummy				-1.002	0.420
				(1.464)	(2.004)
Pension System X Dummy				-0.076	-0.115
				(0.056)	(0.134)
Gini top 1% X Dummy				-0.695**	0.386
				(0.299)	(0.756)
GDP per capita (log) X Dummy				53.205***	-7.273
				(10.314)	(20.483)
_cons	-63.874***	-72.295***	-63.425***	-19.959	-36.018
	(15.410)	(17.385)	(14.985)	(21.385)	(63.192)
Obs.	336	336	336	336	336
R-squared	0.426	0.393	0.455	0.465	0.530

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Standard errors are in parenthesis  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

In table 9, we see the results of the regressions with the dummies. In the first two dummy regressions, we see the dummy for North and the EU. The first regression shows us that Northern countries have less populism than Southern countries, indicated by the -3.3 coefficient for the North dummy which is also significant. For the EU dummy, we see that if you are an EU member state, you have less populism as a non-EU member.

In the fourth and fifth regression, we see more interesting developments. In the regression with the dummy for North, we see that globalization becomes insignificant, while the interaction variable with the dummy is significant. This means that globalization does have a negative effect on populism in the Northern countries, but not in Southern countries. The regression also shows us that in Northern countries unemployment has a strong negative relation with populism and that inequality is also negative correlated. As last, and maybe the most interesting outcome of the fourth regression, is the rise of GDP per capita if the dummy variable is added to the regression. The interaction variable with the dummy shows a highly significant outcome of 0.53, and together with the independent variable of GDP per capita, populism grows with 0.6 if GDP per capita increase with one percent in Northern countries. The same variable was in previous regressions almost all the time between 0.25 and 0.3. In

the last regression, regression number five, we see almost no significant result. For the dummy interaction variable with unemployment, we see a positive relationship. This means that if you are an EU member, the unemployment has a positive effect on populism as the independent variable plus the interaction variable is still positive. Remarkable for this regression is the insignificance of the GDP per capita variable. For the first time in all the regressions, this variable is not significant.

## 5 Discussion

In this section, there will be a discussion on the results of the regressions and on the method used in this paper to get these results. First, the variables will be discussed on their validity. Do they do their job in capturing that, what they are supposed to do? As second, the results will be discussed after which the hypotheses will either be accepted or rejected. As third, the regressions and the tests will be discussed.

### 5.1 Validity of the variables

The validity is to which extent the variables that are used for the regression, capture that what you want to measure and in what degree the results of these variables are generalizable. The first couple of variables have a high validity. The share of populism captures the power of populism ( note: it is about actual power, not the support), social spending is recorded by every country for at least the last thirty years and captures all the social spending of governments, the KOF index for globalization and the harmonized unemployment rate as well. All variables are able to present that what is needed to capture, so this is good. The KOF index has even multiple dimensions, which are also included in this paper by three different regressions ( see table eight for these regressions)

For the inequality variable, there are several different measurements. As said before, the Palma ratio, Gini-coefficient and the Theil index are all well-known measurements for income inequality, but I have chosen for the Gini-coefficient. This is simply because it is the most commonly used in papers and research. Thereby, it has several different options, as it shows not only the top ten percent income inequality, but also the top one, top ten, middle forty and bottom fifty percent of the population. As regards the internal validity of the variable, it measures the inequality in a country as good as possible. It calculates the difference in the income between groups directly, so the Gini-coefficient does provide us with a good representation for the income inequality in a country.

The variable for the pension system has a low validity, but there was no better variable available. The variable that is used measures the expenditure by the government per pensioner divided by the average income. This captures the loss in income when a person retires, but it has some flaws. First of all, it is not precise. The average income of a country is not the average income of a 65-year-old person that works. Also, the private savings of elderly people are not included in the variable. Even more, this variable only captures the expenditure, but it does not say anything about the quality of the pension system, only how expensive it is. Aspects as retirement ages, quality of the retirement homes and other things that are all part of the pension system are not included within this variable. Therefore, the validity of this variable is very low, and the result should be treated with caution.

The variable health expenditure is also not the most desired indicator for the healthcare system. The benefit of this indicator is that the expenditure of government AND consumers are being captured, so the range is much wider than only the government itself. However, it does not capture the quality of the healthcare. Things like how good the education of the employees is, quality of the care and other important aspects that cannot be expressed in money are not included by this variable. Still, the validity of the variable is good, but it could be better. Especially the external validity, which is bad due to the many aspects of healthcare that cannot be captured in money.

The next variable in the regression is the participation rate of immigrants. This indicator measures the participation, so the employed people and others who contributes to society. This variable succeeds for the most part in capturing the integration of immigrants in the labor market, but it also has it flaws. It measures the percentages of all legal immigrants, but there is also a number of illegal immigrants who are not taken into account. Also, it does not specify the quality of work or the level of education needed for that work, aspects that could have led to a different outcome in the regression. This paper however, does not focus on these questions but rather on the participation of immigrants as a whole. Therefore, the variable captures what it is supposed to capture which make the validity decent to good.

The last variable is EPL, with the indicator labor market spending. As argued, the EPL was the desired variable but it does not fit in the regression as it has no to little fluctuation over time. Labor market spending is not the same as EPL, but it focused on the same aspect of the labor market, preserving job opportunity and protection. Although it does not capture any legal issue, it is the best alternative to EPL. With that, the external validity is good but the internal validity not really.

## 5.2 Results and hypothesis

In this section, the results of the regressions will be discussed.

Starting with the main regression, we see some interesting results. The globalization variable is for example negative, which is not what was expected. In the literature, globalization is proven to have a positive relationship with populism. This begs the question why do the regressions show a negative relation? Besides the main regression, almost all regressions show a negative relationship between globalization and populism, except for the regression without GDP per capita and moderators. GDP per capita and globalization do have a strong correlation between each other, but as seen in table 5, this does not alter the regression that much. However, if we run the globalization variable on his own against populism, we see suddenly that the coefficient becomes significantly positive (see table 12, appendix 5). This means that globalization, given *ceteris paribus*, does have a positive effect on globalization as expected. In all other situations, globalization tends to have a negative effect on populism.

The next remarkable thing, what also go against the literature, is the significant negative relation between unemployment and populism. Although it is a small relationship, it is highly significant. This relation can be found in almost every regression where at least one moderator is added, except for the regression with the participation rate in it, which is the regression “2000-2017” (table 6, regression 3). Does this mean that the negative relation is mostly present in the ninetees? In appendix 5, table 11, this is tested. We see clearly that this is not the case, in the contrary, unemployment is not significant at all in the ninetees while it is significant negative in the “2000-2017” regression. The reason for the different outcome in the two “2000-2017” regressions, is the inclusion of the participation rate variable. If we compare the VIF test for multicollinearity (see appendix 3 and 5), we see that if the variable for the participation rate is added, the multicollinearity goes up. This explains the big difference in the outcome. That the unemployment rate is negatively correlated with populism, backs up the results found in the research of Stoyanova (Stoyanova, 2016). In her research, she also found a negative relation between unemployment and populism. She used a dataset for almost the same countries, but over a time period of 1981 to 1998. This indicates that the negative relation between unemployment and populism is not only present in the 21<sup>st</sup> century, but also in the decades before that. Therefore, based on this research and the research by Stoyanova, we can conclude that unemployment does have a negative relationship with populism.

For the indirect effect of unemployment, we look at the moderating variable of unemployment. This variable shows a strong negative relation on the globalization/populism relationship. This is again not what was expected, but every regression with this moderator shows the same relation so there is no reason to assume otherwise. The last remarkable result regarding unemployment, is the interaction with the EU dummy variable in the last regression in table 9. This shows all of a sudden a positive relationship with populism, indicating that EU membership-states see a rise in populism if the unemployment goes up. Possible explaining for this is that the regression has some issues. It shows less significant results for other variables and the values of some of the coefficients are also changes a lot. This makes me believe that the regression is in some way not valid, so the outcome should be taken with caution.

Just like Stoyanova, the unemployment rate shows a negative relationship. However, she did not provide us with a possible explanation for this outcome. A possible explanation could be that the lower unemployment leads to a higher GDP per capita, which has a positive relation on populism. If more people work, GDP per capita would be likely to grow, which stimulates populism, as seen in the regression. GDP per capita is in almost all regressions highly significant with a coefficient of 25. Because GDP per capita is taken into the regression as a log value, one percent increase of GDP per capita results in a change in populism of  $\beta/100$  units of populism, so 25/100 percent increase in the share of votes for populism. This coefficient of GDP per capita is consistent overall, except for the interaction with the North dummy variable. Here it shows a  $\beta$  of 50, indicating that GDP per capita is more effective in North European countries. In the same regression, the values and significance of the unemployment variable are higher than usual, supporting the idea that lower unemployment results in higher populism through a rise in GDP per capita. This paper however, is limited by the data which limits the ability to further investigate this idea, so maybe this is something for future research to investigate.

For the health expenditure variable, we see a positive relationship with populism for the independent variable and no significant result for the moderator. In the main regression, health expenditure has a value of almost 2 and this is consistent over all the regressions, what makes the outcome reliable. Due to the lack of previous research on this relation, the outcome cannot be compared with others, so the explanation for this relation could be anything. Intuitive, if health expenditure rises, the costs for care becomes more expensive what could lead to dissatisfaction by the population. In social welfare countries, the cost of health is

usually already high, which means that an additional one percent increase is a big investment. People with less money to spend are not able to afford these extra costs and are therefore more willing to vote for populism. This also supports the idea that populism is for the average man and that people with a lower income are more vulnerable for populism (Inglehart & Norris, 2016), as they are the most affected by this price increase. This idea could also explain why the moderator does not give a significant result, as globalization does not directly lead to higher health expenditure.

The last significant result for the independent variables in the regression, is the inequality variable. It shows a small negative coefficient, which means that if inequality rises for the top 1%, populism goes down. If we look at other regressions, we see similar results. This outcome is not as expected, but it makes sense as the top one percent does not usually vote for populism, as argued in the literature (Müller, 2016). Populism mainly focus on the working class, the average citizen. If we look at the regression where the inequality for the middle 40% is taken into the regression (table 7, column 3), we see indeed a positive relation between inequality and populism. This supports the idea of the literature that the average citizen move to populism as the inequality rises. In the same regression, the moderator for inequality and globalization is significant, meaning that a rise in inequality positively influence the relation between globalization and populism. If globalization rise, inequality causes an extra boost for populism. If we look further, we see in the same table that the coefficient for inequality is also positive for the bottom 50% of the population, but this relationship is not significant. We cannot conclude that if the inequality rises in the bottom part of society, populism rises, but it does not show a negative relationship as in the top 1% and the top 10%. In hindsight, it can be argued that the Gini-coefficient for the middle 40% is a better indicator for income inequality, but that is why the robustness checks are done.

The last significant result in the main regression is the moderator for the labor market spending, meaning that labor market spending has a positive effect on the globalization/populism relation. The independent variable of labor market spending itself is not significant, meaning that it does not directly affect populism, but only if globalization rises. Remarkable is that the robustness check for labor market spending, the EPL variable, is significant in the EPL regression (table 7, column 5). The independent variable shows a big negative relation between employment protection and populism. This is expected, as literature shows us that job insecurity has a positive effect on populism. Therefore, high EPL means a higher job security and less reasons to shift to populism.

The two variables that are insignificant, are social spending and the pension system. Social spending is in almost every regression insignificant, meaning that there is no effect on populism at all. Only in the regression between 1990-1999, we see a positive significant result( appendix 5, table 11). These results are in line with previous results (Milner, 2018), but are against the expectations of the literature. Milner argued in her paper that the idea that social spending fight against populism, is no longer valid in these days. Social spending is gone up too much to have a significant outcome. In her research, the moderator of social spending is significant while in this paper, it is not. This could be explained by the fact that she uses data from 1960 to 2016, while this paper only has data starting in 1990. The idea that social spending has lost his power in the last couple of decades, supports this finding.

For the pension system variable, we only see a small significant result in the regression with the EPL( table 7, column 5). In any other regression, there is no significant result. The problems with the measurement of this variable could be an explanation of why there is no relation found, but this cannot be said for sure. Until there is a better way of capturing the pension system, no decisive conclusion can be stated whether or not the quality of the pension system has an effect on populism. Same goes for the moderator, which does not give any significant results at all. For now, I have to conclude that there is no effect between the pension system and populism and that the pension system does not have any effect on the relation between globalization and populism.

The last variable that is tested, and not included in the main regression, is the participation rate. Table 4, column 7, we see the regression of the participation rate with his moderator. The reasons for not including this variable in the main regression was due to the missing data between 1990 and 2007 and the multicollinearity of the variable, which made the outcome of the regression change significantly as seen in the two “2000-2007” regressions. The outcome of the regression of the participation rates, is insignificant. The independent variable and the moderator do not show any significance. This result is not what was expected, based on the literature, but it is only one regression based on 18 years of data with a limited amount of countries. More data and research are required in order to have a final answer.

If we look at the hypotheses, most of them have to be rejected. The first hypothesis about social spending can be rejected. This paper does not find any significant results that supports the idea that social spending has any influence on the relation between globalization and populism. The second hypothesis about income inequality can be partly accepted. The regression shows that for the target group of populism (the middle 40%), inequality has a

direct, positive effect on populism. Therefore, this hypothesis will be accepted. The third hypothesis will be rejected. The results of this paper show no positive relation between unemployment on populism, but rather a negative relationship. Especially in the 21<sup>st</sup> century, this relationship is highly significant.

Hypothesis four can also be reject. There is no indication that the quality of the pension system has any effect on the relationship between globalization and populism. Same goes for health expenditure, as it has a direct positive effect on populism but it does not contribute to the relation between globalization and populism, which is the political backlash created by the expansion of globalization. Hypothesis six will also be rejected, as integration of immigrants is not proven to have any effect on the relation between globalization and populism. For the last hypothesis, we see a positive effect of the labor market spending on the relation between globalization and populism in the regressions, so this hypothesis has to be rejected. EPL does have a direct negative effect on populism, but it does not show any sign that it prevents the political backlash, created by globalization.

### 5.3 The regression

The regression itself had several problems, but thanks to multiple tests and the necessary adjustments, the outcome of the regression is now reliable. As discussed in appendix 3, the data is autocorrelated and is heteroskedastic. This can be solved by using the correct command in Stata, compensating for these effects. Additional problems with the dataset came with the creation of the interaction variables, which caused high multicollinearity for the regressions including the moderators. The solution to this was standardizing the moderators. The results of this process can also be found in appendix 3. Multicollinearity went down to an acceptable level and is no longer a problem for the regressions. The only problem with multicollinearity that could not be fixed with standardizing the variables, was with the variable for the participation rate. Therefore, I decided to exclude this variable from the regression and only regress them without the other moderators. The result of this regression can be found in table 4, column 7.

Another point of discussion for the regression, is the removal of Switzerland, Italy and Greece from the regression. This is done because they had to many structural missing values in the dataset. E.g. Switzerland had no data up to 2010 for the unemployment rate variable and Greece and Italy both lacked a lot of datapoints for labor market spending and unemployment

rate. Other variables have also some missing values, but nothing major nor structural. The consistence of the lack of data by these three countries made me believe that this cannot be fixed by filling up the missing values with the mean value, leaving me the option left with the exclusion of all three countries. Total amount of observations decreased therefore from 420 to 336, but this should still be sufficient to have reliable results on which I can base my hypotheses. Only downside to this is decline in the external validity of my research, as it now only covers 12 countries instead of 15.

With the exclusion of Switzerland, a non-EU member state is taken out of the regression, which could explain the weird results for the interaction dummy as only Norway is left as a non-EU member state(table 9, regression 5). The outcome of this regression is hard to believe, as out of the blue, a lot of variables changed drastically in significance or coefficient. It is even weirder if we look at regression with the interaction term with the independent variables and the dummy for the Northern countries. This regression does not show any irregularity, which makes me believe that the problem lies within the EU-dummy. Therefore, the outcome of this regression should be taken carefully and not too heavily, as the regression is probably not reliable.

Regarding the scope of this regression and study, this study is just unable to encompass the entire scope of the welfare state into one regression. For the components that are tested, this study gives for the most part a good overview, although the available data limits the validity of the outcome. As argued, some variables do not have the proper data measurements required in order to have a good and reliable outcome on which the conclusion can be based. The lack of availability of these types of variables are pressing on the value of the outcome of this study. Good example is the quality of the pension system. There is a great variable available, namely the “gross pension replacement rates” provided by the OECD, but this only contains data for two years. This problem does not only occur with this variable, but for more variables the right proxy is not available, or the proxy is available, but there is not enough data, forcing me to a less desired method of measurement. Therefore, if in the future better measurements becomes available, a rework of this study will be encouraged by me.

## 6 Conclusion

This study has looked at how the social welfare state and their components hold back the political backlash of globalization. The political backlash comes in the form of populism, which is nowadays more and more relevant as globalization goes further and further.

In the literature study, it is discussed that globalization has several problems, regarding wage, inequality, integration and the environment. These problems are usually the result of institutional changes, after which people leave traditional parties for more populist parties. An explanation for this effect is given by Rodrik in his book “the Globalization Paradox” (Rodrik, 2012). He discusses that globalization comes with a paradox. If you want further globalization, you have to change your institutions. The result of this change is the political backlash. The political backlash, according to Rodrik, is the rise in populism. Several papers show us that this is not desirable, as populism is a threat to the democracy in developed countries. As an answer to the political backlash, the idea of the social welfare state has emerged. In previous papers, social welfare is tested as a remedy against the political backlash (Milner, 2018). This paper also focused on this matter, but where Milner and others stopped at the social welfare state, is this paper focusing on some of their components. Through several aspects of the welfare state, this paper tried to answer the research question: How can the social welfare state stop the rise of populism, created by the political backlash of globalization?

The aim for this paper is to see which components of the social welfare state affects the political backlash. In order to do so, moderators are included in the regression which would give the answer to the research question. The results of the empirical analysis were diverse, where most of the hypotheses of this research were rejected. One of the more interesting results of this study, is the negative relation between unemployment and populism, which goes against already existing literature. Especially in the last two decades, this direct relationship between unemployment and populism is highly significant. Thereby, unemployment also tempers the political backlash as globalization further expands. Another important result in this research is the strong relation between GDP per capita and populism. Although this is a direct effect and is not a part of the social welfare state, it still indicates that populism is directly linked to the wealth of the population.

This research also further contributes to the idea that inequality has a positive effect on populism, but only if the income inequality rises in the middle segment of society. An

increase in income inequality in the same group also amplifies the effect of the political backlash, what makes it important to fight income inequality for this group. For the components of the welfare state, most of them do not have any effect on the political backlash. Only labor market spending tends to have a small amplifying effect on the political backlash. Therefore, based on this study, recommendation for policy makers is for them to focus on fighting income inequality in the middle segment of society, as this is the most effective way to fight back the political backlash.

For future research, I would like to see similar research on this matter but in more detail and maybe with other indicators. As discussed, the validity of some variables is not up to the standard as they have a lack on internal or external validity. If better proxies for the components become available for the study, it is highly recommended to do this research again and see if the results are the same. Now, this research is limited by the availability of the right data.

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## 8 Appendix

### 8.1 Appendix 1

The list of populist parties used in the variable Pop (Milner, 2018).

Country	Party abbreviation	Full name
Austria	FPO	Freedom Party of Austria
Austria	TS	Team Stronach for Austria
Austria	BZO	Alliance for the Future of Austria
Belgium	VU	Flemish Concentration
Belgium	PP	People's Party
Belgium	FN	National Front
Belgium	LDLDD	List Dedecker/ Libertarian, Direct, Democratic
Belgium	VB	Flemish Block
Denmark	DF	Danish Peoples Party
Denmark	FrP	Progress Party
Finland	SP P	Finnish Party/ True Finns
Finland	IK	Isnmaallinen Kansanliike
France	FN	National Front
France	MPF	Movement for France
France	PRG	Radical Party of the Left
France	MNR	National Republican Movement
Germany	AfD	Alternative for Germany
Germany	WAV	Economic Reconstruction League
Germany	NPD	National Democratic Party
Germany	Rep	The Republicans
Germany	DP	German Party
Germany	DVU	German People's Union
Greece	POLAN	Political Spring
Greece	LSCA	Peoples Association / Golden Dawn
Greece	EDE	National Democratic Union
Greece	EPEN	National Political Union
Greece	EP	National Alignment

Greece	ANEL	Independent Greeks
Greece	LAOS	Popular Orthodox Rally
Italy	LL	Lombard League
Italy	LV	Venetian League
Italy	AN	National Alliance
Italy	LN	North League
Italy	MSFT	Fiamma Tricolore
Italy	FdICN	Brothers of Italy – National Centre-right
Italy	MSI	Italian Social Movement
Italy	MS	Five Star Movement
Italy	ASM	Social Alternative Mussolini
Luxembourg	ARADR	Action Committee Pensions/ Alternative Democratic Reform Party
Luxembourg	NB	National Movement
Netherlands	CD	Centre Democrats
Netherlands	CP	Centre Party
Netherlands	PVV	Party for Freedom
Netherlands	SP	Socialist Party
Netherlands	LN	Livable Netherlands
Netherlands	LPF	Fortuyn List
Norway	FrP	Progress Party
Portugal	PDC	Christian Democratic Party
Portugal	CDSPP	Democratic and Social Center – People’s Party
Portugal	FSP	People’s Socialist Front
Sweden	NyD	New Democracy
Sweden	SD	Sweden Democrats
Switzerland	SVPUDC	Swiss People’s Party
Switzerland	MCG	Geneva Citizens’ Movement
Switzerland	APFS	Automobile Party/ Freedom Party of Switzerland
Switzerland	NASD	National Action against Foreign Domination Swiss Democrats

Switzerland	LdTI	Ticino League
Switzerland	RB	Swiss Republican Movement
United Kingdom	NF	National Front
United Kingdom	DUP	Democratic Unionist Party
United Kingdom	ED	English Democrats
United Kingdom	UKIP	United Kingdom Independence Party
United Kingdom	BNP	British National Party

## 8.2 Appendix 2

### Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Populism	1.000									
(2) KOF index	0.298* 0.000	1.000								
(3) Social Spending	0.221* 0.000	0.430* 0.000	1.000							
(4) Harmonized Unemployment rate	-0.187* 0.000	-0.315* 0.000	-0.246* 0.000	1.000						
(5) Health Expenditure	0.425* 0.000	0.529* 0.000	0.344* 0.000	0.013 0.786	1.000					
(6) Participation Rate	0.121* 0.013	-0.161* 0.001	-0.057 0.240	-0.053 0.280	0.031 0.527	1.000				
(7) Labor market Spending	-0.131* 0.007	0.153* 0.002	0.123* 0.012	0.093 0.056	0.136* 0.005	-0.434* 0.000	1.000			
(8) Pension compensation rate	0.166* 0.001	0.108* 0.027	0.026 0.592	0.091 0.062	0.145* 0.003	0.102* 0.037	-0.152* 0.002	1.000		
(9) Gini coefficient~1%	-0.127* 0.009	0.090 0.066	0.097* 0.047	-0.074 0.130	-0.072 0.139	0.308* 0.000	-0.439* 0.000	0.261* 0.000	1.000	
(10) GDP per capita ~)	0.376* 0.000	0.716* 0.000	0.387* 0.000	-0.376* 0.000	0.351* 0.000	0.111* 0.023	-0.217* 0.000	0.518* 0.000	0.324* 0.000	1.000

\* shows significance at the .05 level

### 8.3 Appendix 3

In this appendix, the several tests will be presented and discussed.

#### **Hausman (1978) specification test**

	Coef.
Chi-square test value	11.419
P-value	.248

To begin with the Hausman test, which let us know what model to use. With a P-value of 0.248, we cannot reject the null-hypothesis, so we have to use the Random Effect model.

#### **Breusch-Pagan / Cook-Weisberg test for heteroskedasticity**

Ho: Constant variance

Variables: fitted values of logPOP

chi2(1) = 12.89

Prob > chi2 = 0.0003

#### **Wooldridge test for autocorrelation in panel data**

H0: no first-order autocorrelation

F( 1, 11) = 58.537

Prob > F = 0.0000

We see here the Breusch-Pagan/Cook-Weisberg test for heteroskedasticity and the Wooldridge test, which are both highly significant. This indicates that the data set contains variables with heteroskedasticity and autocorrelation. This brings several problems, but it is easy to solve to include lagged variables (AR). This is done by using the command `-xtregar-` or `-xtreg- + -vce(robust)-`, so you have robust variance. The robust variance problem is already compensated in the `-xtregar-` command, so `-vce(robust)-` is not necessary. In the case of this dataset, where the N (amount of countries) is smaller as T (amount of Years), the command `-xtregar-` is preferred. However, we also have to deal with cross-section correlation between panels, as seen in the test below in table 10. In this case, we have to choose between the `-xtgls-` command (generalized least squared) or the `-xtpcse-` (panel-corrected standard error). According to Beck and Katz, the `-xtpcse-` regression is preferred as we have a small data set, with  $T > N$  what would result in less optimistic outcome of the regression (Beck & Katz, 1995). Several options will be added to take the heteroskedasticity and autocorrelation into account.

**Table 10 cross sectional correlation test**

Panelvar: country2

Timevar: Year

Variable	CD-test	p-value	average joint T	mean ρ	mean abs(ρ)
POP	9.118	0.000	28.00	0.18	0.42
KOF	49.116	0.000	28.00	0.97	0.97
SS	17.075	0.000	28.00	0.34	0.56
HUR	9.549	0.000	28.00	0.19	0.33
HE	39.667	0.000	28.00	0.79	0.79
LS	9.763	0.000	28.00	0.19	0.51
PEN	44.416	0.000	28.00	0.88	0.88
GINI1	21.726	0.000	28.00	0.43	0.48

Notes: Under the null hypothesis of cross-section independence,  $CD \sim N(0,1)$   
P-values close to zero indicate data are correlated across panel groups.

The last test we see is the VIF test. it indicates how much influence each variable has on the other independent variables in the model. Values between 6 and 10 are problematic and every value below 4 is considered good. Between 4 and 6 is disputable but not bad and can be worked with.

**Variance inflation factor test before standardization**

	VIF	1/VIF
LS	1140.491	.001
KOFLS	1126.245	.001
KOFHE	1100.674	.001
KOPEN	943.154	.001
PEN	909.652	.001
HUR	833.201	.001
KOFHUR	821.494	.001
HE	810.75	.001
KOFSS	664.188	.002
KOFGINI1	574.308	.002
GINI1	543.384	.002
SS	520.074	.002
KOF	69.501	.014
LGDPcap	5.217	.192
Mean VIF	718.809	.

In the first VIF test we see that the VIF for most variables are extremely high, indicating that there is multicollinearity between the independent variables and moderators. This is due to the presences of the interaction variables. The easiest way to get rid of this, is by standardizing the independent variables. This means that the means are subtracted from the observations, and that the new values are being divided by the standard deviation of the variable. The result

is that all variables are measured at the same level and you can compare the results with each other. A big note for the interpretation of the coefficients is that the coefficients indicates the strength of the relationship, not the coefficient of the variable itself! This is only the case for the moderators, as the independent variables are not standardized.

**Variance inflation factor after standardization**

	VIF	1/VIF
LGDPcap	5.217	.192
KOF	4.211	.237
KOFLS	3.614	.277
PEN	3.132	.319
KOFHE	2.886	.346
KOFSS	2.841	.352
KOFHUR	2.494	.401
HUR	2.134	.469
LS	2.106	.475
HE	1.841	.543
KOFGINI1	1.811	.552
GINI1	1.786	.56
SS	1.749	.572
KOPPEN	1.454	.688

## 8.4 Appendix 4

### Correlation of the KOF indexes

	KOF	KOFE	KOFP	KOFS
KOF	1.0000			
KOFE	0.7100	1.0000		
KOFP	0.5283	-0.0995	1.0000	
KOFS	0.7760	0.5905	0.0478	1.0000

## 8.5 Appendix 5

This appendix serves to give additional statistical explanation for in the discussion sector. These are not included in the results.

**Table 11 Regressions 1990-1999 and 2000-2017**

	(1) 1990-1999	(2) 2000-2017
KOF index	-0.335** (0.155)	-0.132 (0.274)
Social Spending	0.426*** (0.094)	0.049 (0.113)
Unemployment Rate	-0.149 (0.156)	-0.959*** (0.282)
Health Expenditure	3.955*** (0.399)	2.362*** (0.425)
Labor Spending	-1.740*** (0.329)	0.537 (0.648)
Pension System	0.072* (0.044)	-0.039 (0.042)
Gini top 1%	-0.144 (0.245)	-0.365* (0.187)
KOFSS	-0.109 (0.537)	-0.020 (0.495)
KOFHUR	-0.691 (0.574)	-1.432*** (0.442)
KOFHE	0.636 (0.497)	-0.383 (0.604)
KOFLS	-0.418 (0.734)	1.298** (0.659)
KOPEN	0.886* (0.509)	0.777* (0.471)
KOFGINI1	-1.135** (0.502)	-0.920** (0.401)
GDP per capita (log)	10.971 (6.936)	19.459*** (6.770)
_cons	-46.608* (24.715)	-78.536*** (30.055)
Obs.	110	216
R-squared	0.779	0.657

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table 12 regression with only one independent variable**

	(1) Globalization	(2) Social Spending	(3) Unemploy- ment rate	(4) Health Expenditure	(5) Labor Market Spending	(6) Pension System	(7) Inequality	(8) GDP per capita
KOF index	0.219** (0.100)							
Social Spending		0.085 (0.093)						
Unemployment Rate			-0.150 (0.157)					
Health Expenditure				1.094*** (0.342)				
Labor Spending					-0.267 (0.489)			
Pension System						0.006 (0.028)		
Gini top 1%							-0.221 (0.147)	
GDP per capita (log)								18.740*** (4.604)
_cons	-7.530 (7.680)	8.656*** (2.572)	10.970*** (1.887)	1.290 (3.198)	10.731*** (1.678)	9.628*** (1.711)	11.659*** (2.182)	-72.623*** (20.251)
Obs.	336	336	336	336	336	336	336	336
R-squared	0.071	0.018	0.021	0.085	0.022	0.044	0.022	0.115

Standard errors are in parenthesis

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Variance inflation factor with PAR**

	VIF	1/VIF
LS	7.909	.126
KOFLS	7.802	.128
KOFGINI1	7.003	.143
KOFHE	6.839	.146
GINI1	5.827	.172
KOF	4.764	.21
HE	4.573	.219
PEN	3.88	.258
KOFPEN	3.661	.273
SS	3.4	.294
HUR	3.2	.313
KOFSS	2.541	.394
PAR	2.471	.405
KOFHUR	2.409	.415
Mean VIF	4.734	.

## 8.6 Appendix 6

**Table 13 Descriptive table moderators**

Variable	Obs	Mean	Std.Dev.	Min	Max
KOFSS	336	.41	1.32	-2.71	12.18
KOFHUR	332	-.07	.98	-5.22	4.45
KOFHE	335	.5	1.09	-1.22	10.03
KOFLS	320	.01	1.05	-4.68	7.2
KOPPEN	306	.17	.72	-1.79	3.08
KOFGINI1	336	.02	1.05	-4.44	6.84