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# Is Economic Alienation Driving Populist Movements?

A Regional Analysis

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#### Abstract:

Right-wing populist movements have seen considerable growth across Europe during the last few decades. This growth has been attributed both to increasing immigration and economic disenfranchisement. We test the hypothesis that economic alienation drives populist support using a regional dataset covering twelve elections in four European countries and testing the effect of regional economic factors and the regional business sector structure, controlling for immigration and demographic factors, finding some support for this theory. Our results indicate that populist support is higher in regions that are economically disadvantaged and where the proportion of workers employed in manufacturing is high. We find that the effect of immigration on the populist vote share is diminished in regions with less manufacturing. We also find some support for the theory that the growth of populist support is driven by longer-term changes. However, some of our results are inconclusive and would require further testing.

Keywords: right-wing populism, immigration, globalisation, political economics JEL: D72, P16, Z13

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1. Introduction	2
2. Theoretical background and literature review	3
2.1 The nature of populism	3
2.2 The relationship between economics and populism	5
2.3 Empirical overview	7
3. Our contribution to the literature	9
4. Empirical approach and data	10
4.1. Sample selection	11
4.2 Data	11
4.2.1 Dependent variable	11
4.2.2 Independent variables	12
4.3 Regression specification	14
4.4 Model assumptions	15
5. Results	16
5.1 Base model	16
5.2 Interaction terms	19
5.2.1 Immigration	19
5.2.2 Business sector structure	20
6. Discussion	21
6.1 Regional economic factors	21
6.2 Regional business factors	21
6.3 Immigration	23
6.4 Summary of findings	24
6.5 Limitations	25
6.6 Conclusion	26
7. References	27
7.1 Academic References	27
7.2 Datasets	28
Appendix I: Variable Descriptions and Definitions	31
Appendix II: Variable Summary Statistics	32

# 1. Introduction

During the last decade, right-wing populist (RWP) parties have seen rising support throughout Europe and the Western world, finding electoral success in many countries. Recent electoral triumphs, including the UK referendum in favour of leaving the European Union and United States presidential election in 2016 have spurred significant discussion regarding the causes of RWP support.

RWP parties typically have strong anti-immigration attitudes and position themselves as an antiestablishment option for voters. They play on a perceived divide between "the people" and "the elite", branding themselves as representatives of the common man's interests, in contrast to those of the ruling political class. They also tend to portray social structures as being in disarray, focusing on crime and poorly functioning public sector institutions, often, but not always, in rural areas. Again, populist parties usually blame either immigration, the political elite, or both for these problems.

The reasons for this surging support for RWP parties is a frequently debated topic within both public discourse as well as the academic literature. High levels of immigration, both through asylum and labour migration, is one commonly used explanation, either due to xenophobic attitudes prompting voters to elect anti-immigration parties, or an increased burden put on the public sector, or due to an influx of low-skilled workers worsening the economic outlook of certain demographic groups.

The lack of economic opportunities for some demographics is also frequently attributed to increased globalization and trade. The Stolper-Samuelson theorem famously predicts that lower-skilled workers in developed economies will be disadvantaged by trade with less developed countries with cheaper labour. It is often theorised that RWP parties largely draw their support from those manufacturing sector employees who saw their jobs offshored to Asia following the industrialization and increased trade with the region, which closely maps onto the Stolper-Samuelson theorem.

Lack of economic opportunity more generally, as well as increasing economic inequality, are other frequently used explanations for the popularity of RWP parties. High levels of economic inequality are theorised to fuel resentment among lower-income workers, driving them to vote for RWP parties which put the blame on immigrants and the political establishment. The link between economic conditions and populist is one that has been highly discussed, with some suggesting that populist support is entirely or mainly driven by economics and that the reaction to immigration is a symptom of economic disadvantages rather than a cause of populism in and of itself. This paper aims to investigate the relationship between economic factors and RWP party support, particularly focusing on the theory that economic alienation in various forms is a prime driver of support for these parties, as well as compare this potential explanation to the impact of immigration, under the hypothesis, following from the literature below, that economic factors are likely major drivers of populism.

We do not use "economic alienation" in the Marxist sense, but rather as a term that encompasses economic stagnation, lack of employment opportunities and generally poor economic outcomes. It can be viewed as a feeling of alienation from the national economy as a whole, or as an inability to participate in generating and benefiting from economic prosperity. While we do not go on to investigate economic alienation in terms of said subjective feelings, it is still a useful way to conceptualize the factors which we do investigate.

# 2. Theoretical background and literature review

# 2.1 The nature of populism

Populism as a political force in the modern sense can be traced back to the 19th century, when populist forces appeared in both Europe and the United States. This was later followed by growing influence in Latin America during the 20th century. Rovira Kaltwasser, Taggart, Ochoa Espejo and Ostiguy (2017) describe these early populist movements as disparate, but united in positioning themselves as anti-establishment and appealing to their concept of "the people", as opposed to the elite. Often, "the people" was regarded as the common people living in rural areas, as a consequence of a rural-urban divide. The people were seen as disadvantaged by the

establishment, and the populist movements therefore appealed directly to them in a bid to effect change. These movements were also generally nationalist.

In addition to interpreting populism as a backlash against an establishment perceived as not representing the interests of the people, another interpretation is as a consequence of the concept of popular sovereignty, which developed along the same timeline. With this concept, the roots of which can be traced at least to Ancient Rome, where the people of a nation were starting to be seen as the ultimate authority from which power is derived, in contrast to the government being their own authority. With this development, "the people" could be seen as an entity unto themselves which could be appealed to as a basis of power, in much the same way as kings and queens in absolute monarchies. Rovira Kaltwasser et al. (2017) proposes that this serves as a basis for populist movements, founded on the fact that "the people" could now exercise their power to reshape society and take control from the elite.

Weyland (2017) describes populism as being opportunistic and often focused around a leader rather than ideology, giving these movements more political flexibility than their ideological counterparts. A hallmark of populist movements is that the leader addresses "the people" directly and refrains from using traditional intermediaries and organisational structures. Weyland (2017) defines populism as "a political strategy through which a personalistic leader seeks or exercises government power based on direct, unmediated, uninstitutionalized support from large numbers of mostly unorganized followers." In this concept, populism, in contrast to traditional political movements, is less focused on political issues such as the economy and more focused on the identity of the representatives of the movement and the movement's supporters.

Populism, seen from these perspectives, is inherently neither left nor right, but can encompass a wide range of political proposals. Populist movements in Latin America have often been leftwing, while Europe has seen a fair share of both left- and right-wing populism. The type of populism focused on in this paper, modern European right-wing populism, emerged in Western Europe in the decades following World War II (Rovira Kaltwasser et al., 2017). These movements often combined fairly liberal economic policies, such as calls for lower taxation, for instance, with nativist positions on social and cultural issues, usually advocating stricter limits on immigration. One such early modern European populist party was the French *Front National* (now *Rassemblement National*), which was followed by similar parties across most European nations. It was only in the 1990s, however, that European right-wing populist parties saw a rise to prominence, with growth across Europe continuing since then, and especially in the last decade. This paper aims to analyse this particular growth and will therefore focus on this particular form of right-wing, European, populism.

# 2.2 The relationship between economics and populism

While populism is by no means a new phenomenon, its recent re-emergence as a relevant political force has rekindled an interest in understanding its underpinnings. As previously mentioned, our analysis will primarily be focused on the populism of the right, of the kind most commonly found in Europe. However, because the literature on the economic drivers of populism sometimes concerns itself with both the left- and right-wing varieties of populism, this overview of the economic theories of populism will inevitably include theories which are not just limited to understanding right-wing populism.

Increased globalisation is among the most commonly cited explanations for rising support for populist parties. Rodrik (2017) traces the populist backlash against free trade and movement back to the repeal of the corn laws in Great Britain in the mid-19th century, which was followed by agricultural free trade agreements across Europe, which in turn were followed by popular movements in Europe to re-assert protections for domestically produced goods. The improvement of transport technology in the late 19th century, facilitated by the adoption of steam-powered trains and ships was followed by laws targeting Chinese and Japanese immigrants to the United States (Rodrik 2017).

This relationship between globalisation and populism aligns well with models in trade theory. The Stolper-Samuelson theorem posits that under certain economic conditions, workers who are employed in producing some good where other nations have a relative advantage in production will be made worse off by free international trade. (Stolper, Samuelson, 1941). Swank and Betz (2002) draw on this same line of argument in their empirical study of the links between economic factors and populism. While the theorem is derived to apply under very specific conditions, other, less restrictive theoretical work has produced similar results (Rodrik 2017). What these models have in common is highlighting the redistributive effects of free trade. As globalization has increased, low skill workers in the developed world have therefore been exposed to greater competition from the developing world, making them worse off and giving them an economic interest in supporting anti-globalisation populist parties.

While declining incomes among certain classes of people is a plausible explanation for a populist backlash against globalisation, Møller (2013) highlights the inequality-exacerbating effects of redistribution from trade. Since high-skilled workers are comparatively abundant in the developed world, the Stolper-Samuelson theorem predicts that their labour will be in higher demand under free trade, thereby making the already wealthy better off at the same time as making the less fortunate comparatively worse off. In terms of empirical work based on this particular theory, Pastor and Veronesi (2018) construct a model where an anti-globalist backlash occurs as a result of increased free trade, provided the society values income equality.

Immigration is another commonly cited explanation for RWP party support, not least by the generally anti-migration RWP parties themselves. In economic terms, a negative attitude towards immigration may be explained by increased competition for low- and medium-skilled domestic workers facing increased competition from immigrants from less developed nations. While immigration may have a Stolper-Samuelson-like effect, there are differences between migration and free trade, where migration introduces several theoretical complications. As many developed nations have relatively generous welfare states, immigration could increase the burden on welfare state services such as education and healthcare. Minimum wage regulations and similar arrangements make it more difficult for low-skilled migrants to find work, thereby increasing the competition for economic assistance. Compared to free trade, migration also theoretically introduces an element of group competition for state resources.

Rodriguez-Pose (2017) similarly highlights inequality as a major driver of RWP party support, but argues that it is inter-regional inequality, not conventional interpersonal inequality that is of importance. Prevailing intellectual trends in urban economics and new economic geography have narrowly focused on the greater economic efficiency of cities compared to rural regions, in addition to overestimating rural populations' willingness to move to metropolitan areas. He argues that in light of these views, the state has neglected to provide rural regions with the support necessary for economic growth, leading to stagnation. Populists then seek support in the "places that don't matter" (rural regions) by seizing on the local resentment produced by economic stagnation.

# 2.3 Empirical overview

Research on the causes of RWP support has been conducted for decades across a multitude of changing political landscapes. Swank and Betz (2003) analysed populist support during the 1980s and 1990s across 16 European countries. Using an empirical approach, they tested the impact of a variety of potentially causal factors, including, among others, economic growth, manufacturing employment, and immigration. They found that slow economic growth did not seem to have an impact on RWP support, while openness to trade and foreign immigration did. Moreover, strong universal welfare states depressed RWP support and diminished - or even reversed - positive effects on populist support from trade openness and immigration, which corresponds with Rodrik (2017).

Today, the political environment has changed. Countries where RWP parties found only little or no support in the 1980s and 1990s - such as Sweden, Germany and Finland, for example - have seen a surge in RWP votes, even though these generally have more universalist welfare systems, which Swank and Betz (2003) suggest would have negative effect. This implies that something has changed since their study that has driven RWP sympathies to increase even in countries with universalist welfare systems.

Furthermore, Swank and Betz (2003), as well as many others, focus primarily on betweencountry differences. However, RWP party support varies significantly within countries as well. Electoral results are sometimes vastly different in different regions, as seen in the Swedish general election in 2018, for instance. While between-country analysis can give important insights in drivers of populism due to structural and national factors, it can miss details shown in a regional analysis. One such analysis that has been done is by Becker, Fetzer, and Novy (2017). Becker et al. (2017) conducted an empirical analysis of the result of the UK EU referendum, using regional UK data. The Brexit referendum is another example of a vote with vast regional differences, and Becker et al. (2017) use regional data to explain this variation. While they find some support for immigration (specifically immigration from EU countries in Eastern Europe) contributing to the Leave vote share, this is not deemed to be the most important factor. Rather, factors such as poor public services, high unemployment and dependence on manufacturing are important, somewhat in contrast to Swank and Betz' (2003) conclusions. Becker et al. (2017) also investigate both the level of, and change in many of their explanatory variables, finding that often relative changes often have a larger impact on RWP party vote share than the absolute level of a variable.

Similar to Becker et al. (2017), Dal Bó, Finan, Folke, Persson, and Rickne (2018) find that economic factors explained at least part of the RWP vote. They argue that the Great Recession and accompanying economic policies created instability and job insecurity for sections of the population and that these sections then became the electoral base of populist parties. This is in line with other authors, such as Becker et al., who also propose economic uncertainty as a driver of RWP support.

Furthermore, Pastor and Veronesi (2018) argues that a rise in populism and pushback against globalisation in rich countries in recent years comes as a backlash to growing income inequality. They propose that inequality-averse agents will vote for populist policies even if these were to hurt the same voters, through lowering consumption, since they place relatively more weight on lowering inequality. They predict that voters in developed countries with growing inequality and negative current account balances will be more likely to support populist policies. In the same vein, Rodriguez-Pose (2017) introduces a distinction between intrapersonal and interregional inequality to the study of RWP movements. He argues that populists find support in regions which have been politically neglected and have declined economically in comparison to the country as a whole, i.e. interregional inequality rather than intrapersonal inequality. The driver of populist voting would in this case be a real or perceived notion of entire regions being disadvantaged, rather than individuals.

Although we have thus far mainly focused on economic factors and immigration as drivers of RWP support, there are potentially other causes as well. Arzheimer (2017) mentions several others in his paper reviewing some of the literature. Among these are micro-level factors, such as personal party identification and party leader charisma, as well as meso- and macro-level factors such as political systems, crime, media influence and institutional quality. These factors could very well have a significant effect, and deserve due consideration. Becker et al. (2017) try to test for some of these, including media influence, which their results suggests could have had a significant impact on the Leave vote. Other factors tested for include demographics regarding age and education, where they find significant correlations with voting behaviour. Another demographic factor, mentioned by Dal Bó et al. (2018) and Abi-Hassan (2017), is gender. In general, it is well-documented that men are overrepresented among populist voters. Abi-Hassan (2017) mentions that the degree of overrepresentation varies between countries, but that it is present in most, if not all, cases. Controlling for factors such as age and religion increases this gender disparity, although controlling for socio-economic factors such as work decreases it, suggesting that the gender gap can be at least partially explained by economic factors. Also, Dal Bó et al. (2018) mention a gap in voter support within immigrant populations themselves, where European migrants to Sweden vote similarly to the general population, while other immigrants have much lower vote shares for RWP parties. These immigrants also have lower average turnout.

# 3. Our contribution to the literature

Based on the literature, we hypothesise that economic alienation will be found to have a significant impact on RWP vote share. We test this hypothesis using a set of variables based on the literature above, which is explained in further detail later.

This paper builds on the empirical work done by Swank and Betz (2003), and Becker et.al. (2017) to investigate the relationship between economic factors and RWP party support in four northern European countries (Sweden, Denmark, Finland, and Germany) on a regional level across a total of 12 national elections (three per country) between 2006 and 2017. Since the countries in question have well-developed universalist welfare systems of the kind that Swank &

Betz (2003) found to have a significant dampening effect on the support for RWP parties, it is worth investigating how populist parties have found support in these countries in spite of Swank & Betz' (2003) conclusions.

During the last decade, there have been two major events that the varying theories surrounding populist support predict should have an effect. First, the global financial crisis and the Great Recession which followed in the late 2000s and early 2010s, which transformed the economic situation and potentially could have changed the economic factors driving support. Secondly, the European migrant crisis which culminated in 2015, though migration was increasing for years before, and which led to greatly increased numbers of international immigrants, especially asylum seekers from Africa and the Middle East. Since Swank and Betz (2003) identified asylum immigration as a driver of support in their paper, it is not inconceivable that increased numbers would push RWP support higher in universalist welfare countries as well.

By using regional data to account for changes within countries as well as between them we hope to build a better understanding of the regional economic factors that drive populist movements. In doing so, we try to strike a balance between the regional detail of the nationally focused research, such as that performed by Becker et.al (2017), and the more general validity of the research with an international focus.

Since there is a significant degree of regional variability in the support for RWP parties, we aim to use this variance to find what explains differences in RWP support and what drives certain regions to these parties. Similar to Becker ar to et.al, we also choose to remain agnostic about whether it is the absolute *level of*, or *change in* economic factors which drives support for populism, and by including both in our analysis for many of our explanatory variables we hope to gain more insight into the possible mechanisms through which these economic factors operate.

# 4. Empirical approach and data

We perform a regression analysis of the economic drivers of RWP party support across twelve national elections in four countries (Sweden, Denmark, Finland, and Germany). We use a random-effects model to study the relationship between economic factors and populist movements on a regional level, using EU NUTS 3-regions or equivalent (*Kreis* in Germany, *län* in Sweden, *landsdele* in Denmark and *maakunta* in Finland). The effect of economic factors on RWP support is analysed through regressing RWP vote share on a number of economic indicators, controlling for demographic factors and immigration. In order to ascertain the relative importance of immigration vis-à-vis economic factors, further regressions are ran including a number of interaction terms between these. Following our base model specification, we add a range of interaction terms in order to gain some further insight into the economic mechanisms at work.

# 4.1. Sample selection

As previously mentioned, these countries have been chosen in part due to their universalist welfare states, which Swank and Betz (2003) found to depress support for RWP parties. Support for RWP parties also shows a significant degree of regional variability, and it is therefore appropriate to perform a regional-level analysis to understand what produces those regional differences. These specific countries have been chosen due to the similarity in regards to their electoral systems, in terms of proportionality – which Swank & Betz (2003) also found to play a role in determining RWP party support – as well as being relatively similar in terms of their culture, geographic region and economic institution, as well as them all being members of the EU. All of these countries have also seen RWP parties find electoral success during the time period covered. By eliminating excessive variance in these variables, we hope to produce a deeper and more reliable understanding of populist party support in these countries.

# 4.2 Data

#### 4.2.1 Dependent variable

The dependent variables are the election results of RWP parties in elections to our countries' national legislative bodies (The Riksdag, Folketing, Eduskunta and Bundestag). In the case of Germany, which uses a system of both party and constituency votes, we will use the party vote as the dependent variable, to ensure comparability with other countries and minimise the effect of individual candidates.

We use the election results of the main RWP party in each country to represent RWP voting. These are the Sweden Democrats (*Sverigedemokraterna*, SD) in Sweden, the Finns Party (*Perussuomalaiset*, PS) in Finland, the Danish People's Party (*Dansk Folkeparti*, DF) in Denmark, and Alternative for Germany (*Alternative für Deutschland*, AfD) in Germany for the elections in 2013 and 2017 and, similarly to Swank and Betz (2003), The Republicans (*Die Republikaner*, REP) for the election of 2009, when AfD had not yet been formed. Although these parties are somewhat heterogeneous and have different historical backgrounds, they are all generally described as populist and all, except The Republicans, have managed to achieve representation in parliament, although at varying times.

#### 4.2.2 Independent variables

For most variables there is data available on NUTS 3-level or equivalent, either from international databases or the respective countries' government agencies. However, in some cases we only have access to data for larger regions, such as NUTS 2. We have clearly noted indicated the variables where that is the case, and all other variables use data on the NUTS 3 level or equivalent.

#### Regional business sector structure

In line with the theoretical redistributive effects of free trade and migration, the makeup of the regional business sector is of interest. Certain sectors, such as manufacturing, should be particularly vulnerable to increased global competition. We capture this effect by using regional data on the proportion of the employed population, which is employed in one of seven groups of EU NACE classifications, focusing on the population employed in manufacturing (*MANUFACT*, defined as NACE C) and the population employed in white-collar professional work (*WHITECOLLAR*, defined as NACE K-N). We also use the five-year change in this level to include the effect of changing sector structures.

#### Regional economic factors

To analyse any relationship between economic stagnation, regional inequality and populist party support, we use regional GDP data to construct an index of regional inequality (*WEALTHINEQ*) and inequality of regional growth rates (*GROWTHINEQ*). The index of regional wealth

inequality is defined as the regional GDP/capita divided by the national average GDP/capita, and the index of regional growth inequality is defined by the regional GDP/capita growth rate over the previous five years, subtracted by the national average GDP/capita growth rate over the same period. In order to take into account the availability of economic opportunity, we also include the regional employment-to-population ratio (*EMPPOP*). This is calculated by using data of total employment within a region and the number of working-age inhabitants, which means we also capture the effect of people living in one region and commuting to another to work, which might also better indicate a lack of employment opportunity within a region than a conventional employment rate. However, this can also appear to produce seemingly odd results, especially in certain German city-districts, where the number of employed persons can sometimes exceed the working age population.

#### Migration

Migration has been a major focal point of the debate around RWP parties. The tide of refugees from the wars in Syria and Afghanistan, culminating in the European migration crisis has been major topic of political discussion in all of Europe. To include the effect of immigration, we use population data of the proportion of foreign-born residents as a percentage of the population within a particular region (*FOREIGN*). We also use the five-year change in this proportion to capture the effect of changing demographics.

#### Governmental-political factors

A lack of political support and declining quality of public services is a commonly cited explanation for the increasing support of RWP parties within a region. Non-functional public sector functions, such as health care, and neglect by the central state are believed to cause antiestablishment attitudes in rural regions, which RWP parties capitalize on. We use the number of hospital beds per 100000 inhabitants (*HOSPBEDS*) as a proxy for the level of political support for a particular region to capture this effect, available on NUTS 2-level, except for Germany where it is only available at the NUTS 1-level.

#### Demographic factors

Populist movements have often had striking age differences. In the Brexit referendum of 2016, older voters disproportionately favoured the leave campaign, while younger people largely voted to remain in the EU. The level of education is also often included in discussions about RWP movements. Again, leave voters were disproportionately less educated than remain voters, having them branded as "low-information" voters easily swayed by populists. Another competing explanation is that the less educated low-skilled workers have been the most negatively affected by globalized trade and low-skill immigration. As previously discussed, there is also a significant gender gap in support for RWP parties. We therefore include the proportion of the population with a tertiary education as an explanatory factor (*HIGHERED*), available on a NUTS 2-level, and also choose to control for the regional gender (*FEMALE*) and proportion of the population which is 65 years of age or greater (*OVER65*).

#### Country-specific factors

While the countries in our sample have been selected for their relative similarity, there are still inevitably going to exist differences between them. We therefore also use dummy variables for each country (*COUNTRY*) to control for these differences.

#### 4.3 Regression specification

Using these variables, our baseline model takes the form

$$\begin{split} RWP_{it} &= \beta_0 + \beta_1(MANUFACT_{it}) + \beta_2(\Delta MANUFACT_{it}) + \beta_3(WHITECOLLAR_{it}) \\ &+ \beta_4(\Delta WHITECOLLAR_{it}) + \beta_5(WEALTHINEQ_{it}) + \beta_6(GROWTHINEQ_{it}) \\ &+ \beta_7(EMPPOP_{it}) + \beta_8(\Delta EMPPOP_{it}) + \beta_9(FOREIGN_{it}) + \beta_{10}(\Delta FOREIGN_{it}) \\ &+ \beta_{11}(OVER65_{it}) + \beta_{12}(FEMALE_{it}) + \delta_i(COUNTRY_{it}) + a_i + u_{it} \end{split}$$

Where  $\Delta$  indicates the five-year change of the relevant variable, except in the case of *EMPPOP*, where we use one-year changes due to a lack of data. As previously mentioned, *GROWTHINEQ* also uses a five-year period. Variables with coefficients  $\beta_1 - \beta_{10}$  are our main explanatory variables, while *OVER65*, *FEMALE* and *COUNTRY* are control variables.

We also use an extended model, which includes the variables  $HIGHERED_{it}$  and  $HOSPBEDS_{it}$ . These variables are treated differently due to them only being available at a more aggregated level, and we want to test for whether they produce significant changes, or if the greater level of aggregation makes them irrelevant to our analysis.

Note that when we perform regressions with interaction terms, and interact with changes in the employment-to-population ratio, we use 5-year changes in *EMPPOP*, denoted  $\Delta EMPPOP5$  to match the 5-year changes in the term which it is being interacted with. Therefore, those interaction regressions have fewer observations. For the variables *FOREIGN* and *MANUFACT* we also use 5-year lagged variables to investigate interactions with what the values for those variables were 5 years prior. They are denoted *FOREIGNLAG5* and *MANUFACTLAG5* respectively.

# 4.4 Model assumptions

The key random effects model assumption is that the fixed effect error  $(a_i)$  is uncorrelated with the explanatory variables  $(x_{it})$ , i.e. that  $Cov(x_{it}, a_{it}) = 0$ . In our case, this would imply that a region's fixed, unexplained level of RWP support is uncorrelated with our explanatory variables. Swedish, Finnish, and Danish NUTS 3 regions (*Landsting, Maakunta* and *Landsdele* respectively) have relatively little political power compared to higher (state) and lower (municipality) regional divisions. Therefore, a higher level of RWP support should have relatively limited political power on the NUTS 3 level, which should limit the endogeneity problem of RWP support affecting our explanatory variables through the political process. This is however not the case in Germany, where the *Kreis* perform a significant number of local political functions. However, when dealing with political economics and studying the relationship between election outcomes and economic factors, there are always bound to be endogeneity problems due to the democratic political system.

While this is arguably reason for opting for a fixed effects model instead, given that we only have data for three elections per country, using fixed effects would limit us to three observations per region, which would limit the variance in the dataset too severely to be likely to produce significant estimators. Through controlling for country-specific effects by using country dummies in our specification, we limit the systematic differences between regions by controlling for the portion of that difference which is attributable to regions belonging to different nations.

Therefore, the random effects assumption is more likely to be valid. Given the data available to us, using a random effects model is therefore the method which is the most appropriate, although the aforementioned problems should be kept in mind when interpreting our results.

# 5. Results

# 5.1 Base model

In the baseline model (Table 1), several variables produce significant results. Both having a larger share of foreign-born residents and a greater increase this proportion over the previous five years have the effect of increasing support for RWP parties. The effect is both stronger and more significant for the change in proportion (i.e. immigration at a higher rate than the growth of the native population). Decreases in the employment-to-population ratio have a significant bolstering effect on RWP party support, while high values in our index of interregional inequality (i.e. greater GDP/capita than the national average) leads to lower RWP support. Differences in regional growth rates do not produce a significant effect, however.

Turning to demographic factors, it is interesting to note that the both the proportion of women and older people (65 and over) have a regression coefficient with an absolute value greater than one. Given that there is only one vote per person, it is striking that a 1% change in these factors has an effect on RWP vote share greater than 1%. It may be that these groups have a higher-thanaverage voter turnout rate, but it could also imply that changes in their proportion have significant external effects or that they are indicators other underlying phenomena. For instance, areas with a large share of older people may have significant emigration of working-age people, potentially indicating economic stagnation.

Extending the model using education and healthcare (as a proxy for quality of government) data yields no significant changes from the baseline model. An interesting result, however, is that the proportion of people with tertiary education is positively related to RWP vote share. However, since this data is only available on a much more aggregated level than the rest of our variables, this should be interpreted very carefully. Due to the overall lack of impact on the regression we choose to exclude these variables from the following regressions to be able to use data aggregated on comparable levels and keep our analysis on the NUTS3 level.

Table 1 – Baseline and extend		
	(1)	(2)
	Baseline model	Extended model
MANUFACT	0.065**	0.063**
	(0.029)	(0.029)
ΔMANUFACT	-0.434***	-0.498***
	(0.137)	(0.144)
WHITECOLLAR	$0.470^{***}$	0.435***
	(0.081)	(0.075)
∆WHITECOLLAR	-1.065***	-1.029***
	(0.189)	(0.184)
WEALTHINEQ	-0.033**	-0.036***
	(0.013)	(0.013)
GROWTINEQ	0.027	0.032
	(0.024)	(0.025)
EMPPOP	0.072**	$0.078^{***}$
	(0.029)	(0.029)
ΔΕΜΡΡΟΡ	-0.419**	-0.524***
	(0.180)	(0.179)
FOREIGN	0.055	0.025
	(0.034)	(0.037)
	0.810**	0.819**
ΔFOREIGN	(0.365)	(0.398)
OVER65	1.642***	1.601***
	(0.111)	(0.113)
FEMALE	-4.689***	-4.540***
	(0.714)	(0.726)
HIGHERED		0.132***
		(0.042)
HOSPBEDS		-0.003
		(0.003)
ΔHOSPBEDS		-0.049
		(0.035)
Observations	1202	1191

Table 1 – Baseline and extended models

Standard errors in parentheses  $p^* > 0.10$ ,  $p^* < 0.05$ ,  $p^{***} < 0.01$ 

	(1)	(2)
ΔFOREIGN × FOREIGN	-0.018***	
	(0.002)	
∆FOREIGN × FOREIGNLAG5	-0.016***	—
	(0.001)	
ΔFOREIGN × MANUFACT	$0.028^*$	_
	(0.016)	
ΔFOREIGN × ΔMANUFACT	0.047	—
	(0.103)	
ΔFOREIGN × WHITECOLLAR	-0.103***	_
WIIIILCOLLAR	(0.022)	
ΔFOREIGN × ΔWHITECOLLAR	-0.099	—
AWIIIIECOLLAR	(0.116)	
∆FOREIGN × WEALTHINEQ	-0.008***	—
	(0.001)	
∆FOREIGN × GROWTHINEQ	0.063**	—
	(0.027)	
ΔFOREIGN × EMPPOP5	_	-0.016***
		(0.005)
ΔFOREIGN × ΔEMPPOP5	_	$0.074^{*}$
		(0.042)
Observations	1202	903

Table 2 – Interactions with immigration

Standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)*
ΔMANUFACT × MANUFACT	.031**	
	(.013)	
∆MANUFACT × MANUFACTLAG5	.032**	—
	(.013)	
ΔMANUFACT × WEALTHINEQ	.002	—
	(.002)	
ΔMANUFACT × GROWTHINEQ	.004	—
	(.011)	
$\Delta$ MANUFACT × $\Delta$ EMPPOP5	_	053*
		(.029)
Observations	1202	903
Standard errors in parentheses		

Table 3 – Interactions with changes in manufacturing sector employment

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

# 5.2 Interaction terms

#### 5.2.1 Immigration

Further analysis running regressions including interaction terms with immigration (Table 2) yield several significant results. For one, immigration has a smaller impact on RWP support in areas where there are already a larger proportion of foreign-born people. The same holds true for areas where there were more immigrants five years earlier. This may be explained by areas with a larger number of immigrants being more adjusted to immigration, or it may simply be that immigrants themselves do not tend to vote for anti-immigration parties, and will therefore respond differently to immigration than the native-born population. This also matches findings by Becker et. al. (2017), where they found a similar interaction for eastern-European migration and its impact on the vote leave share in the Brexit referendum.

A higher proportion of white-collar business within a region also has a dampening effect on immigration's impact on RWP support, and the opposite holds true for regions with a higher proportion of employment in manufacturing, although the latter has lower statistical significance. We also find that both the estimates for immigration and the proportion of employment in manufacturing by themselves turn insignificant when interacting those variables with one another. We do not find any significant relationship between immigration and changes in the proportion employed in different sectors, nor do we find any relationship between the level of regional inequality and inequality of growth rates (Table 4).

The interaction between immigration and measures of interregional inequality are somewhat mixed. Immigration produces greater RWP support in regions which are less prosperous than average, but the same is true for regions which have experienced aboveaverage growth. Similarly, immigration is related to higher RWP support in regions which have experienced higher employment or

Table 4 – Interactions be	tween regional
economic factors	
	(1)
WEALTHINEQ ×	0
GROWTHINEQ	
	(.0)
Observations	1202
Standard errors in parent	
* $p < 0.10$ , ** $p < 0.05$ , ***	<sup>°</sup> p < 0.01

which have experienced higher employment growth.<sup>1</sup>

#### 5.2.2 Business sector structure

Somewhat surprisingly, we find that in regions which have a large share of employment in manufacturing (or had so five years prior), the effect of a loss of manufacturing jobs is smaller than in regions with a smaller share of employment in manufacturing (Table 3). We also find that the relationship between RWP support and the loss of manufacturing-sector jobs is stronger in regions which have increased their employment-to-population ratio. Such regions could be regions which are transitioning away from a manufacturing-based economy at the same time as achieving greater employment. However, the results indicate no interaction between the effect of

<sup>&</sup>lt;sup>1</sup> Note that the number of observations is lower due to a lack of data on employment change for some of the earliest elections.

employment in manufacturing and regional inequality, indicating that the wealth of the region as a whole does not impact the effect of manufacturing on RWP support.

# 6. Discussion

# 6.1 Regional economic factors

We begin by examining regional economic factors. Regions which are wealthier than average (high values for regional inequality), or which have an increasing employment-to-population ratio tend to have lower electoral support for RWP parties. Immigration also tends to produce less RWP support in wealthier-than-average regions and regions with a high employment-to-population ratio (although the interaction between immigration and *change* in employment-to-population ratio fails to reach significance). This indicates that immigration is unable to drive RWP support where there is ample economic opportunity, at least to as large a degree. This lends some credence to the theory that RWP support is at least somewhat driven by economic alienation, although the effect of immigration, especially when combined with a lack of economic opportunity. However, the results could also be explained by differences in the *kinds* of immigration to less and more prosperous regions, where wealthier regions may, for instance, receive more highly skilled immigrants from the developed world. In this case, immigrants would compete with high-skilled workers, rather than the low-skilled workers often seen as the base of RWP support.

It is also interesting to note that the interaction between the regional wealth index and growth index does not produce a significant result. This term would indicate whether people respond to rising inter-regional inequality (i.e. if there is a multiplier effect when both regional wealth and growth is high or low) by voting for populist parties. However, our results do not point to that being the case.

# 6.2 Regional business factors

The fact that an increase in the proportion of manufacturing jobs has a depressing effect on RWP support seems to support the theory that lost jobs in said sector help bolster RWP parties, although we have little indication as to *why* the proportion has changed. We do not know for

instance whether it is due to increased competition from global markets, or due to a more general economic transition away from those jobs in favour of other sectors. The fact that the effect of immigration on RWP support is stronger in regions with a greater proportion of manufacturing employment, and weaker where there is a greater proportion of white-collar employment also seems to line up with the theory that the economically adverse effects of migration are most strongly felt for lower-skilled workers. Emphasising this is the fact the impact of immigration is negligible when the proportion of people employed in manufacturing is low, indicating that immigration might only drive RWP support when occurs where there is a significant low-skilled labour force, potentially since these people could feel threatened by immigration, whereas high-skilled workers would not.

The finding that a decreased share of employment in manufacturing has a greater positive impact on RWP support in regions which have a small share of manufacturing employment may however seem to contradict this theory. Regions which rely on manufacturing for employment should theoretically be highly sensitive to changes in the proportion of employment in manufacturing, as the regional economy depends on that industry. In terms of proportion, it may simply be that a 1% decrease in the share of employment which is in manufacturing is most strongly felt where that proportion is already small and dampened where it is large.

We also find that a decreasing share of manufacturing employment has a larger impact on RWP vote share in regions where the employment-to-population ratio has increased. As previously mentioned, such regions are likely regions which are transitioning away from a manufacturing-based economy. It may be that the share of employment in manufacturing is decreasing due to increased employment in non-manufacturing sectors, implying a stagnant manufacturing sector, theoretically leading to greater RWP support. On the other hand, if the regional economy is providing more jobs overall, then manufacturing workers should more easily be able to find employment in other sectors, which should theoretically decrease RWP support through decreased economic alienation. If we assume that labour mobility between sectors is limited, then these findings are consistent with our theory, but if labour is relatively mobile, these results and our theory are contradictory.

Drawing conclusions regarding regional business sector structure is further confounded by the fact that the RWP vote share is greater in regions with a high proportion of white-collar employment, and that higher white-collar employment also implies a smaller effect of immigration on RWP support. This may imply that low- and high-skilled workers have different reasons for voting for RWP parties, where high-skilled workers are less concerned about migration, although this assumes that it is the white-collar employees themselves who are voting for RWP parties. It may also be the case that a high proportion of white-collar work drives non-white-collar workers to vote for RWP parties to a greater degree, possibly due to white-collar employment indicating greater inequality, or some other social factor. However, our results do not give us a sufficiently strong indication to say which of these scenarios (or some other scenario) is more likely to be true.

# 6.3 Immigration

Turning to immigration itself, we consistently find that immigration is a powerful driver of RWP support, even when we control for economic factors. This is hardly surprising given that RWP parties themselves place a lot of emphasis on migration policy, but indicates that immigration affects RWP support though other factors than just those economic ones we control for, suggesting that RWP support is more than just an economic phenomenon.

We also find that additional immigration to areas with a larger existing proportion of foreignborn inhabitants has a smaller effect on RWP support. Becker et. al. (2002) found the same effect for Eastern European immigration to the UK with respect to the vote leave share in the Brexit referendum. This is likely because immigrants' attitudes toward additional immigration differs from the native-born population, but may also be indicative of regions with a large share of foreign-born citizens being better adjusted to dealing with additional immigration.

Somewhat surprisingly, we also find that the proportion of immigrants increases RWP support, which appears to contradict the finding by Becker et. al. (2002), that the proportion of Eastern European immigrants decreased the vote leave share in the Brexit referendum. They interpret this as indicative of Eastern European immigrants themselves supporting Brexit to a lesser degree. It is not unreasonable to assume that the same holds true for immigrants and anti-immigration

RWP parties. If that is the case, we can plausibly account for this surprising result by the fact that election participation is self-selective, and that immigrants themselves may vote to a lesser degree than the native-born population. It is then possible that having a high proportion of immigrants may provoke the native-born population to support RWP parties to a large enough degree that it offsets the fact that a larger proportion of the population is foreign-born, and therefore does not support RWP parties. That would however raise the question as to why this mechanism would be at work here, but not in the Brexit referendum. Since our dataset does not separate immigrants by origin, it is possible that this result is affected by immigrants from neighbouring and otherwise culturally similar countries, who might vote similarly to the native population.

The positive relationship between the proportion of immigrants and RWP vote share could also be explained by immigrants themselves having an economic interest in limiting further immigration, as those additional immigrants would tend to compete for the same lower-skill jobs, welfare state services and benefits as immigrants already in the country.

# 6.4 Summary of findings

Our empirical analysis produces a few consistent results. First, the regional economic environment matters. RWP parties find more support in poorer, low-growth regions, particularly when immigration to those areas is high. Second, changes in the employment sector structure, as well as changes in the overall employment-to-population ratio matters for RWP party support. Third, both the proportion of foreign-born in the population, as well as further immigration, particularly to regions which have previously had a smaller immigrant population has the effect of strengthening RWP party support. Fourth, demographic factors, namely the proportion of older people and the proportion of women in a region strongly influences election outcomes for RWP parties. There are some indications in support of the theory that voting for antiimmigration parties is based on immigration being particularly costly for certain demographics, namely among people living in less prosperous, economically stagnant or manufacturing-reliant regions. However, this theory is also faced with many confounding factors. Why does the proportion of white-collar employment *increase* support for RWP parties if people employed in those lines of work appear least sensitive to immigration, and if they are the group who theoretically have the most to gain from globalized trade? Do white-collar workers themselves support RWP parties, or does the prevalence of white-collar work provoke non-white-collar workers to vote for RWP parties? If RWP parties theoretically draw support from manufacturing sector workers who have lost their jobs due to increased globalization, why does RWP vote share increase with shrinking manufacturing sector employment *even when* overall employment is increasing in the region? Is this evidence against the economic alienation hypothesis, or is this explained by low labour mobility between sectors?

From our results we can conclude that support for populist movements have economic underpinnings, at least in part. RWP support is particularly pronounced in poorer-than-average regions, and it is sensitive to changes in both the employment-to-population ratio and the distribution of employment between sectors. The effect of immigration on populist support is most strongly felt in less prosperous regions with lower overall employment, and a greater proportion of employment in manufacturing rather than white-collar work. This indicates that the populist aversion toward immigration most likely has an economic component, and that it is not simply based in bigotry. All of these pieces of evidence are aligned with our hypothesis that economic alienation is a significant driver of populist movement support. But when we attempt to gather more detailed evidence, which would allow us to conclude that the economic alienation hypothesis is valid with greater confidence, our results are less conclusive. The evidence is mixed and does not give us a sufficiently deep insight into the economic mechanisms at work to preclude the possibility that there are other hypotheses which would account for our results.

#### 6.5 Limitations

While our findings do seem to indicate certain factors as drivers of populist support, these findings should be interpreted with caution. Our dataset is limited to four relatively similar countries and extrapolating these results to cover more countries is potentially risky. Furthermore, while we attempt to control for long-term changes, we only use five-year changes, due to limited availability of older data. It is possible that RWP support is driven by structural changes over an even longer time horizon, which we are unable to control for. Similarly, our dataset does not differentiate between different types of immigrants, nor their countries of origin. Controlling for this would possibly yield different results for immigration, as suggested by previous studies such as Becker et al. (2017). Further testing using a wider variety of countries as well as a dataset including a longer time horizon, differentiation of immigrants as well as data on education and quality of government on a regional level comparable to the other variables would be required to verify our results.

# 6.6 Conclusion

The results of our analysis indicate that although we cannot claim with full confidence that the economic alienation hypothesis is correct, economic factors seem to have a significant effect. Still, immigration remains significant even after controlling for economic factors, suggesting that there may be more factors at play. It is not unlikely that RWP support is driven by a variety factors, including economic as well as cultural and social factors. Also, issues regarding the dataset or an incorrectly specified model could impact the result. Further research would be required to conclusively identify the drivers of RWP support, preferably testing more variables over a longer time horizon and more countries. In summary, however, our results show that a case can be made that economic alienation seem to impact RWP support.

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# Appendix I: Variable Descriptions and Definitions

# Table 5: Variable Descriptions and Definitions

	I
RWP	The proportion of votes cast for a right-wing populist party in a general election in a
	particular region.
MANUFACT	The proportion of a region's total employment which is in the manufacturing sector (EU
	NACE C classification).
WHITECOLLAR	The proportion of a region's total employment which is in white-collar employment (EU
	NACE K-N classification).
WEALTHINEQ	An index of a region's prosperity relative to the nation as a whole, defined as that region's
	GDP/capita divided by the national average GDP/capita.
GROWTHINEQ	An index of a region's growth relative to the nation as a whole, defined as that region's
	growth in GDP/capita, subtracted by the national average GDP/capita growth
EMPPOP	The employment-to-population ratio of a region, defined as the total employment within
	that region divided by that region's working-age population (age 15-64). Note that this
	definition does not take into account whether people work in the same region as they live,
	meaning that people commuting to a region will increase that region's employment-to-
	population ratio.
FOREIGN	The percentage of a region's population which is foreign-born.
OVER65	The percentage of a region's population which is age 65 or greater.
FEMALE	The percentage of a region's population which is female.

# Appendix II: Variable Summary Statistics

	5				
	Count	Mean	SD	Min	Max
RWP	1286	7.150	6.521	0.101	35.46
MANUFACT	1281	19.54	8.426	1.768	50.89
ΔMANUFACT	1264	-0.431	1.441	-8.583	4.556
WHITECOLLAR	1281	13.70	4.521	5.789	36.10
ΔWHITECOLLAR	1264	0.811	1.257	-5.485	8.646
WEALTHINEQ	1281	99.65	41.47	44.50	505.8
GROWTHINEQ	1264	0.786	7.528	-45.61	48.79
EMPPOP	1262	77.62	21.22	38.28	200.6
ΔΕΜΡΡΟΡ	1262	0.475	1.144	-5.627	7.685
FOREIGN	1253	8.476	7.428	0.617	126.3
ΔFOREIGN	1218	1.376	2.226	-30.23	26.28
OVER65	1267	20.73	2.541	11.84	29.91
FEMALE	1256	50.84	0.710	48.60	53.74

# Table 6: Variable Summary Statistics