



BI Norwegian Business School - campus Oslo

GRA 19502

Master Thesis

Component of continuous assessment: Thesis Master of Science

Immigration, welfare generosity and electoral preferences:
An empirical study of Yugoslavian immigrants in Norway

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Start: 02.03.2017 09.00

Finish: 01.09.2017 12.00

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Study program:
Master of Science in Business,
Major in Economics

Date of submission:
01.09.2017

"This thesis is a part of the MSc programme at BI Norwegian Business School.
The school takes no responsibility for the methods used, results found and
conclusions drawn."

Abstract

Does immigration reduce natives' support for the welfare state? Immigration is a growing source of ethnic heterogeneity, which is said to change individual attitudes towards redistributive public spending. This paper exploits municipal-level variations in Yugoslavian immigrants to estimate the causal effects on welfare generosity and electoral preferences in Norway (1990-2003). The analysis is performed by using fixed effect regression models on a balanced panel data of 394 municipalities. The results indicate that a higher share of Yugoslavians in Norway is associated with higher welfare generosity and lower vote share for left-wing parties. In contrast to previous studies, there is little indication of a cost constraint from higher welfare use or a negative shift in native's preference for redistribution from a higher share of Yugoslavians. The observed positive effect on welfare generosity does not seem to be driven by the political arena as support for left-wing parties and more redistribution is estimated to reduce, but rather from higher welfare spending in municipalities where welfare needs are high. Ultimately, the study give insight on how relatively high-skilled immigrants affect welfare support through redistributive spending and voting attitudes.

Acknowledgments

This thesis contains the final requirement to graduate with an MSc in Business from BI Norwegian Business School. I would like to thank my supervisor, Jon H. Fiva, for excellent advice and contribution to this study. I really appreciate his availability and encouragement along the way and for providing data from his own 'Local Government Dataset'. Finally, I would like to express my gratitude to my fellow students, friends and family for their support throughout this challenging and rewarding process.

Oslo, 01.09.2017

Hedda Struve Jarlsby

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1.0 Introduction

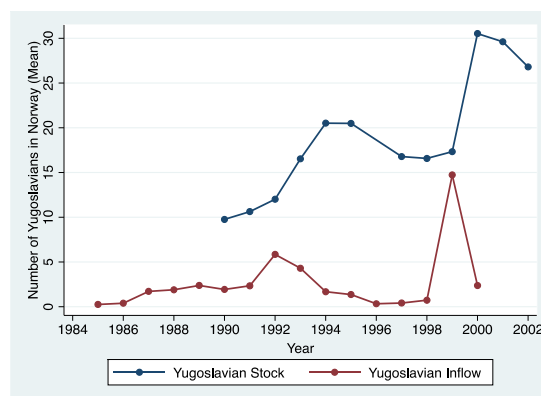
There has been a wide discussion of how immigrants affect the Norwegian welfare system, where some argue that the group of people might be a solution to the aging population, while others argue that immigrants undermine public support for social policy (Brady & Finnigan, 2014). Historically, the Norwegian population has been extremely homogeneous in terms of ethnicity and language. A noteworthy paper by Alesina & Glaeser (2004) compared the welfare system in USA and Europe, and argued that Europe has more generous welfare states partly because of ethnic homogeneity. In the recent years, Europe have been challenged by a global refugee crisis which have changes the ethnic compositions in many countries. In terms of welfare expenditure, the refugees tend to have a less favorable fiscal position and a higher dependency on benefits than the native-born. Further, increased ethnic diversity is said to affect individual attitudes and political preferences. Many international studies have shown that large density of immigration correlates with a preference for less welfare spending (Alesina & Glaeser 2004; Jofre-Monseny et al., 2016; Dahlberg & Edmark, 2012; Orr, 1976). In Norway, the percentage of foreign-born have grown substantially over the years, and today the foreign-born make up about 17 per cent of the population (SSB, 2017). Also, there has been an increased trend in support for anti-immigrant, right-wing parties over the years (Sørensen 2016). The growing source of ethnic heterogeneity and the ensuing anti-immigrant sentiments is said to be an explanatory factor for the level on public support for social policy and redistribution in Norway.

The aim of this study is to construct an empirical analysis on how welfare generosity and vote share for left-wing parties responded to the Yugoslavian immigration shock in the 1990s. How did welfare expenditure respond to changes in Yugoslavians per capita during this period? How did policymaker's react to the comprehensive impact and did it spill over to the electoral arena? I study Yugoslavian immigrants since they were one of the largest first-generation immigrants in Norway in the 1990s (Østby, 2002). To my knowledge, there is no existing literature that examines the causal effect using this particular group

of immigrants in Norway. I use regression analysis of a balanced panel data on 394 Norwegian municipalities and will estimate the effect by using fixed effects regressions. The cost-constraints and policy decision concerning immigration and welfare generosity in municipalities are expected to be an important factor of the causal relationship to be estimated, and is therefore of importance in this study. One should be aware that the characteristics of Yugoslavians can be different to other immigrants in terms of demographics, skills, motivation for departing their home countries and the likelihood that they will establish long-term residence in Norway. The significance of using Yugoslavians in this analysis can give insight on how relatively high-skilled immigrants effect redistributive spending and voting attitudes in Norwegian municipalities.

I will exploit the municipal-level variations in the Yugoslavian immigrants to estimate the causal effect on welfare generosity and electoral preference. The place of residence for the Yugoslavian immigrant where generally determined by controlled settlement, which implied that they were subject to severe restrictions in terms of settlement options in Norway (Djuve & Kavli, 2000; Valenta & Bunar, 2010). The refugee placement policy creates a unique natural experiment and is used in several studies to capture similar effects (Edin et al., 2003; Fredriksson & Åslund, 2003; Sørensen, 2016). Figure 1 below show an overview of the Yugoslavian stock and inflow measured as the average share across Norwegian municipalities. There is indication of fluctuation in both the stock and inflow of Yugoslavian immigrants, where the migrants both came and left.

Figure 1: Yugoslavians in Norway (stock and inflow)



Source: NSD's regional database

The first strain of literature motivating this paper is from immigration and the level of welfare generosity, while the second strain of literature is immigration and electoral preferences. Existing literature suggest that immigration might reduce welfare generosity by two different channels: Firstly, immigration increases ethnic heterogeneity, which may reduce the desire to redistribute income (Alesina & Glaseaer, 2004; Dahlberg et al., 2012; Orr, 1976). Secondly, immigration increases the pool of welfare dependent residents, which increase the fiscal burden in the receiving municipality (Razin, 2011; Razin et al., 2002). The studies exploit exogenous variation in municipal density induced by a refugee placement program or by adopting instrumental variables to address potential endogenous location of immigrants. More recent literatures argue that the effect can be the opposite, where immigrants are correlated with higher support for social policy and redistribution (Svallfors, 1997; Finseraas, 2008; Brandly & Finnigan, 2014). This mechanism is called the *compensation hypothesis* and states that people demand protection against the risks associated with immigration. These studies suggest that the citizens prefer strong welfare programs to compensate from the perceived economic competition and insecurity resulting from high immigration. My study aims to add results to the existing literature by analysing how welfare generosity in Norwegian municipalities are affected by higher share of Yugoslavian immigrants.

Immigration and ethnic diversity is said to have important effects on policy outcomes by changing voters' political attitudes and voting behavior. In general, previous studies claim that high density of immigrants and racial heterogeneity create a shift in the political support from left-wing parties toward right-wing parties (Harmon, 2017). In Norway and Austria, studies confirm that support for the right-wing parties (The Progress Party/The Freedom Party of Austria) tended to increase with low-skilled immigrants from non-western countries (Sørensen, 2016; Halla et al., 2017). The observed effect is claimed to arise from perceived labor market competition and lower quality of neighborhoods when ethnic diversity increase. The study from Norway finds a non-linear effects of immigration on electoral preference, where cultural anxiety tend to increase when the first group of immigrants arrive, but further immigration have little relation to voter attitudes (Sørensen, 2016). My study will be complementary to

existing literature by studying to which extent support for the Norwegian left-wing parties (socialistic parties) are affected from the presence of Yugoslavian immigrants.

Regardless of many studies on the field, are there huge variations in methods and identification strategies used to estimate the causal effect between immigration, welfare generosity and electoral preferences. In general, the empirical literature on Yugoslavians in Norway has minor devotion. This paper purposes to contribute to filling that gap. The results from the analysis have potential to influence public attributes in this area and could inform further policy considering welfare generosity for immigrants. I will exclusively look at the expenditure side when measuring the fiscal impact of immigration to limit the scope of the study. To create constancy in classification of the Yugoslavian foreign-born, I will label the group as *Yugoslavians immigrants* in my study, even though most of the immigrants were characterized as refugees at the time.

1.1 Research question

I use exogenous variation in the concentration of Yugoslavians in Norwegian municipalities to identify the effect of welfare generosity and electoral preference during the 1990s. Thus, my research question is defined as follows:

“What is the causal effect of increased density of Yugoslavians on welfare generosity and electoral preferences in Norway?”

Based on existing literature, *hypothesis 1* suggests that increased Yugoslavian density will decrease welfare generosity per capita. The reasoning behind this hypothesis is that the increased Yugoslavian settlement will increase ethnic differences in a municipality, which in turn increase the cost of redistribution and reduce preference for income distribution. In addition, a higher pool of welfare dependent citizens creates fiscal constraints in certain municipalities. With regards to immigration and electoral preference, *hypothesis 2* states that increased density of Yugoslavians tends to decrease vote share for left-wing parties in Norway. The hypothesis is based on existing literature, which claim that ethnic diversity make individual in more favor of anti-immigrant parties.

Hypothesis 1 is not supported in this study, as there is no significant evidence of a negative relationship between Yugoslavian immigrants and welfare generosity, even when controlling for several municipality-specific features. In fact, the estimated coefficients show that increased density of Yugoslavians tends to *increase* the welfare benefit norm and social spending per capita. These findings contradict with previous studies, as there is no indication of a reduction in preference for income distribution or redistributive public spending from higher density of Yugoslavians. Further, my empirical analysis support *hypothesis 2*, as result shows a negative and significant effect from a higher share of Yugoslavian immigrants on preference for left-wing parties. There is little indication that the shift in electoral preference is reflected in the welfare generosities in this study. Results are discussed more in detail later in the paper.

This study proceeds as follows: In section II I discuss the background of the settlement of Yugoslavian immigrants and the institutional setting in Norway. Section III will cover a description of the data used in this empirical study, while section IV will be a description of the empirical methodology and identification strategy used. In Section V, I will cover results from the analysis follow by an implication of them. Lastly, section VI provides a conclusion of the study.

Section II

2.0 Background

In order to better understand the channels through which immigration affect welfare generosity and political attitudes, it is useful to review the Norwegian integration process of immigrants from Yugoslavia in the 1990s. The fiscal framework and election system and voting rights during the period is also covered.

2.1 Settlement and integration of Yugoslavian immigrants

The social welfare system is an important feature of the Norwegian inhabitant's education, health care and standard of living. The labor immigration in the 1960s together with the refugee and family reunion at that time created the baseline for the integration policy in Norway (Tronstad, 2014). The aim of the integration policy was to enable newly arrived refugees to participate in the labor market and society. In the 1990s, Norway developed an integration policy that heightened the focus on economic integration and anti-discrimination (governmental proposal on refugee policy: St. meld 17: 1994/1995). In order to integrate the immigrants, the government created introductory programs, which included language training and information about the Norwegian society (IMDi, 1999). The reliance on economic assistance and state sponsored language training was provided to the immigrants with the purpose of creating higher participation in the Norwegian society. Over time, the aim was to make the immigrants financially independent from welfare benefits (Justis- og beredskapsdepartementet 2015-2016).

During the 1990s, most of the Yugoslavian immigrants were characterized as refugees due to the resolution of the former republic of Yugoslavia. Refugees, which consist of several ethnic and religious minorities, are described as persons who have fled their homeland due to conflict and shall be protected by international law (UN, 2016). This massive flow of immigrants was primarily a heavy burden on countries neighboring the conflict zone; but also a challenge to a number of European and Nordic countries. The large number of people who

needed protection challenged the Nordic welfare model, as the immigrants perceived the states integration policies as attractive. It is argued that the war in former Yugoslavia was the beginning on the pressure on effective integration processes in Europe (Brochmann & Hagelund, 2011). The place of residence for the Yugoslavian immigrants where determined by “controlled settlement” which implied that they were subject to severe restrictions in terms of settlement options in Norway. The policy was a way to hamper concentration in metropolitan areas, but also as a strategy to accelerate integration and discourage the emergence of socially segregated communities (Djuve & Kavli, 2000; Valenta & Bunar, 2008). According to the Introduction Act, (Lov 2003-07-04 nr. 80: Introduksjonsloven), all Norwegian municipalities which have received refugees had to set up local introductory programs. The municipalities were free to decide how the introduction programs were organized and the people given responsibility of implementation (Tronstad, 2014). As a result, there was a large variation in the quality of offered programs as well as the individual needs varied a lot. The immigrants had an opportunity to decline the offered integration program and settle in some other place, but then they may lose state sponsored housing assistance and other forms of integration assistance through the introduction programs. In other words, they were able to resettle wherever they want, but if they declined the offered settlement placement by the Norwegian authorities, they have to rely on their own resources and income (Tronstad, 2014).

For the Yugoslavian migrants, there was established a Temporary Protection Scheme (TP-scheme) in Norway (Østby, 2016). The TP-scheme was based on the belief that the refugees should return to their home country after the war when the situation in their home country had been stabilized. Norway gave a residence permit based on the general criteria of protection. The TP-scheme also gave suspension of asylum processing for respectively two and three years (Vedsted-Hansen et al., 1999). Furthermore, it was demanded an absolute minimum of social assistance under the TP-scheme. The social benefits covered fundamental rights which consist of (1) the basic necessities of life including food, shelter and (2) basic sanitary and health facilities. In 1996 the Norwegian government decided that Bosnian refugees (classified as Yugoslavian population

at the time) should be considered and offered permanent residency (Østby, 2016). This resulted in a high level of Bosnian became Norwegian citizens. In 2007, it was estimated that the Yugoslavians amounted to a total of 27,500 first generation immigrants (Dzamarija, 2017). Statistics show that the main inflow of refugees Yugoslavia stopped in 2009. Today, the Bosnians (the largest group from former Yugoslavia) is relatively spread around Norway, and located in 278 of the country's 428 municipalities (Dzamarija, 2017). The level of education and employment rate among Bosnians is estimated to be equal to the native Norwegians. Hence, the adaptation of Bosnian into the Norwegian society is perceived to be a successful integration process.

2.2 Fiscal framework

In order to discuss reasons for variation in welfare generosity, I will outline the fiscal framework of Norwegian municipalities. The public sector is divided in three tiers; the central government, the county governments, and the municipal governments (Borge, 2010). The 19 counties and the 435 municipalities constitute the local public sector, and are responsible for implementing national welfare policies. Thus, the government is described as a redistributive mechanism for transferring resources between groups in society. Despite the huge variation in population size, all municipalities have the same responsibilities related to welfare service for the residents (Borge, 2010). The municipal and county governments are mainly financed by governmental transfers, taxes and fees. In 1990, the main sources of revenues for Norwegian municipalities were tax revenues¹ (43%), general grants (24%), earmarked grants (14%), and user charges/fees (14%) (SSB, 1998).

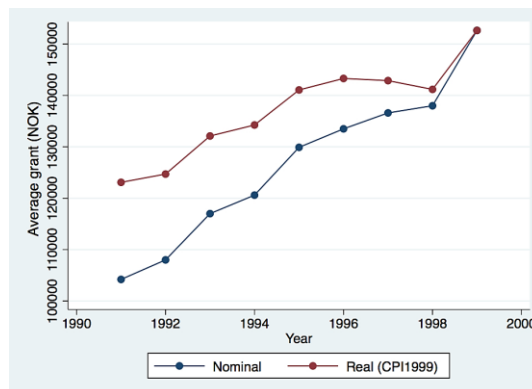
Tax revenues and general grant are described as *unrestricted/free revenues*, and account for almost 2/3 of the total revenues. Municipalities are free to use these revenues with no restrictions apart from what is regulated in applicable laws and regulations (One municipality may give education a high priority, while another prioritizes healthcare). The unrestricted income provides the local government

¹ Tax revenues are a collective term for income tax, property tax, wealth tax and natural recourses.

with extra funding where local politicians have greater flexibility to pursue targeted spending programs. Hence, the variation in unrestricted revenues can explain variation in various welfare services offered in Norwegian municipalities.

The earmarked grants are mainly the governmental funding given to municipalities for handling and taken care of immigrants (IMDi, 1999). The grants were first introduced in 1991 by IMDi and were given yearly for 5 years for every settled refugee. The aim of the grant scheme was to cover the average expenditure on settlement, as well as cover the administration costs concerning the refugees (Kommunaldepartementet: Beregningsutvalget, 2000). A comparison over the given grants from 1991 to 2002 show that the governmental transfers to municipalities was largest for refugees that have recently settled (See Appendix, Table A7 and figure A10). The same figure/table show that over years, integration grants have increased and become more evenly distributed over the 5 cohorts. The figure below (Figure 2) shows the average grant given per refugee per year between 1991 and 2000. The figure suggest that there was a real increase in average grants from 1991-1996, whilst there is a small decline in average grants from 1996-1998.

Figure 2: Average grant per refugee (1991-1999)

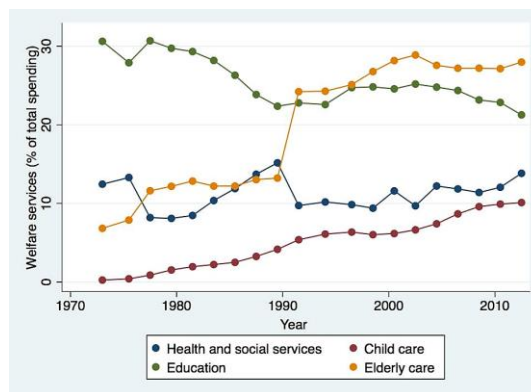


Source: Beregningsutvalget (2001)

With regards to the municipality’s operating expenses, it is evident that welfare services within the social sectors account for a large bulk of the total expenditures (Borge, 2016). Since the municipalities have several other expenses than social welfare to cover, all functions will compete against each other over the municipal budget. Local authorities can in principle allocate

resources to the sectors they choose to prioritize. Health and social expenditures, education, childcare and care for elderly and disabled are one of the main local government responsibilities, which account for about 70 percent of total spending in 2010 (Figure 3). The remaining percent is spent on culture, transport (roads and infrastructure), central administration and “other purposes” (Fiva et al., 2017). From the figure below, it seem to be a fairly stable percentage usage on health and social services during the 1990s. All other welfare programs seem to increase or have unchanged percentage share of the total expenditure. Hence, there is no indication the increased integration expenditure on Yugoslavian immigrants affected the aggregated usage on health and services away from other welfare programs.

Figure 3: Percentage of total spending on different welfare services



Source: Fiva, Halse and Natvik (2015)

2.3 Election system and voting rights

The political system in Norway is based on the proportional representation on the local council and in the national parliament, and has a system of staggered elections (Sørensen, 2016). The main political cleavage in Norway goes between the left-wing socialists and the right-wing conservative. The national and local elections are held every fourth year but at an interval of two years between them. The electoral system is an open-list proportional system with one election district per municipality (Fiva & Rattsø, 2006). People who are eligible to vote are registered in the national population register (*folkeregisteret*). Only Norwegian citizens can vote in the national elections, but foreign nationals can vote in local elections (municipal and county council elections) after residing legally in the

country for at least three years (Sørensen, 2016). The aim was to facilitate the integration of immigrants into our democratic political processes and institutions. Consequently, the Yugoslavian immigrants can get involved in local politics after 3 years of legal residence and could influence the electoral outcome. One intuitive mechanism is that more Yugoslavian immigrants with low income would have a left-oriented voting pattern. The left-oriented voting pattern can also be a collective idea that the parties to the left are defenders of the minorities (Bjørklund & Bergh, 2013). History shows that there is a low turnout among immigrant voters at general election in Norway and it is documented that immigrants from the former Yugoslavia have one of the lowest vote-turnouts in Norway (Kleven & Aalandslid, 2017). This indicates that Yugoslavians had relatively low impact on local politics and is most likely not the main drivers of the vote-support during the 1990s.

Section III

3.0 Data description

This study is an empirical analysis using quantitative data to estimate the causal effect of interest. I will use a balanced panel data of 394 municipalities (kommuner) over the relevant period². All of the data contains aggregated data in each municipality over each year³. The data is gathered from two main sources: *Norwegian Centre for Research Data* (NSD Norway)⁴ and from the *Local Government Dataset*, by Fiva, Halse and Natvik (2015). The data from NSD, as well as some additional variables, are merged on the *Local Government Dataset*. Overall, the dataset used in this study contains in variables of socio-economic status, number of Yugoslavian immigrants, measures of welfare generosities and characteristics of the political system in Norway⁵. In the section below I will give a closer description of the main variables of interest.

3.1 Yugoslavians per capita

In my thesis I will use *Yugoslavians per capita* as the main independent variable. The variable is defined as:

$$Yugoslavians\ per\ capita_{i,t} = \frac{Yugoslavian\ stock_{i,t}}{Population_{i,t}}$$

The variable is considered to measure the variation of Yugoslavian inhabitants as a part of the population size in each municipality (i) over time (t). The measure can alternatively be a measure of the density/visibility of Yugoslavians in Norwegian municipalities. The variable Yugoslavians per capita is cover the period 1990-2002⁶. Below is a boxplot of the change of Yugoslavians per capita I Norway, in terms of both stock and inflow. The height of the boxes and the length of the whiskers is an indication of the variability within the municipalities

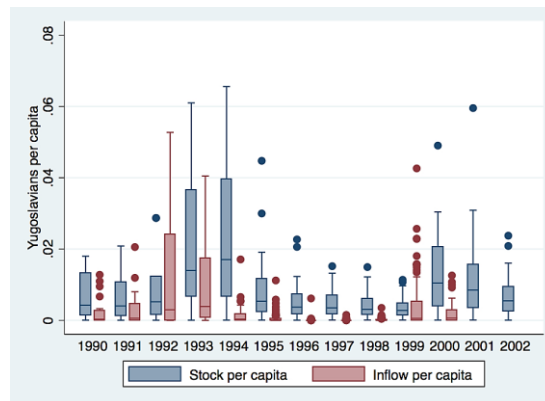
²Some municipalities were excluded due to missing observations

³ The dataset covers data on Norwegian local governments from 1972 to 2015, while data from NSD range from 1985 until 2004

⁴ "(Part of) The data used in this publication are obtained from the *Norsk samfunnsvitenskapelig datatjenestes kommunedatabase*. NSD is not responsible for the analysis of the data or for the interpretations made in this study."

⁵ For a detailed description of the data sample and its sources, see Appendix, Table A5: Description of variables

⁶ It should be noted that there are no observations for the stock of Yugoslavians in year 1996, so the observations is set manually as an average between values of 1995 and 1997. This issue is also commented in section VI – Limitations.

Figure 4: Yugoslavians per capita (1990-2002)

Source: NSD's regional database

Figure 4 shows that the distribution of Yugoslavian per capita is positively skewed over the sample. Both the size and variability in the data seems to be highest in the years of 1993 and 1994. The explanation of the variability in data during this period is arguably due to the war in former Yugoslavia at the time, which created a large flow of Yugoslavians immigrants to Norway (Østby, 2016). The increase in 2000 and 2001 would be due to strong arrival of Kosovo-Albanian immigrants from the war in Kosovo (Østby, 2016). The reduction in density of Yugoslavians during 1994-1998 is likely Yugoslavians that chose to leave Norway and return home. One question that arises from these observations is: Did people believe the Yugoslavians would stay? And if so, what are the implications for welfare spending? Native-born residents may view long-term immigrant residents differently than sudden influxes of short-term immigrants, resulting in adverse effects from Yugoslavian stock and inflow. This issue will be highlighted in sensitivity analysis later in the study. A graphical overview of Yugoslavian immigrants as a proportion of the total population shows that there is a positive relationship between Yugoslavian immigrants and population size (Appendix, Figure A11). Results suggest that immigrants tend to settle down in the municipalities with high population, and could be a result of higher welfare generosities and labor opportunities in the large cities. However, by excluding Oslo as observations, the relationship is not that proponent, and indicates that the dispersal policy created some sort of exogenous allocation of the immigrants independent of municipality size.

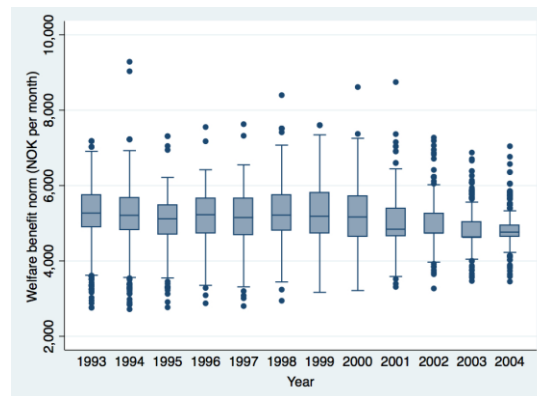
3.2 Welfare generosity

There are several potential candidates for measuring the level of welfare generosity of a municipality (Dahlberg & Edmark, 2008). In this study I will focus on the different measure on welfare generosity per capita since it constitutes an important redistributive spending component of local governments. I will in my analysis mainly look at two measures on welfare generosity motivated from previous studies (Fiva & Rattsø 2006; Dahlberg & Edmark, 2008). These measures are defined as: *welfare benefit norm* and *social assistance per capita*. The first measure regulates the amount of benefits that a person is entitled to, while the other reflects the actual spending of welfare generosity. The welfare benefits norm is correlated with welfare policy and preference of such goods and serve therefore as proxy for how immigration affect the political aspect of welfare generosity. The second variable (social assistance per capita) measure to what degree economic expenditure is affected, and can tell us something about the municipality's economic situation and the degree of recourses used on welfare recipients. All variables regarding welfare expenditure are deflated using a CPI (2011)⁷

3.2.1 Welfare benefit norm

I use a politically determined norm to measure level of welfare generosity in the Norwegian municipalities. The variable is defined as *welfare benefit norm* and measures an amount paid to a 'standard user' per month. The variable is collected from Fiva (2009), and range from 1993 to 2004. The norm is set as guidelines by a local council and reflects the preference of the politicians and is independent of actual individual social needs (Fiva & Rattsø, 2006). Changes in the measure of welfare benefit norm can be interpreted as changes in demand for redistributive public spending as a low norm can be a consequence of lack in demand for natives redistributive public spending. The welfare benefit norm is likely to be the most visible measure of welfare policy from the perspective of potential welfare immigrants (Fiva 2009).

⁷ Based on deflated series in the "Local government dataset"

Figure 5: Welfare benefit norm per recipient (1993-2004)

Source: Fiva (2009)

The politically determined norm has significant variation locally, as shown in the boxplot above (Figure 5), where there is a large spread in the data over several years. On average, the welfare benefits declined in real terms in the period under study. The contraction effect after 2000 is likely due to the implementation of the national instructive norm in 2001, which is described in Fiva (2009). Since housing costs are excluded from the measurement, the observed measurement of welfare benefits is not due to differences in living costs

3.2.2 Social assistance per capita

The second measure on welfare generosity in my study is social assistance expenditure per capita. The variable social assistance covers the period 1991-2000 and is collected from NSDs regional database. The variable includes social assistance under the law on social care, social assistance to refugees, asylum seekers and persons with residence grants on humanitarian grounds⁸. Social assistance per capita as a measure of welfare benefits is defined as:

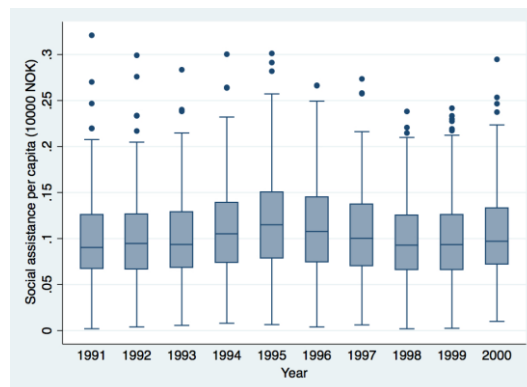
$$\text{Social assistance per capita}_{i,t} = \frac{\text{Social assistance (NOK)}_{i,t}}{\text{Population}_{i,t}}$$

The variable is measured in 10000 NOK. This measure will represent the relative burden on each citizen for offering social assistance to the Yugoslavian immigrants as it can be interpreted as a shift in the priority of redistribution. However, one should note that a change in the variable is not exactly measuring

⁸ Description of variables in Appendix 1

how welfare expenditure responds to Yugoslavian immigrants, but rather the redistribution of welfare. The figure below (figure 6) shows the social assistance per capita over the estimated period. There is a fairly stable expenditure pattern, with a small indication of an average increase in the nine year period. There is indication of variation in social assistance across municipalities. Except from a few outliers in the sample, the level of social assistance seem to be evenly distributed across municipalities over the period.

Figure 6: Social assistance per capita (1991-2000)



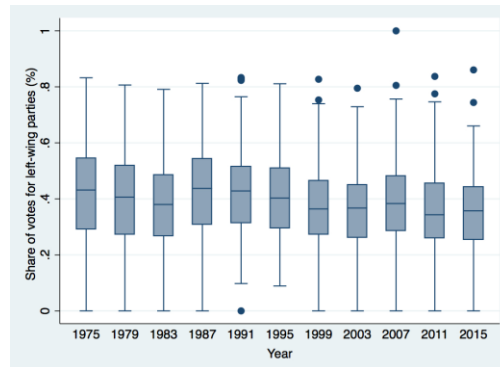
Source: NSD's regional database

3.3 Electoral preferences

Changes in political have shown to be of importance when explaining variation in welfare generosity and immigration. Based on the previous findings, it can be reasoned that welfare generosity can to some degree be politically determined. This is a motivation to examine how Yugoslavian immigrant's spills over to the electoral arena.. I will use local election data from the period (1975-2015) collected from the *Local Government Dataset* (Fiva et al., 2015). I will mainly focus on the vote support for left-wing parties as measure of changes in electoral preferences. The reason for this measure is that left-wing parties are known for it's pro-migration view thought to have a greater wish for redistribution and an increased support for social security. The variable is denoted as *VoteShareLeft* and measure the vote shares for left-wing parties in the local election, held every fourth year. The variable is a joint share of votes received by Red Electoral Alliance (RV), The Socialist Left Party (SV) and the The Norwegian Labour Party (DNA). The effect from changes in the density of Yugoslavian immigrants on *VoteShareLeft* can be interpreted as changes in

preference for social policy and demand for redistribution. Below, there is a graph of the share of votes for the left-wing parties over time. On average, the vote share for left-wing parties show signs of a small decline from 1975 to 2015, but the variability in vote shares are considered large across local governments.

Figure 7: Vote share left-wing parties (local election)



Source: Fiva et al. (2015): Local Government Dataset

Since the Yugoslavian refugees is small compared to the population size, and have restricted right to vote, we assume that the native voters are the main driving force for the voting shares and that Yugoslavians does not directly affect the composition of the electorate.

3.4 Descriptive statistics

In Table 1 below, there is an overview of the descriptive statistic for the main variables used in this study. The statistics is based on a pooled sample of all observations in the period 1972-2015. All variables and their period of estimation is described in Appendix, Table A5

Table 1: Descriptive statistics

Variable	N	Mean	Std. Dev.	Min	Max
Welfare generosity					
Social assistance per capita (10.000 NOK)	3,848	0.0820471	0.044889	0	0.3208956
Welfare benefit norm (NOK per recipient)	4,498	5027.72	715.6582	2718.677	9285.501
Yugoslavian immigrants					
Yugoslavian stock (per capita)	5,122	0.0013492	0.0036735	0	0.0656009
Yugoslavian inflow (per capita)	6,304	0.0003828	0.0027145	0	0.1053241
Municipality features					
Population	16,942	9876.256	30072.69	209	634463
Women (%)	16,942	0.493947	0.0115228	0.4123711	0.5370804
Children (%)	16,942	0.0870408	0.0206362	0.0317757	0.1942461
Young (%)	16,942	0.1347192	0.0213615	0.0576714	0.211017
Elderly (%)	16,942	0.1582518	0.039106	0.0456591	0.2981192
Unemployment (%)	16,154	0.0208857	0.0136986	0	0.1293588
Elections					
Vote Share left-wing parties (%)	17,320	0.3883121	0.1501374	0	1
Vote Share DNA (%)	17,320	0.3329877	0.1322219	0	0.7843602
Vote Share SV (%)	17,320	0.0491861	0.0525547	0	0.45
Vote Share H (%)	17,320	0.152314	0.100438	0	0.5682181
Vote Share FRP (%)	17,320	0.0506471	0.0721743	0	0.4929809
Other fiscal variables					
Unrestricted revenues per capita (10.000 NOK)	3,848	3.079705	1.093215	1.672664	15.82359
Hydropower revenues per capita (10.000 NOK)	3,848	0.0873981	0.0536653	0	0.5045845
Share on health and social services (% of total spending)	16,443	11.17484	5.022857	0.8664601	47.47655

Note: The table summarize the descriptive statistics for the variables of interest. All budget variables are expressed in NOK 2011. Variables vary in time over the period 1972-2015. All variables cover the period 1993-2000. See Appendix, Table A6 for mean and standard deviation between 1990-2001 for the variables of main interest.

For the dependent variables in the sample, the average social assistance per capita was NOK 820,4 with a standard variation of NOK 448,9. The average welfare benefit norm to a single-person household was NOK 5027 per month, ranging from NOK 2719 to NOK 9285. Both measures indicate that there is substantial variation in welfare generosity offered across Norwegian municipalities over the studied period. The Yugoslavian stock per capita is estimated to be an average of 0,001349. As expected, the Yugoslavians are a small proportion of the total population. However, the average standard deviation is estimated to be 0,00367. This indicates a considerable variation on the Yugoslavian density across municipalities (This is also shown in figure 4 in section 3.1). Table A6 in Appendix provides the yearly average values across the period 1990-2001 for the variables of primary interest. The table report substantial cross-section variation across Norwegian municipalities, both in welfare generosity and Yugoslavians. The table also reports a decreasing mean and spread in vote-support for left-wing parties from 1990-2001. The two measurements of welfare generosity are only slightly correlated, with a

coefficient of -0.0986 (Appendix, table A8). This indicates that the norm does not perfectly cover the social needs, and there are separable effects from the two measures.

Section IV

4.0 Methods

In order to have a sensible analysis of the Yugoslavian immigration effect on welfare generosity and electoral preferences, I will use a fixed effects regression model based on OLS methods. My identification strategy in this study rests on the idea that higher density of Yugoslavians in period (t) will tend to effect welfare generosity the next period (t+1). This is based on the belief of a delay in welfare offers after settlement for the immigrants. I will assume that there is a one-year lag from immigration and election outcomes as well. As previous theory suggests, changes in welfare generosity per capita can be caused by changes in preference for redistributive spending or due to fiscal constraints in municipalities. As for the causal relationship between immigrants and electoral preferences, ethnic heterogeneity might affect voters' political attitudes regarding redistribution. Hence, the aim will be to compare different outcomes within Norwegian municipalities over time to capture the causal relationship between Yugoslavian density, welfare generosity and electoral preferences.

4.1 Model specification

I will estimate the relationship by using fixed effects regression by exploiting municipality-level variation over time. In this study I will control for time-varying observable characteristics across municipalities to reduce omitted variable biases. The standard errors are clustered to solve problems of intra-group correlation and serial correlation in municipalities over time (Wooldridge 2003). The estimates is based on the baseline models:

Model 1: Effect on welfare generosity

$$WG_{i,t} = \alpha_i + \gamma_t + \beta \left(\frac{Yugoi,t-1}{Pop_{i,t-1}} \right) + u_{i,t} \quad (1)$$

$WG_{i,t}$ is denoted as welfare generosity in municipality (i) in time (t), and represents two measurements: social assistance per capita and welfare benefit norm. In order to address potential biases, I have included time fixed effects as well as municipal fixed effects, denoted α_i and γ_t . The municipality-fixed effects will control for time-invariant unobservable heterogeneity, while the time-fixed effect will pick up unobserved effects that affect all local municipalities similarly (Dahlberg & Edmark, 2008). u_{it} is the error term. I have included a 1-year lag for the Yugoslavian density measure defined as the stock of Yugoslavian immigrants “*Yugo*”, over the municipality population “*pop*”. The lagging of the independent variables also serves as a strategy where I exploit the timing between the variables of interest. β will be the variable of interest as it measures how much an increase in Yugoslavians per capita in period t-1 will affect welfare generosity in period t.⁹

Ultimately, model (1) is the municipality-specific variation in Yugoslavian immigration and welfare generosity over time. The hypothesis of the model is stated as follows: *Hypothesis 1: An increased share of Yugoslavians will lead to lower welfare generosity per capita.* This hypothesis suggest that $\beta < 0$. This hypothesis is bases on previous studies from (Alesina & Glaseaer, 2004; Jofre-Monseny et al., 2016) where immigration is said to increase ethnic heterogeneity, which reduce the preferences for income redistribution. In addition, it will create a higher fiscal burden in the receiving municipality, which might also be an explication of lower benefits per capita (Razin, 2011; Wadensjö & Orrje, 2002). High density of Yugoslavians can potentially lead to greater social and/or cultural distances between citizens, which may weaken the motivation of citizens and politicians to allocate money to redistributive measures such as welfare. If results suggest that $\beta > 0$, then increased share of Yugoslavian immigrants is associated with higher welfare generosity per capita. This result be justified by the fact that when more people need help, demand for welfare goes up, and welfare generosity increase. In addition, immigration could

⁹ I examine other leads and lags (dynamic model) in Section V, Sensitivity analysis.

create intensives for strong welfare programs and demand for redistribution to compensate from the perceived of one's risk for unemployment and insecurity (Svallfors, 1997; Finseraas, 2008).

The hypothesis is based on the assumption that the refugees stay in the municipality they are assigned to and social assistance is given to people living in the respective municipality. We assume that if immigrant move to another municipality or country have no claim to social welfare benefits. Figure 4 in section 3.1 show that there is a noteworthy reduction in Yugoslavians per capita during 1995-1999. If a proportion of Yugoslavian immigrants chose to leave, we would expect that demand and offer for welfare generosity will decrease as well.

Model 2: Effect on electoral preferences

$$VoteShareLeft_{i,t} = \alpha_i + \gamma_t + \beta \left(\frac{Yugo_{i,t-1}}{Pop_{i,t-1}} \right) + u_{i,t} \quad (2)$$

Vote share for left-wing parties is denoted as *VoteShareLeft* in model (2). This model specification serve as an extension of the baseline model as it looks at the effect from the Yugoslavian immigration shock on the electoral preferences for left-wing parties. The model has exactly the same specifications as baseline model, except from the change in dependent variable. The hypothesis is expressed as follows: *Hypothesis 2: An increased share of Yugoslavians will lead to lower support for left-wing parties.* This implies that $\beta < 0$, where an increased share of Yugoslavians municipalities will tend lower share of votes for left-wing parties. This hypothesis is based on previous studies on immigration and electoral preferences where ethnic heterogeneity decreases voters' support for redistribution and shifts the political support from left-wing parties toward right-wing parties. (Sørensen, 2016; Halla et al., 2017; Harmon, 2017). To add robustness to the results, I will also look at the effect on vote share on certain parties motivated from their ideologies towards immigration and redistribution.

4.2 Control variables

Empirical research has found social characteristics to be important determinants for welfare generosity. To capture the causal relationship, I need to control for other municipality-specific features. This model is an extension of the baseline-model and defined as:

$$WG_{i,t} = \alpha_i + \gamma_t + \beta \left(\frac{Yugo_{i,t-1}}{Pop_{i,t-1}} \right) + \Phi x'_{i,t} + u_{i,t} \quad (3)$$

$$VoteShareLeft_{i,t} = \alpha_i + \gamma_t + \beta \left(\frac{Yugo_{i,t-1}}{Pop_{i,t-1}} \right) + \Phi x'_{i,t} + u_{i,t} \quad (4)$$

$x'_{i,t}$ is the new included term and reflects the set of control variables. The control variables included in this analysis have the purpose of including differences between municipalities that are not captured by the fixed effect model. $\Phi x'_{i,t}$ reflects contemporaneous changes in control variables capturing differences in expenditure needs and welfare attitudes across municipalities. Even though controlling for more covariates tend to increase the likelihood that regression estimates have a causal interpretation it is important to distinguishing between *good and bad controls* (Angrist & Pischke, 2009). In this analysis, including a control that in practice could serve as an outcome variable in the model is described as *bad control*. If bad controls are included in the analysis, a comparison of Yugoslavians per capita conditional on welfare generosity or vote shares does not have a correct causal interpretation. Thus, we would do better to only control for variables that are not themselves caused by increase of the Yugoslavian stock.

Variables concerning demographic and socio-economic differences in municipalities are determined to be a good control, as it does not directly vary with the Yugoslavian stock. The age distribution of the population represents differences in demand for local welfare services to different age-groups. As a result, I will include *share of children, young and elderly* as controls. The size of the population in the municipalities may influence costs and preferences for welfare and will be controlled for by using the log of the population; *logpop*. A control for gender is included by controlling for the *share of women* in the respective municipalities'. Further, the *share of unemployed* is included to control for the level of demand for welfare. In order to describe the unemployment rate as a good control in this case, I will assume that Yugoslavian

immigrants are not the main drivers of the unemployment rate. The control variables mentioned above reflect the difference in social service needs in municipalities, and are believed to be determined before the variable of interest and therefore serve as good controls in this study.

4.3 Selection bias

In this section I will give a specification of the model and present issues and biases the model could face. A common problem with panel data is that the dataset may suffer from omitted variable bias (Angrist & Pischke 2009). The independent variable used in this study might be driven by other factors that are difficult to control for with the available data. Further, the causal relationships between immigrants, welfare generosity and electoral preferences have some methodical problems. Do Yugoslavians cause more welfare generosity, or do more welfare generosity cause an increase in Yugoslavians? If the immigrants endogenously cluster in places due to job opportunities, family etc., there would probably be spurious positive correlation between immigration and welfare benefits (Borjas, 2003). There is also a possibility of reversed causality between Yugoslavian immigrants and election outcomes. Do the Yugoslavians choose location based on prior election outcomes and/or based on long-standing preference in certain municipalities? To prevent this reversed causality, we need to assume that Yugoslavians are as good as randomly distributed across municipalities. Since the group of Yugoslavians is quite constrained by this settlement policy in Norway during the 1990s, I assume this is the case as the settlement policy provides an exogenous source of municipal-level variations in the Yugoslavian immigrants. Hence, this limits the potential of problems from reversed causality in this study. More limitations in the data is addressed in section 6.2 Limitations.

Section V

5.0 Empirical results

In this section I will present my main results, followed by some sensitivity analysis. Firstly, I analyze the effect of Yugoslavians per capita on the two measures of welfare generosity. Further, I will use the same independent variable and analyze the effect on vote share for left-wing parties. I include additional predictors to increase the explanatory power of each model. The measure on Yugoslavians per capita and welfare generosity are standardized to compare coefficients of interest.

5.1 Effect on social assistance

In Table 2, I assess the effect from Yugoslavians per capita on social assistance per capita. Regression 1 is the baseline model without controls, while regression 2-5 is the extended model with additional control variables concerning municipality features.

Table 2: Effect from Yugoslavians per capita on social assistance per capita

	(1)	(2)	(3)	(4)	(5)
	Social assistance per capita	Social assistance per capita	Social assistance per capita	Social assistance per capita	Social assistance per capita
Yugo per capita (t-1)	0.0392** (0.0190)	0.0472** (0.0195)	0.0441** (0.0190)	0.0433** (0.0188)	0.0419** (0.0183)
Log pop		-1.872*** (0.556)	-2.208*** (0.587)	-2.249*** (0.583)	-2.370*** (0.564)
Children			5.390* (3.098)	5.846* (3.119)	5.623* (2.992)
Young			1.570 (2.537)	2.093 (2.589)	1.991 (2.496)
Elderly			-3.011 (2.604)	-2.830 (2.586)	-2.622 (2.557)
Women				-5.536 (3.850)	-7.185* (3.691)
Unemployment					13.36*** (2.680)
Time FE	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes
Year	1991-2000	1991-2000	1991-2000	1991-2000	1991-2000
Clusters	394	394	394	394	394
Observations	3848	3848	3848	3848	3848
R ²	0.0580	0.0693	0.0736	0.0750	0.102
R ² adjusted	0.0555	0.0667	0.0702	0.0713	0.0978

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects. The data is estimated over the period 1991-2000 for 394 municipalities

Results from regression (1) suggest that an increase in Yugoslavians per capita have a positive and significant effect on social assistance per capita. The coefficients are interpreted as follows: One standard deviation increase in Yugoslavians per capita will on average, result in a 0,039 standard deviation increase in social assistance per capita. The result is significant at 5 % level. In regression (2) I have controlled for the log population size. This coefficient shows a clear and significantly negative effect on social assistance per capita. This result is in line with the assumption that more people result in less social assistance per person. However, compared to the baseline model, the main coefficient has increase from 0,039 to 0,047. This is expected, as population size would explain some of the variation in social expenditure across municipalities. In regression (3) I control for different age-structures: *children, young and elderly*. The sign of Yugoslavians per capita is still significant at 5% level and the main coefficient has minor changes. The children-coefficient is positive and significant at 10% level while all other age-coefficients are not significant at any level. Hence, higher share of children is associated with higher social assistance per capita. Yet, if more children were an outcome from the major refugee shock, the control can be described as *bad* since the age group is endogenous connected to the explanatory variable. When controlling for the share of women within municipalities in regression (4), we can observe that the share of women is associated with lower social assistance per capita, but the coefficient is only significant when controlling for unemployment. One would assume that women tend to be more dependent on social assistance than men (higher number of male immigrants in the work force), but this result suggests that opposite. Further, controlling for the level of unemployment in regression (5) show that unemployment tend to increase social assistance, which is reasonable since more people are outside the labor force and depend on social welfare.

When we include control variables for differences in expenditure needs, we observe that the main coefficient remain basically unaltered. Hence, the effect of Yugoslavian density on social assistance is not determined by changes in proportions of age, population size and unemployment in this model. The overall results suggest that higher share of Yugoslavian immigrant will on average tend to increase welfare generosity in Norwegian municipalities. Hence, there are no

indications of shift in the priority of redistribution or a fiscal contain in municipal welfare systems from a higher share of Yugoslavian immigrants. It should also be noticed that the explanation power of the model is as low, between 5-10% (Adjusted r-squared). One explanation for the low explanation power is most likely a consequence of the noisy and high-variability data used. However, significant results still indicate that there exist a causal relationship between the predictors and the response variables.

5.2 Effect on welfare benefit norm

I will now look at welfare benefit norm as a measure for welfare generosity. As previously discussed, this variable is highly correlated with welfare politics and received grants for the Yugoslavian immigrants. In Table 3 I use the same specifications and controls as in Table 2.

Table 3: Effect from Yugoslavians per capita on welfare benefit norm

	(1)	(2)	(3)	(4)	(5)
	Welfare benefit norm	Welfare benefit norm	Welfare benefit norm	Welfare benefit norm	Welfare benefit norm
Yugo per capita	0.0442** (0.0210)	0.0404* (0.0207)	0.0431** (0.0213)	0.0438** (0.0211)	0.0438** (0.0212)
Log pop		0.777 (0.607)	0.992 (0.628)	1.049* (0.627)	1.125* (0.614)
Children			0.0347 (3.900)	-0.574 (3.896)	-1.191 (3.871)
Young			-2.529 (3.842)	-3.009 (3.874)	-3.196 (3.872)
Elderly			4.774 (3.378)	4.219 (3.331)	3.739 (3.217)
Women				7.856 (5.936)	8.732 (5.903)
Unemployment					-6.157* (3.149)
Time FE	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes
Year	1993-2003	1993-2003	1993-2003	1993-2003	1993-2003
Clusters	376	376	376	376	376
Observations	4122	4122	4122	4122	4122
R ²	0.0551	0.0565	0.0590	0.0606	0.0635
R ² adjusted	0.0525	0.0538	0.0556	0.0569	0.0597

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects. The data is estimated over the period 1993-2003 for 376 municipalities

Regression (1) displays the results from the baseline model without controls. The results is interpreted as follows: one standard deviation increase in Yugoslavians per capita will on average, result in a 0,0442 standard deviation increase in the welfare benefit norm. When control for different demands for local welfare services in regression 2-5, population size shows an opposite sign than in table

2, as higher population size is associated with higher welfare generosity per capita. These results can be explained by the fact that large municipalities are expected to have lower tax price for redistribution and therefore choose to have higher benefit levels (Fiva & Rattsø, 2006). Many of the other controls are not significant at any levels, which indicate that demographic and socioeconomic differences in municipalities have little effect on the policy determined welfare norm.

The significance and size of the main coefficient remain mostly unaltered over the regressions. Since the welfare benefit norm can serve as proxy for politician preferences for welfare goods and redistribution, results suggest that more Yugoslavians and higher ethnical heterogeneity is associated with a higher benefit norm. The overall results suggest that there is an increased preference of the politicians in terms of welfare offers when welfare needs increase. The explanatory power of this model is also quite low with an adjusted r-squared around 5-6%, but there is still evidence of a significant and causal relationship.

5.3 Effect on electoral preferences

I will in this section look on the effect from the Yugoslavian shock in the 1990s on electoral preferences. I will mainly address the effect on left-wing parties¹⁰. I will also examine the effect on selected parties with different ideology to capture isolated effect on far-right and far-left parties. The model specification will be exactly as the baseline model, except that we change the dependent variable from welfare generosity to vote shares.

¹⁰ Left-wing parties include: Red Electoral Alliance (RV), The Socialist Left Party (SV), the Norwegian Labour Party (DNA) and joint lists of left-wing parties.

Table 4: Effect from Yugoslavians per capita on electoral preferences

	(1)	(2)	(3)	(4)	(5)	(6)
	Vote Share Left	Vote Share Left	Vote Share SV	Vote Share DNA	Vote Share H	Vote Share FRP
Yugo per capita (t-1)	-0.00201* (0.00107)	-0.00219** (0.00107)	-0.000654 (0.000875)	-0.00307** (0.00132)	0.00214* (0.00128)	-0.000708 (0.000824)
Log pop		0.0647* (0.0374)	0.0540** (0.0231)	0.0207 (0.0435)	0.0131 (0.0372)	0.126*** (0.0197)
Children		-0.862*** (0.270)	-0.432** (0.172)	-0.389 (0.276)	-0.573** (0.248)	-0.153 (0.139)
Young		-0.331 (0.214)	-0.532*** (0.124)	0.194 (0.230)	-0.130 (0.200)	-0.102 (0.112)
Elderly		-0.176 (0.196)	-0.279** (0.112)	0.204 (0.207)	-0.308 (0.191)	0.299** (0.117)
Women		0.326 (0.419)	0.268 (0.229)	-0.124 (0.420)	0.566* (0.320)	-0.266 (0.186)
Unemployment		0.327* (0.196)	0.223* (0.117)	0.0821 (0.186)	0.203 (0.178)	-0.121 (0.0941)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Year	1991-2003	1991-2003	1991-2003	1991-2003	1991-2003	1991-2003
Clusters	394	394	394	394	394	394
Observations	5110	5110	5110	5110	5110	5110
R ²	0.219	0.231	0.351	0.185	0.0771	0.252
R ² adjusted	0.217	0.228	0.349	0.182	0.0736	0.249

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects. The data is estimated over the period 1991-2003 for 394 municipalities

Voting shares for left-wing parties is presented in the table above in regression (1), while the demographic and socioeconomic controls are included in regression (2). The main coefficients are negative and significant at 5% level. The result suggest that a standard deviation increase in Yugoslavians per capita will, on average, decrease voting support for left-wing parties with 0,2 percentage points. The control for population size is positive and significant at 10%, which indicate that municipality with high habitation tend to vote more for left-wing parties. There could be various reasons for this. One implication of the results can be that population rich areas are better connected to the global economy and often more open to diversity. People are more likely to experience differences in welfare needs when ethnic diversity is high, which can result in more support for left-wing parties. The reaction coefficient seems to be unaltered and stable for the given controls. The results indicate that the higher share of Yugoslavian immigrants result in less preference for economic equalization. Regression (3) and (4) show the effect on two left-wing Norwegian parties: The Socialistic Left Party (SV) The Labor Party (DNA). The results suggest that there is a significant reduction in vote share for DNA in the period. Hence, higher share of Yugoslavian is shown to shift political preference away from DNA in particular. Regression (5) and (6) display the effect on two right-wing parties,

The Conservative Party (H) and The Progress Party (FRP). There is no indication that there is an increased support for The Progress Party in local elections from higher share Yugoslavians. This contradicts with results found by (Sørensen, 2016) where support for The Progress Party increased with non-western immigrants. In comparison, there is rather a significantly larger support for The Conservative Party. The results are significant at 10% level. As a result, a higher share of Yugoslavian immigrants is associated with higher preference for the right-wing Conservative party.

In general, finding suggests that that Yugoslavian immigrates shifts political support away from left-wing parties in general. The reported results show that this could be due to reduction in vote-support from The Labor Party and/or a increase in vote support for The Conservative Party¹¹. However, significance and size of coefficients indicate that reduction in vote share for left wing parties is mainly due to reduction in vote share for DNA. The explanatory power for *Voteshareleft* is considered high compared to measures on welfare generosity, with an adjusted r-square of about 20%. The overall results suggest that there is a decreasing preference for politics concerning redistributing and equalization from more Yugoslavian immigrants.

5.4 Sensitivity analysis

In this section, I will do several sensitivity analyses in order to test the robustness of my estimates. Firstly, I will do a placebo-test to look at dynamic effects and parallel trend in the model to ensure if the results can then be interpreted as causal. Further, robustness of the estimates has been checked against various alternative specification including quadratic estimates, quartile dummies, changes of controls and different functional forms.

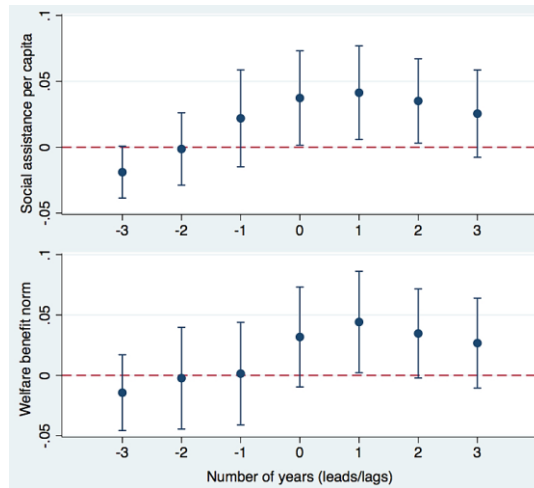
Parallel trends and dynamic effects

To empirically assess the validity of my identification strategy, I conduct a model using different lead- and lag-lengths of Yugoslavian per capita on the

¹¹ Unreported estimates showed that vote share for H and DNA to be the only significant parties out of all political parties

different measures on welfare generosity. The model makes it possible to access the dynamic effects by examining how Yugoslavians change welfare generosity after the shock (t+1, t+2, t+3) and displays the pre-trends in the data by looking at the effect prior to the shock (t-1, t-2, t-3). The figure below is a coefficient plot, where the capped spikes in the model display the 95 percent confidence intervals of the estimated coefficients.

Figure 8: Placebo test – Lead and Lags



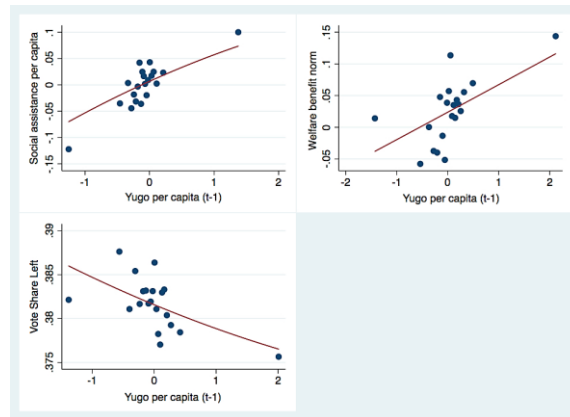
Source: NSD’s Regional database. Note: the figure visualize the OLS coefficients relating the measures of welfare generosity 3 years before and 3 year after the immigration shock

The identification of the model is based on the assumption that there is a significant change in the outcome one year after the treatment (t+1). The figure confirms that there is a significant effect of Yugoslavians per capita on welfare generosity one year after the shock (t+1). The shock seems to be stable with a modest decrease in magnitude over time. Hence, there are indication of some delayed effects in the model. The plot also shows that the effect prior to the shock is very close to zero for the welfare benefit norm-measure. This is good news for the parallel trend assumption as there is small evidence of anticipatory effects before the Yugoslavian shock. However, the parallel trend assumption is not as obvious for the measure of social assistance as there is indication of a trend in the coefficient prior to the shock. Still, none of the period’s before the shocks are statistically significant different from zero for any measurements. In conclusion, there are some issues concerning the parallel trend assumption of the measure of social assistance per capita, but the assumption seem to be fulfilled

for the welfare benefit norm. However, the one-year lagged value of Yugoslavians per capita is significant for both measures of welfare generosity.

Quadratic relationship

I want to account for non-linear effects of immigration, motivated from specifications in previous studies (Sørensen, 2016). Findings argue that more immigrants induce more support for right-wing political parties, but the effect fades out once the immigrant's population has reached a modest size. By including a quadratic term one can control for the possible non-linear effect from the Yugoslavian immigrants. I add a quadratic term, $\beta \left(\frac{Yugoi,t-1}{Popi,t-1} \right)^2$ to examine the effect on electoral preferences, welfare benefit norm and social assistance per capita. The estimates of the quadratic term are displayed in Appendix, Table A9. The results suggest that there is non-linear and concave effect between Yugoslavian immigrant and social assistance per capita. The other two measures have a non-significant quadratic terms. In Figure 9 below, there is a graphical representation of the quadratic relationship for the various models. Initially, an increase in Yugoslavians per capita increase social assistance per capita, but it will decrease as the density of Yugoslavians reach a certain threshold. This result can be justifiable as integration of a large density of immigrants require a lot of recourses for municipalities, which result in a reallocation of social assistance toward a fewer people. The results also support previous findings where it is argued that once the immigrants become "visible" enough, natives' preference shift away from generous welfare benefits (Jofre-Monseny 2016). There is also a possibility that ethnic enclaves decrease welfare dependency through larger internal labor market and lowered information cost. When the share of Yugoslavians are big enough, they depend less on welfare and this reduce the volume of social assistance in municipalities (Edin, et al. 2003)

Figure 9: Quadratic relationship

Note: The figure is produced with the Binscatter module in STATA.

Changing control variables

Changing some of the control variables in the analysis will be reasonable if we have excluded some good variables in the model. Other studies suggest that fiscal capacity can explain some of the different level of welfare expenditure in different regions (Jofre-Monseny, 2016). I have included unrestricted revenues per capita and hydropower revenues per capita to control for other levels of local wealth in municipalities. According to the estimates Appendix, Table A10, unrestricted income does not seem to have a significant effect on welfare generosities. Hydropower revenues on the other hand seem to have a positive and significant effect on social assistance per capita. This result is consistent with the belief that wealthy municipalities with high level of hydropower revenues are expected to have higher possibilities of offering welfare generosities. The main coefficient is more or less unaltered with result from the baseline model for social assistance when including a new set of controls. This indicates that the measure on social assistance is robust, as the estimate is insensitive to changes in control variables (Angrist & Pischke, 2014).

Quartiles dummies

In terms of municipality exposure to the Yugoslavians, the density of Yugoslavians in Norwegian municipalities differs to a large extent. The goal is to test for the degree of Yugoslavian exposure by looking at average difference

in welfare generosity and electoral preferences between quartiles of Yugoslavian exposure. Q4 will be described as a *treatment dummy* as it contains the group of municipality with the highest density of Yugoslavians, while Q1 will be described as a *control dummy*. The results are included in Appendix, Table A611. The quartiles seem to have a significant role for social assistance per capita, but neither for politically determined norm nor electoral preferences. Municipalities with large share of Yugoslavians tend to have higher social assistance per capita. This result implies that there is evidence of high level of welfare generosity in municipalities where social needs are high. Initially, immigrants that are placed in a municipality with relatively low ratio of natives (measured as high share of Yugoslavian immigrant) have higher willingness to pay for redistribution. This result is not in line with results found by Jofre-Monseny et al. (2016) as they claimed that increase in social service spending tended to be lowest in those municipalities experiencing the greatest immigration density.

Different functional form

To test sensitivity of my estimates, change the functional form of the measurements used. By using a *log-specification*, it will be possible to put more weight on lower values in the data, which can improve the results. When running a fixed effect regression with a log-specification, I obtain quantitatively similar results as in the baseline model for all measurements, both in terms of coefficient size and significance. These results strengthen the baseline result of the causal relationships found earlier. To check whether if my measurements of Yugoslavians are robust, I examine *Yugoslavian inflow per capita* as an alternative independent variable. Flows capture the sudden change of rising immigration, as opposed to the more stable stock of immigrants. Native-born inhabitants may view long-term immigrant residents differently than sudden influxes of short-term immigrants. Reported results from Yugoslavian inflow per capita as independent variable suggest that the reaction coefficient is no longer significant at any level for measures on welfare generosity. Even though the result is not in line with the baseline results, it reason to believe that flows of immigrant's measure other mechanisms concerning welfare generosity. With

regards to electoral preference, the results stay significantly negative for left-wing parties. The explanation for this effect can be that changes in the flow are a more viable measure of immigration, and residents may respond to sudden increases in Yugoslavian inflow with a sense of insecurity and desire for protection. Hence, anti-immigration attitudes seem to be linked to the inflow as well as the stock of immigrants living in the municipalities.

5.5 Summary of results

The results suggest that Yugoslavians tend to have a positive effect on welfare generosity and a negative effect on vote share for left-wing parties. As a result, an increase in Yugoslavians per capita in Norway during 1990s as associated with high levels of welfare generosity and electoral preference away from left-wing parties. The shift in electoral preference seems to be an outcome of less support for The Labor party (DNA) and more support for The Conservative party (H). Overall, the baseline model is insensitive to numerous controls. This give some support for the good as random assumption. Sensitivity analysis indicates a non-linear and concave relationship between Yugoslavian exposure and social assistance per capita. Further, the placebo-test suggests that the parallel trend assumption in welfare benefit norm holds, whilst there are some evidence anticipatory effects in the social assistance per capita measure. Overall, sensitivity analysis suggests the latter measurement is more or less robust with regards to several specifications, including changes in functional form, quartile estimation and changes in controls.

Section VI

6.0 Discussion

In this section, I will discuss some of the empirical findings in Section V. Firstly, I will discuss implications of the finding and later address some limitations in the study. Lastly, I will give some proposals for further research.

6.1 Implications of the results

The aim of this study was to examine how immigrants affect welfare generosity and electoral preferences, based on the following hypothesis: An increased share of Yugoslavians will lead to lower welfare generosity per capita (Hypothesis 1) and an increased share of Yugoslavians will lead to lower support for left-wing parties (Hypothesis 2). Previous studies predict that immigrants may reduce welfare generosity by two different channels: Firstly, more ethnic heterogeneity reduces the desire to redistribute income (Alesina & Glaseaer, 2004; Dahlberg et al., 2012; Orr, 1976). Secondly, immigration increases the pool of welfare dependent residents, which increase the fiscal burden in the receiving municipality (Razin, 2011; Razin et al., 2002). The finding in my study rejects *Hypothesis 1*, as there is no indication of lower welfare generosity from higher density of Yugoslavians. Hence, increased ethnic heterogeneity from more Yugoslavians does not appear to reduce the preferences for income redistribution or create financial pressure on municipal welfare systems. The results show evidence of an opposite relationship, where higher welfare generosity is associated with higher share of Yugoslavian immigrants. The measure on social assistance per capita is significant and positive and is shown to be robust for several specifications. The positive effect on the welfare benefit norm indicate that politicians responded by increasing temporary support since more people were in need, independent of actual individual social requirements. In general, the findings suggest that welfare expenditure is higher in municipalities where social needs are high.

Another possibility of the observed effect can be due to citizens' preference for stronger welfare programs to compensate for and protect themselves from the perceived economic competition and insecurity resulting from the more Yugoslavian immigrants (Finseraas, 2008; Svallfors, 1997). Since the group of immigrants were characterized as relatively high skilled, the native-born could have become more concerned about their own job-security and therefore demanded more welfare. However, this effects was possibly offset by the fact that government transfers were granted to the municipalities in order to integrate the immigrants. As a result, there is little indication that mote Yugoslavians resulted in a higher welfare demand from the native-born. By the overview of the share of total spending on different welfare services (Figure 3) in Norway, the increase in welfare generosity does not seem to be driven by changes in the aggregated usage on integration away from other welfare programs. The state-sponsored assistance seems to have benefited the Yugoslavians without having a higher relative burden on each citizen from more integration spending. In addition, unreported results find no significant effect from higher share of Yugoslavians on the percentage share on health and social services. Another explanation for the positive effect can be that Norwegians derive a certain utility from being generous, which increase the acceptance of higher tax and more equalization when the Yugoslavian density increase.

Immigration and ethnic diversity is said to have important effects on policy outcomes by changing voters' political attitudes and voting behavior. My results from the relevant period are consistent with *Hypothesis 2*, which states that preference for left-wing parties will decrease with higher density of Yugoslavians. The findings support existing literature as immigrants and higher ethnic heterogeneity is said to decrease voters' political support from left-wing parties toward right-wing parties (Harmon, 2017). The consistent negative effect on vote share for left-wing parties when using Yugoslavian inflow as independent variable, suggest that residents also decrease their support for social policy when there are sudden and more "visible" inflow of Yugoslavians. The reason for the observed negative vote-support for left-wing parties is complex and uncertain. One explanation is an overall shift in the native-born preferences or "ideology" from higher ethnic diversity (Harmon, 2017). Treats to national

culture and employment can also influence voting behavior in favor of less redistribution (Halla et al., 2017). Difference in political views within the electors is also expected to affect voting outcomes. It is possible that a group of voters have a leftist view on redistribution and a rightist view on immigration policy. As a consequence, more xenophobia can drive the decreasing support for left-wing parties rather than a less preference for redistribution. In general, it is expected that the effect of immigration on welfare state attitudes is possibly not constant across all groups within society. Some citizens with high income may be expected to decrease their support for redistribution in fear the increasing financial burden of arriving immigrants, whilst some citizens with high income also would like to share and help arriving immigrants and will be happy to accept an increased financial burden. On the other hand, citizens with lower income are expected to demand more compensation and increase their support for redistributive policy. Low-income voters could potentially be afraid that increased immigration may challenge the labor market opportunities and thereby change their voting behavior in favor of more social welfare. On the other hand, the low-income voters could also be generally more willing to share and redistribute welfare thereby helping immigrants.

The non-significant effect on the Anti-immigrant Progress Party is consistent with findings in Sørensen and Halla et al (2016; 2017) as immigration from Western countries/high-skilled immigrants shows no significant impact on Progress Party support. The significant effect on The Conservative Party as opposed to the non-significant effect on The Progress Party, can indicate that the Yugoslavians did not induce large xenophobic attitudes across the municipalities. Even though The Conservative Party is committed to lower degree of redistribution, it does however support the continued existence of the Norwegian welfare state (Tvedt et al., 2017). May it be that The Conservative Party are more generous in terms of welfare generosity compared to The Progress Party? The Conservative Party is expected to view immigrants in general as recourses, and are willing to prioritize integration for the groups. It might be that The Conservative Party expected the rather well educated Yugoslavians coming to Norway during the relevant period, to be potential taxpayers as opposed to only being relying on social welfare benefits. However,

the contradictory effect on welfare expenditure and vote-support for social policy suggest that the welfare generosity is most likely not driven by the political arena in this model. The small shift in support for left-wing parties (0,2 percentage points) seems to have little causal inference on the level of welfare generosity offered in the relevant period.

To conclude: This study rejects *Hypothesis 1* and support *Hypothesis 2*. The reason for the lack of support hypotheses 1 is most likely due to difference in model specification and data selection from exiting literature, which create conflicting results. For example, few comparable studies use Yugoslavians as immigration groups in Norway to identify the causal effect. The Norwegian welfare model, the level of resources, and the perception of the Yugoslavians as being a contributor to society are likely to derive the positive effect on level of welfare generosity. Further, the composition of immigrants is expected to have varying effect on voting attitudes. The support for hypothesis 2 is consistent previous studies, and indicates that higher ethnic diversity has a causal effect on electoral preferences away from social policy. This study contributes to existing literature by suggesting that relatively high-skilled immigrants in Norway show a positive effect on preference for redistributive spending, but shift vote-support away from social policy. There are no indications of a well-defined link between the two outcomes in this study.

6.2 Limitations

I will now address some limitations in the study. Firstly, there are some missing observations for certain municipalities, which create less precision in the estimates. This can affect the internal validity in the data. However, the missing variables are assumed to be missing at random and therefore of less concern (Stock & Watson, 2011). Further, to get a balanced panel data, some municipalities were omitted from the sample, which could disregard important variation in the data. Another limitation in the data is the stock of Yugoslavian immigrants as it measures registered residents and not the asylum seekers at the time. This implies that the group of welfare dependent recipients could be underestimated in the model. The same variable has no data for the year of 1996.

I solved this issue by setting the values in 1996 the average number of 1995 and 1997. This could imply an over- or underestimated effect in 1996 in all the models.

Settlement-request by refugees might have some influence on the place of settlement (Edin et al., 2003). For example, the settlement of the Yugoslavians is expected to depend on available capacity in municipalities, and is therefore not completely random. This can potentially cause reversed causality in the study since it violates the assumption of exogenous variation in Yugoslavian in Norway. With regards to the conclusions drawn, there is reason to believe that changes in the density of Yugoslavians only explain a small fraction of the total changes in welfare generosity offered and electoral preferences. Other immigrants who came to Norway during the same period is expected to affect the outcome variables as well. This implication is also confirmed in the models, as the explanatory power is quite low for all specifications.

6.3 Further research

Beyond the points already discussed, I suggest some directions for future research. A natural extension of the study is to include the revenue side to capture the total fiscal impact of the Yugoslavians. By including other immigrations-groups, one could estimate the causal effect from a larger sample. Looking at the effect of immigration on welfare generosity according to the immigrant's characteristics seems sensible when examining effects between immigrant-groups. Norway may be an outlier in an international setting when examining ethnic heterogeneity, political preference and welfare generosity. Moreover, assessment of other social democracies would yield more comparable estimates. Alternative measures of redistribution and public support for welfare also seem to be an important for future work. In addition, further research should try to better understand which channels drive anti-immigration views and voting attitudes.

Section VII

7.0 Conclusion

Immigration is a growing source of ethnic heterogeneity, which is said to change individual attitudes towards redistributive public spending. The aim of this study has been to construct an empirical analysis on how welfare generosity end vote share for left-wing parties responded to the Yugoslavian immigration shock in the 1990s. By relying on the dispersal policy and controlled settlement of the Yugoslavians in Norway, I exploit the municipal-level variations in immigrants to estimate the causal effect on welfare generosity and electoral preference. In my study, I find that higher share of Yugoslavians is associated with an increased welfare generosity and a decrease in vote share for left-wing parties. Overall, the models seem to be robust and insensitive to numerous controls. The observed increase in welfare generosity does not seem to be driven by the political arena as support for left-wing parties goes down in the period. The results indicate that higher welfare generosity is most likely a consequence of higher welfare spending in municipalities where welfare needs are high. As the world becomes more globalized, more research in the field is necessary to obtain knowledge of how ethnic heterogeneity affect welfare expenditure and voting attitudes. There will be need for careful monitoring of present and future immigrations shocks to better understand the political- and economic challenges concerning these groups, which ideally could enhance future policy design and implementation of welfare services.

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Appendix

Table A5: Description of variables

Name	Description	Source	Period
Stock of Yugoslavian immigrants	Number of registered residents born in Yugoslavia	<i>Norwegian Centre for Research Data (NSD) "Regional database"</i>	1990-2002
Inflow of Yugoslavian immigrants	Number of Yugoslavia inflow. As moving from foreign country, the person who moves need to move in the purpose to settle, or to stay in the country for at least six months	<i>Norwegian Centre for Research Data (NSD) "Regional database"</i>	1985-2000
Vote share left-wing parties	Joint share of votes received by RV, SV/SF, DNA, and joint lists of left-wing parties	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Vote Share H ¹²	Share of votes for the Conservative Party (H) in the last local election	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Welfare benefit norm	Welfare benefit norm is set by the local politicians. The variable capture the reported welfare benefit norms for single persons per month (NOK)	<i>From 'Sosialstatistikk', Statistiscs Norway. Cleaned data from: Fiva, Jon H. 2009</i>	1993-2004
Social assistance	Gross expenses of social assistance. Social assistance includes, among other expenses, mainly social assistance under the law on social care, social assistance to refugees, asylum seekers and persons with residence grants on humanitarian grounds. Measured in 10 000 NOK.	<i>Norwegian Centre for Research Data (NSD) "Regional database"</i>	1991-2000
Population	The total number of inhabitants in the municipality.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Unemployment	The number of registered unemployed persons (yearly average) as share of the total number of inhabitants aged 16-66 years at the end of the year.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Children	Share of population at pre-school age: Share of population aged 0 to 6 years for the period 1972-1996. Share of population aged 0 to 5 years for the period 1997-2011.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Young	Share of population at school age: i.e. Share of population aged 7 to 15 years for the period 1972-1996. Share of population aged 6 to 15 years for the period 1972-1996.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Elderly	Share of population aged 66 years and higher.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Women	The female share of the municipality's population.	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015
Unrestricted income	Income that the municipalities may dispose of without bindings other than current laws and regulations. Include. Measured in 10000 NOK	<i>Norwegian Centre for Research Data (NSD) "Regional database"</i>	1991-2000
Hydropower revenues	Gross income from hydropower plants. Measured in 10000 kroner	<i>Norwegian Centre for Research Data (NSD) "Regional database"</i>	1991-2000
Share on health and social services	Share on health and social services (% of total spending)	<i>Fiva, Jon H., Askill H. Halse and Gisle J. Natvik (2015): Local Government Dataset.</i>	1972-2015

¹² The other political parties in the study (DNA/H/SV/FRP) are measured similarly and are from the sane source

Table A6: Descriptive statistics (1990-2001)

Year	Social assistance per capita	Welfare benefit norm	Vote share left-wing parties	Yugo per capita (stock)
1990	-	-	0,423131 (0,1445043)	0,0005275 (0,0018084)
1991	0,0778559 (0,0429009)	-	0,423131 (0,1445043)	0,0005528 (0,0017861)
1992	0,0774049 (0,0433869)	-	0,4033102 (0,1420962)	0,0006347 (0,0024363)
1993	0,0785631 (0,0425057)	5095,21 (811,2443)	0,4033102 (0,1420962)	0,0012777 (0,0050746)
1994	0,0859247 (0,0467547)	5080,602 (836,0741)	0,4033102 (0,1420962)	0,001768 (0,0061293)
1995	0,0919661 (0,0496857)	5018,102 (718,4191)	0,4033102 (0,1420962)	0,0015644 (0,0035902)
1996	0,0874719 (0,0462542)	5080,199 (714,7209)	0,3705455 (0,1314337)	0,0012911 (0,0024032)
1997	0,0838135 (0,0441134)	5082,293 (753,5077)	0,3705455 (0,1314337)	0,0010177 (0,0019852)
1998	0,0764491 (0,0414987)	5185,11 (806,1093)	0,3705455 (0,1314337)	0,0009171 (0,0017753)
1999	0,0778767 (0,0432863)	5159,538 (792,2849)	0,3705455 (0,1314337)	0,0008336 (0,0015917)
2000	0,0829074 (0,0455626)	5103,638 (779,6673)	0,3608122 (0,1289734)	0,0027499 (0,0054388)
2001	-	4952,687 (659,996)	0,3608122 (0,1289734)	0,0025031 (0,0051262)
Total	0,0820471 0,044889	5027,72 715,6582	0,3883121 0,1501374	0,0013492 0,0036735

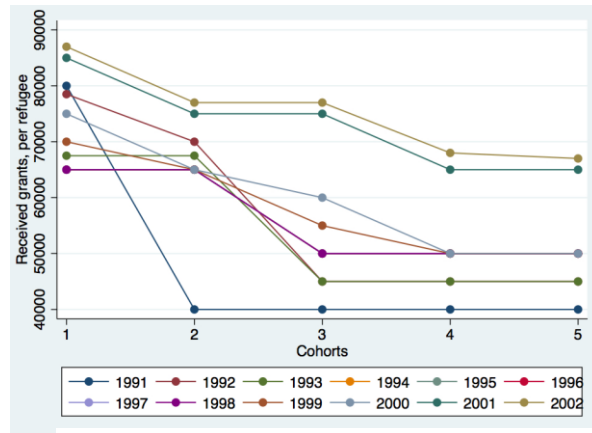
Notes: The table summarize the mean and standard deviations (in parentheses) for the variables of primary interest based on Norwegian municipality-level data. The share of votes for left-wing parties is from the local election, which is held every fourth year.

Table A7: Integration grants (1991-2004)

Payment year	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Number of first settlers per year
1991	80000	40000	40000	40000	40000	240000	4200
1992	78500	70000	45000	45000	45000	283500	3800
1993	67500	67500	45000	45000	45000	270000	3200
1994	65000	65000	50000	50000	50000	280000	11900
1995	65000	65000	50000	50000	50000	280000	5600
1996	65000	65000	50000	50000	50000	280000	2600
1997	65000	65000	50000	50000	50000	280000	2700
1998	65000	65000	50000	50000	50000	280000	3000
1999	70000	65000	55000	50000	50000	290000	6700
2000	75000	65000	60000	50000	50000	300000	6300
2001	85000	75000	75000	65000	65000	365000	7200
2002	87000	77000	77000	68000	67000	376000	8300
2003	87000	77000	77000	68000	67000	376000	6700
2004	96000	85000	77000	68000	67000	393000	5300

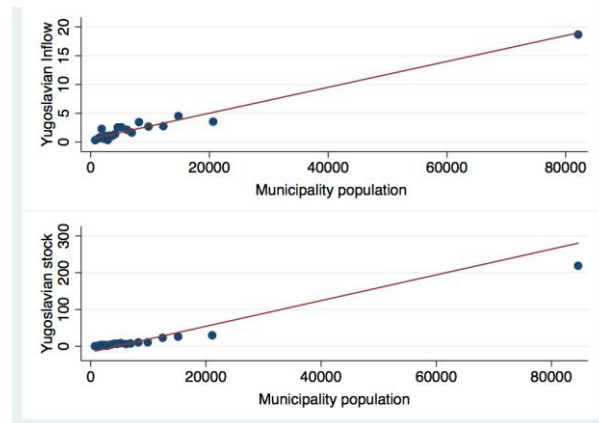
Note: After years of residency in Norway. Measured in NOK Source: IMDI, 2010 *In addition, the volume grant was NOK 500,000 per 18 resident

Figure A10: Integration grants per refugee, by cohorts



Source: Beregningsutvalget (2002)- The received grants given for each refugee over the 5-year integration-program. The data is collected from *Beregningsutvalget* report and plotted in graphs using Stata. The grants given in 1994 was 65 000 NOK per person who had stayed 1 or 2 years in Norway, while people settled for 3, 4 or 5 years was given grants of 50 000 NOK per person

Figure A11: Yugoslavian immigrants as a proportion of the total population



Source: NSD's regional database

Table A8: Correlation, measures of welfare generosity

	Social assistance per capita	Welfare benefit norm
Social assistance per capita	1.0000	
Welfare benefit norm	-0.0986	1.0000

Table A9: Quadratic relationships

	(1)	(2)	(3)
	Social assistance per capita	Welfare benefit norm	Vote share left
Yugo per capita (t-1)	0.112*** (0.0355)	0.0187 (0.0371)	-0.00401* (0.00210)
Yugo per capita ² (t-1)	-0.0684** (0.0283)	0.0258 (0.0237)	0.00191 (0.00130)
Controls	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Year	1991-2000	1993-2003	1991-2003
Clusters	394	376	394
Observations	3848	4122	5110
R ²	0.105	0.0639	0.232
R ² adjusted	0.101	0.0598	0.229

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects.

Table A10: Change in control variables

	(1)	(2)	(3)	(4)	(5)	(6)
	Social assistance per capita	Social assistance per capita	Social assistance per capita	Welfare benefit norm	Welfare benefit norm	Welfare benefit norm
Yugo per capita (t-1)	0.0405** (0.0181)	0.0430** (0.0187)	0.0415** (0.0185)	0.0349 (0.0222)	0.0354 (0.0222)	0.0350 (0.0222)
Unrestricted income (per capita)	0.0884 (0.0617)		0.0928* (0.0541)	0.0383 (0.0737)		0.0379 (0.0741)
Hydropower revenues (per capita)		1.414** (0.548)	1.476*** (0.568)		0.0959 (0.932)	0.0958 (0.933)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Year	1991-2000	1991-2000	1991-2000	1993-2000	1993-2000	1993-2000
Clusters	394	394	394	376	376	376
Observations	3848	3848	3848	2937	2937	2937
R ²	0.103	0.105	0.106	0.0184	0.0183	0.0184
R ² adjusted	0.0989	0.101	0.102	0.0133	0.0132	0.0130

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects. The data is estimated over the period 1991-2003 for 394 municipalities, and 1993-2000 for 376 municipalities

Table A11: Quartile dummies

	(1)	(2)	(3)	(4)	(5)	(6)
	Social assistance per capita	Social assistance per capita	Welfare benefit norm	Welfare benefit norm	Vote Share Left	Vote Share Left
Yugo per capita (t-1)	0.0419** (0.0183)		0.0438** (0.0212)		-0.00219** (0.00107)	
Yugo per capita (t-1)						
Q2		0.0885 (0.0675)		-0.149 (0.102)		-0.000736 (0.00565)
Q3		0.0785 (0.0490)		-0.0655 (0.0620)		-0.00243 (0.00338)
Q4		0.156*** (0.0573)		-0.0125 (0.0717)		-0.00392 (0.00345)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Year	1991-2000	1991-2000	1993-2003	1993-2003	1991-2003	1991-2003
Clusters	394	394	374	374	394	394
Observations	3848	3848	4122	4122	5110	5110
R ²	0.102	0.104	0.0635	0.0620	0.231	0.230
R ² adjusted	0.0978	0.0994	0.0597	0.0576	0.228	0.227

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. Q1 is excluded in the model as it is used as reference in the model. All regressions include municipality- and time-fixed effects.

Table A12: Different functional form

	(1)	(2)	(3)	(4)	(5)	(6)
	Social assistance per capita (log)	Social assistance per capita (log)	Vote Share Left (log)	Social assistance	Welfare benefit norm	Vote Share Left
Yugo per capita (t-1)	0.0564** (0.0219)	0.0509** (0.0217)	-0.0163** (0.00733)			
Yugo inflow per capita (t-1)				0.00265 (0.00785)	0.00226 (0.0107)	-0.00221*** (0.000769)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Year	1991-2000	1993-2003	1991-2003	1991-2000	1993-2001	1986-2001
Clusters						
Observations	3842	4122	5101	3848	3370	6294
R ²	0.0896	0.0539	0.204	0.0986	0.0267	0.274
R ² adjusted	0.0858	0.0500	0.201	0.0948	0.0223	0.271

Note: Standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01. All regressions include municipality- and time-fixed effects.

Attachment: Preliminary Thesis Report