

How Distributional Conflict over In-Kind Benefits Generates Support for Anti-Immigrant Parties

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What role do economic concerns play in activating support for anti-immigrant parties? Previous research has hypothesized the existence of a welfare channel, in which citizens exposed to a decline in transfers will be more opposed to immigrants. However, evidence is conflicting. This paper makes two contributions. Theoretically, we highlight non-residual, in-kind welfare programs as especially prone to generating distributional conflict between immigrants and natives. Empirically, we leverage exogenous variation in the intensity of this conflict to identify its effect on electoral outcomes. We focus on Austria's affordable housing program, which benefits a quarter of households. In 2006, a EU directive forced municipalities to open public housing to previously excluded immigrants. As we demonstrate, this reform increased support for anti-immigrant parties in affected municipalities. More broadly, our findings suggest that populist parties may have benefited from the recent confluence of austerity measures and concerns surrounding the congestion of in-kind benefits.

Introduction

The Great Recession, slow economic recovery, and successive migrant crises have generated a fertile breeding-ground for right-wing populism in Europe.¹ While historically relegated to the political fringe (Mudde 2010), populist anti-immigrant parties have recently broken through. In September 2017, the Alternative for Germany emerged as the third largest party in the country, with 94 seats in the Bundestag. In France, the National Front received a record-breaking eleven million votes in the presidential election, while the Austrian Freedom Party lost the second round of the presidential election by a mere 31,000 votes.

The mechanism driving this unprecedented electoral success remains the topic of intense debate. One line of work emphasizes the role of distributional conflict over economic goods: faced with the ostensible prospect of a shrinking pie and more seats at the table, self-interested voters may be drawn to parties that advocate excluding immigrants from accessing jobs and social benefits. Yet empirically, this hypothesis treads on uncertain ground. Research relating anti-immigration parties' vote share to resource competition, broadly defined, returns inconsistent results (Golder (2016: 483), Pottie-Sherman and Wilkes (2015)). Similarly, survey research finds limited evidence that opposition to immigration is shaped by material self-interest (Hainmueller and Hiscox 2010, 2007; Lucassen and Lubbers 2012; Hatton 2016). A growing consensus is that theories emphasizing material self-interest miss the forest for the trees. Instead, scholars have argued that recent increases in hostility towards immigrants should be tied to non-material channels such as a taste for cultural homogeneity (Becker 2010; Hainmueller and Hopkins 2015), the activation by strategic elites of latent out-group bias or authoritarian values (Kitschelt 1997; Rydgren 2008; Ford and Goodwin 2010; Cutts, Ford and Goodwin 2011), or identity and status concerns among the losers of globalization (Shayo 2009; Häusermann and Kriesi 2011; Gidron and Hall 2017; Inglehart and Norris 2018).

We believe this conclusion is premature, especially when it comes to explaining the recent success of anti-immigrant parties in Europe. The majority of null findings examine immigra-

¹ According to De Bromhead, Eichengreen and O'Rourke (2013) and Arzheimer (2009) support for the Far Right increases with economic hardship. Hopkins (2011) documents the effect on anti-immigrant sentiment of a *rapid* increase in the foreign born population.

tion's presumed impact on native workers' labor market prospects (the 'labor market channel'). However, a second source of distributional conflict, namely immigration's impact on natives' disposable income (the 'welfare channel'), has received comparatively less attention in recent scholarship (Hainmueller and Hopkins 2015; Gerber et al. 2017). As first pointed out by Freeman (1986), in contexts where immigrants are net beneficiaries of transfers and services provided by the state, immigration inflows can adversely affect public finances in the form of tax increases and benefit cuts. This welfare channel may fuel increased opposition to immigration in countries where the fiscal costs of immigration are high, i.e. in countries where the welfare state is comparatively more generous and the immigrant population comparatively less skilled.

Since Freeman's seminal contribution, the majority of studies addressing the relationship between immigration, domestic politics, and the welfare state have focused on the separate, albeit related, prediction that ethnic diversity undermines natives' support for social safety nets (Alesina and Glaeser 2004; Banting and Kymlicka 2006; Freeman 2009; Rueda and Stegmueller 2015). In contrast, a line of work seeking to identify whether fiscal strain affects anti-immigrant sentiment has produced conflicting results (e.g. compare Hanson, Scheve and Slaughter (2007) and Mayda (2006) with Hainmueller and Hiscox (2010) and Card, Dustmann and Preston (2012)).² The absence of clear evidence in favor of the welfare channel has further increased researchers' skepticism that opposition to immigrants is driven by material concerns.

To improve our understanding of the welfare channel, we build on Malhotra et al.'s (2013) distinction between identifying a mechanism and identifying the prevalence of an activated mechanism within a given population. In the case of the welfare channel, the key mechanism is the perception among natives of a zero-sum relationship between their disposable income and that of immigrants ('zero-sum fiscal reasoning'). We argue that existing studies often fail to theoretically flesh out the conditions for the activation and prevalence of zero-sum fiscal reasoning among voters. As a result, empirical designs are often sub-optimal, generating findings that are difficult to interpret.

The institutional design of social programs is a key factor shaping the activation and prevalence

² A larger body of work identifies fiscal costs as part of a bundle of concerns held by natives. In our review, we narrow our focus to the literature that explicitly models the effect of the welfare channel on anti-immigrant behavior.

of zero-sum fiscal reasoning. Unlike extant studies in political economy, which examine public spending 'in bulk', we follow Dancygier (2010) and highlight the distinction between transfers provided in-cash and those provided in-kind (e.g. school or housing vouchers versus publicly-provided education or housing). In-kind transfers consist of more than half of social spending in post-industrial democracies (Garfinkel, Rainwater and Smeeding 2006). Because their consumption is geographically bounded and their supply is constrained in the short-run, in-kind transfers are especially prone to activating resource competition among voters (Dancygier 2010). With regards to the prevalence of zero-sum reasoning, we emphasize the well-known distinction between non-residual social programs, which benefit a large share of voters, and means-tested programs, which target benefits to the poor. Non-residual programs are politically sustained by a large coalition of low and middle-income households "wedded to its defense" (Esping-Andersen 1990: 69). Given an immigration-induced drop in per-capita transfers, the prevalence of zero-sum fiscal reasoning will therefore be higher for non-residual than for targeted programs.

An emphasis on institutional design suggests a "disaggregated" approach to the study of the welfare channel (Moene and Wallerstein 2003). In other words, it requires an empirical test that focuses on social programs with a high likelihood of generating distributional conflict between immigrants and a large share of citizens. We identify Austria's in-kind housing program, which benefits one in four Austrians, as a most-likely case. Eligibility criteria are only weakly related to income and the high quality of Austrian public housing entails that it is desirable to the middle class. Our focus on Austria is not only methodological but also substantive: since the Freedom Party's meteoric rise in the late 1990s and its participation in the governing coalition, Austria has been central to research on the Far Right (Mudde 2007, 2013; Halla, Wagner and Zweimüller 2016).

To assess the degree to which distributional conflict over in-kind benefits drives opposition to immigration, we leverage plausibly exogenous variation in immigrants' access to Austria's public housing stock. In 2006, a legal decision at the EU level forced Austrian municipalities to open public housing to foreign residents. By expanding the pool of potential beneficiaries at a stroke, this ruling sharply increased demand for public housing, placing the program under fiscal stress. It also generated a clear distributional conflict between newly eligible immigrants

and a politically relevant share of native voters.

Using a difference-in-differences design, we examine whether support for populist anti-immigrant parties increased among municipalities most affected by the EU directive.³ The results suggest a clear relationship between the intensity and prevalence of distributional conflict over public housing and support for anti-immigrant parties in the 2006 legislative elections. In municipalities most affected by the reform, our results suggest that the increase in the Far Right's vote share was 59% higher than expected given historical trends. Moreover, this pattern persisted into the 2008 legislative elections, pointing to a sustained term effect of distributional conflict over in-kind social benefits.

As with any study examining aggregate electoral outcomes, ballot secrecy implies the absence of individual-level data on voting behavior.⁴ We consequently extend our analysis to ward-level data from Vienna, where we precisely map public housing units to electoral wards. The abundance of public housing and the small size of geographic units enable us to contrast neighborhoods dominated by public housing beneficiaries with other areas. Vienna, with over 40% of households in affordable housing, also offers additional evidence regarding the effect of distributional conflict in a highly politicized case. Substantively, our results indicate that support for anti-immigrant parties was elevated by an additional 5 percentage points in the most affected wards. Exploring the mechanism with additional data on housing diversity and rents, we document the key role of material concerns in shaping reactions to the legal reform.

This paper demonstrates the benefit of deliberately identifying a high prevalence case in which a significant share of voters can be expected to engage in zero-sum fiscal reasoning. In a context of a growing skepticism toward the role economic concerns play in shaping opposition to immigration, our findings offer a more nuanced conclusion: perceived distributional conflict remains

³ This design differs from recent contributions in economics which leverage exogenous variation in the size of the local immigrant population to identify immigration's effect on support for the Far Right (Otto and Steinhardt 2014; Halla, Wagner and Zweimüller 2016; Barone et al. 2016; Harmon 2017; Becker, Fetzer et al. 2016). In these studies, evidence in support of the welfare channel is only indirectly inferred – e.g. Halla, Wagner and Zweimüller (2016) show that an immigration shocks is also associated with more time spent commuting to school. Most importantly, because immigration shocks affect many aspects of natives' environment –by design– cannot identify the contribution of competition over in-kind benefits net of non-economic motives.

⁴ Survey data is a poor substitute given that voters systematically under-report their likelihood of voting for radical parties. For instance, in 2002, approximately 10% of voters cast a vote in favor of the FPÖ. Yet in a 2004 survey, only 5% declared having voted for the Far Right party in the last election (European Social Survey Wave 2).

an important — albeit conditional — driver of support for anti-immigrant platforms. Our findings also speak to a larger literature on globalization and the welfare state. Previous contributions have argued that welfare states can lessen economic insecurity induced by the free movement of goods and capital (Rodrik 1997; Garrett 1998; Swank and Betz 2003; Iversen and Cusack 2000) and thus dampen support for the Far Right (Swank and Betz 2003). Instead, our emphasis on the activation and prevalence of zero-sum fiscal reasoning highlights how perceived threats to broadly accessible in-kind programs can contribute to support for anti-immigrant parties.⁵

Investigating the Welfare Channel

To examine the effect of immigration on citizens' taxes and social transfers, existing research models the welfare state as a combination of a flat rate tax t and a lump sum transfer $b(t)$. Immigration affects public finances by increasing the amount of revenue collected (assuming a non-zero employment rate among immigrants) and by increasing the number of people this amount is redistributed to. The more immigrants who rely on redistributive transfers (because of low income and/or low market attachment), the higher the cost of fiscal adjustment to natives. Within the native population, the group that pays the bulk of the bill depends on the nature of fiscal adjustment: a tax increase holding $b(t)$ constant affects high-earning voters the most, while a benefit decrease holding t constant adversely affects low-earning voters.

Empirical tests of this model using survey data have produced conflicting findings. In line with expectations, Hanson, Scheve and Slaughter (2007) and Facchini and Mayda (2008, 2009) find that support for immigration declines in countries with higher fiscal exposure to immigration (i.e. high levels of taxes and social spending and mostly low-skill immigration). In each case, cross-country differences in the preferences of high-income individuals appear to be driving the results. The authors conclude that distributional concerns over taxes and social spending affect anti-immigrant sentiment and that immigration-induced fiscal adjustment occurs mainly through a tax increase at the expense of high-income groups. In contrast, Hainmueller and Hiscox (2010) find that this pattern does not hold across American states: in states with higher fiscal exposure,

⁵ See Kitschelt (1997), chapter 8, for an early exposition of this argument.

rich natives are *less* opposed to low-skilled immigration than rich natives in other states. They conclude this "indicates that concerns among poor natives about constraints on welfare benefits as a result of immigration are more relevant than concerns among the rich about increased taxes" (p. 61). Overall, they find only limited evidence that distributional concerns over taxes and social spending have a substantive impact on anti-immigrant sentiment.

Given the research designs used in these studies, it is difficult to adjudicate between contradictory results. First, the intensity of immigrant-induced fiscal adjustment is not exogenous, implying that it is difficult to rule out the possibility that observed correlations are shaped by factors and mechanisms unrelated to the welfare channel. Second, and most importantly, studies often leave unexamined the crucial assumption that voters' perceive the fiscal costs of immigration as a realistic threat to their own income.

A recent contribution by Malhotra, Margalit and Mo (2013) emphasizes the importance of analyzing contexts in which individuals may credibly perceive a threat to their material well-being. In their study of the labor market channel, the authors distinguish between a mechanism's effect and its prevalence. They build on this distinction to argue that a lack of support for the labor market channel in large-N survey data does not imply that egocentric economic reasoning is overpowered by orthogonal non-material concerns, but merely that too few people perceive immigration as a threat to their own job prospects. They subsequently demonstrate that when a research design correctly identifies individuals facing a credible threat, the effect of labor market competition on anti-immigrant sentiment is "sizable" (Malhotra, Margalit and Mo 2013: 391).⁶ Similarly, we argue that the study of the welfare channel requires identifying a situation in which a large number of voters will perceive immigration as a threat to the material benefits they derive from the welfare state. On this point, extant studies fall short. For example, Hanson, Scheve and Slaughter (2007) and Mayda (2006), build the activation of zero-sum reasoning into two (implicit) model assumptions: first, that voters understand the fiscal consequences of immigration and second, that they perceive tax increases and/or benefit decreases as a credible threat. However, citizens' misunderstanding of public finance, alongside government reliance on borrowing to

⁶ Similarly, Dancygier and Donnelly (2012) finds that zero-sum reasoning over jobs is more likely in a recessionary context, when job loss –and wage loss– is a credible threat because it is both more likely to occur and less likely to be temporary.

fund resilient budget deficits, make it unlikely that such assumptions hold. Empirically, tests by Hanson, Scheve and Slaughter (2007) or Hainmueller and Hiscox (2010) do not convincingly identify countries or states where fiscal adjustment is a credible threat. Indeed, immigration inflows are likely to be positively correlated with economic growth: states or countries that are the most exposed to large immigration shocks may also be less likely to experience fiscal adjustment because of optimistic tax revenue expectations.

Likewise, high prevalence conditions are inadequately theorized. For instance, Hanson, Scheve and Slaughter (2007) and Mayda (2006) condition their predictions regarding the size and nature of the affected population on the type of fiscal adjustment (tax increases or benefit cuts). Yet, they leave the latter undetermined *a priori*. Empirical outcomes (e.g. the sign and size of the income gradient) are used to determine *a posteriori* whether high-income (through tax increases) or low-income (through benefit decreases) citizens are the most affected by the fiscal costs of immigration. A more robust theory and design should hold the type of fiscal adjustment — and thus the nature and size of the affected population — fixed without inferring it *a posteriori* from the empirical findings.

In sum, while existing research has clearly identified the welfare state as a possible source of distributional conflict between immigrants and natives, empirical evidence remains conflicted. However, without identifying situations in which individuals face a credible threat from immigration, one cannot reject the null hypothesis that the welfare channel plays no substantive role in explaining anti-immigrant sentiment, and by extension, anti-immigrant parties. The remainder of this paper aims to address this gap. First, we build on existing literature to argue that social policy design design is an important factor behind the activation and prevalence of zero-sum fiscal reasoning. Second, we develop a ‘most-likely’ test of the welfare channel, i.e. a test where failure to reject the null hypothesis would provide strong support for the claim that ego-centric economic reasoning cannot explain recent increases in support for anti-immigrant parties in Europe.

Designing a Most-Likely Test of the Welfare Channel

The welfare state redistributes income through policies with varying institutional designs. A key feature of social programs often overlooked by existing models is that they can provide benefits in-kind (e.g. public housing) or in-cash (e.g. housing vouchers). As argued by Dancygier in her study of city-level conflict between immigrants and natives, several features of in-kind transfers render them especially prone to distributional conflicts and thus to the activation of zero-sum reasoning (Dancygier 2010: 26,34). In-kind transfers are a class of social benefits for which supply is fixed in the short-term: building a new school or new public housing requires long-term planning. As a result, a population shock such as a sudden inflow of immigrants can be expected to decrease per-capita benefit both in quantity (e.g. there are less slots available in existing schools) and quality (e.g. the average number of students per classroom increases). Because in-kind benefits are consumed locally and immigration is experienced locally (Money 1999), the environment is rich in informational cues that link changes in benefits to immigration. In contrast, the receipt and consumption of cash transfers is not geographically constrained and the existence of a distributional conflict between immigrants and natives is harder to infer from opaque and complex adjustments in the government's budget.

A second important institutional feature is the extent to which a program targets benefits to the poor or whether it is aimed at a broad swath of the population (Esping-Andersen 1990). As documented by a long line of research in political economy, these two (ideal-typical) programs are supported by very different political coalitions and dynamics. Given high quality and broad eligibility, non-residual programs tend to generate a plurality "wedded to its defense" (Pierson (1998); Campbell (2003)). Means-tested programs, in contrast, do not generate the large support base necessary to protect them from retrenchment (Esping-Andersen 1990; Korpi and Palme 1998). To increase or maintain benefit generosity, such programs rely on a much more fragile coalition of low-income beneficiaries and high-income "altruists" who believe recipients to be deserving (Cavaille and Trump 2015). These institutional features have important implications both for the types of fiscal adjustment triggered by fiscal stress and for the share of population affected. Given a fiscal shock, means-tested programs are more likely to experience "drift" (Hacker

2005), namely a slow decline in per-capita benefits and quality. Anti-immigrant sentiment is consequently more likely to increase among the low-income population targeted by these benefits. In contrast, absent market-based alternatives to benefits provided by non-residual programs, fiscal stress will affect a larger pool of beneficiaries both as recipients and as tax payers. In this case, anti-immigrant backlash is more likely to encompass middle class voters.

In sum, immigration-induced pressure on public finance is more likely to generate anti-immigrant backlash if a significant share of native voters perceive a zero-sum relationship between their disposable income and that of immigrants. The likelihood that such perceptions are held by a large share of voters varies across social programs depending on the nature of the transfer (i.e. in-kind or in-cash) and according to benefit design (e.g. non-residual or means-tested). In-kind programs, especially when they offer high-quality benefits accessible to broad swathes of the income distribution, thus provide ‘most-likely’ cases for a fostering anti-immigrant backlash. Yet a clear test of the political relevance of the welfare channel requires more than a program-centric design: it also requires variation in exposure to immigration-induced fiscal stress. As a result, we focus on an exogenous policy change to Austria’s public housing program. As a hard test, we evaluate a behavioral outcome, and assess whether an increase in distributional conflict following the reform generated support for anti-immigrant parties in legislative elections.⁷

Public Housing in Austria

As in many European countries, public housing occupies a central role in the Austrian welfare state. In 2011, 23% of all dwellings were governed by public housing programs.⁸ The capital, Vienna, possesses a particularly high concentration of units due to extensive post-war construction efforts by the Social Democratic Party (SPÖ): as of 2011, 43% of households in Vienna resided in the public housing sector.

⁷ The majority of existing research in political economy that evaluates the welfare channel uses survey evidence. While we believe that survey evidence is important for establishing underlying mechanisms, it remains unclear how concerns over immigration map on to real world outcomes.

⁸ 2011 Austrian Building and Housing Census. In the Austrian context, as in many other countries, public housing includes municipal dwellings owned by local governments, as well as dwellings owned by limited-profit housing associations. For clarity, the main analysis examines the entirety of the public housing sector. In Appendix A.1, we discuss the differences between the two types of housing and implications for our analysis.

Austria's housing program is not narrowly targeted to the poor, but rather seeks to provide for the housing needs of the middle and lower classes. Initial eligibility is only weakly means-tested: formally, 80-90% of households are eligible (Scanlon, Whitehead and Arrigoitia 2014: 11).⁹ Dwellings are allocated using time spent on the waiting lists and specific point systems for applicants. Points take into account the applicants' current living conditions, the number of people living together in one household, the age of the applicants (e.g. young family or elderly persons) and their income. Although initial access is governed by income and point requirements, individuals are able to continue their lease if their income subsequently increases beyond the eligibility threshold or their personal conditions change (Reinprecht 2014). In tandem, these features keep public housing socio-economically diverse. The absence of concentrated poverty, as well as the high quality of housing units, entail that public housing remains attractive to middle-class households.¹⁰ At the time of the legal reform, individuals living in public housing could expect a rental price that was, on average, 10 to 20% cheaper than a unit in the private sector, without sacrificing quality (Baumgartner 2013). (See also Appendix A.3).

The Consequences of the EU Legal Directive

Historically, public apartments could only be allocated to Austrian citizens.¹¹ Upon accession to the EU in 1995, Austrian states updated their legislation to comply with the directive that long-term EU residents be granted equivalent status.¹² However, third country nationals (11% of the population in 2001) continued to lack the legal right to access public housing, regardless of length of stay or whether they possessed a permanent residence permit.

The barrier between immigrants and social housing was legally breached in November 2003, when the European Union implemented the Council Directive 2003/109/EC on the Long Term

⁹ In addition to weak income limits, applicants must provide evidence of on-going stable employment.

¹⁰ Austrian public housing is also attractive for its tenure security: rental agreements in the private sector are often short-term (Mundt and Amann 2010). See Appendix A.1 for additional background information.

¹¹ The Austrian government is not a signatory to several human rights treaties, such as the European Convention on Social and Medical Assistance, that were interpreted by domestic courts in other contexts to grant access to third country nationals.

¹² Limited migration from EU states prior to 2004 implied that this directive had few practical consequences. In 2001, for instance, EU citizens comprised 2.5% of the Austrian population

Residence of Third Country Nationals. Motivated in part by the systematic exclusion of immigrants from welfare benefits, the directive mandated member states to permit individuals with foreign residence permits to access social services and transfers. As a result, the Austrian parliament passed the Equal Treatment Law (Gleichbehandlungsgesetz Austria/BGBl I 66/2004) in 2004, which required states to implement access for third country nationals by January 23, 2006. In parallel, and partly to reduce the impact of the reform, the federal government passed a revised Residency Act in 2005 which significantly tightened the requirements for gaining a residence permit.

Following this mandate, each of the federal states implemented the directive between 2005 and 2006.¹³ Despite the lag between the federal legislation and January 2006, several states resisted modifying their social assistance and housing laws until the deadline. In Styria for instance, municipal councils argued that, due to the change in the Aliens Act, they would have to delay allocating apartments until they received clarity on how to document permanent resident status.¹⁴ In Vienna, the Social Democratic-led council implemented the revised guidelines by decree on January 23, but delayed formal revisions to the social assistance law.¹⁵ Although the Green party suggested that the delayed codification was an explicit attempt to reduce applications, the implementation of the EU directive nevertheless received substantial attention. The far-right FPÖ and BZÖ campaigned on the legal change, which they termed a "Brussels diktat." In an official press release, the FPÖ argued that the "completely undemocratic" decision would generate a "social explosion of the first order" if quotas were not implemented.¹⁶ Emphasizing the material impact of the reform, Heinz-Christian Strache, chairman of the FPÖ and member of the Vienna city council, noted that the provision entailed that an additional 100,000 eligible foreigners in Vienna would gain access to the stock of approximately 240,000 public apartments.¹⁷ Given the expected increase in waiting lists, Strache argued that "as a traditional citizen, it is difficult to avoid the

¹³ Three cities in Upper Austria had unilaterally granted foreign residents access to public housing prior to the reform: Steyr, Linz, and Wels. We remove these municipalities from the subsequent analysis.

¹⁴ "EU-Richtlinie wird umgesetzt: Ab heute sind alle Gemeindebauten für Ausländer offen." News.at. January 23, 2006

¹⁵ Protocol: Wiener Landtag, 18th legislature, 6th meeting of 6 October 2006

¹⁶ FPÖ Press Release, March 1st 2006. "Herzog zu Gemeindebauöffnung: Ein EU-Diktat ohne Befassung und Einbindung der Bürger!"

¹⁷ Protocol: Wiener Landtag, 18th legislature, 6th meeting of 6 October 2006

impression that one is the very last to be considered when municipal services are needed." ¹⁸

Anticipating high demand for rent-controlled public housing, local policymakers responded by publicly pledging additional housing construction. For instance, shortly prior to the deadline, the town council of Graz (10,500 municipal flats) attempted to mitigate the perceived impact by announcing that "the opening of public housing must be accompanied by a housing [construction] offensive." ¹⁹ In Vienna, the government allocated an additional 535 million Euros to construction and renovation, funding a total of 10,200 new apartments in the city.²⁰ Although a portion was funded via taxes, the public housing system is designed to raise the majority of construction and renovation costs from existing rents. Thus, while the Councilor for Public Housing, Walter Faymann, assured citizens in May that existing rents would not be increased to finance the construction boom²¹, this promise was abandoned later in the year with the announcement that rents would be raised just prior to the legislative election. Depending on the location, increases ranged from an additional 5.0% to 5.7% per square meter. Given that the public housing program operates as a limited subsidy, this policy change may be viewed as an effective immigrant-induced benefit decrease.

A second direct consequence of the reform was reduced mobility. Pending new construction, waiting lists in Vienna gradually increased to three years by early 2007.²² Shortly after the reform, the city government was forced to publicly dispel false rumors that the wait list had immediately jumped to five years.²³ While the expansion of the waiting list directly affected voters hoping to receive the public benefit, it also had implications for existing beneficiaries. In Vienna, for instance, applicants have an obligation to accept one of the first two apartments offered to them, and many leaseholders are initially placed in undesirable neighborhoods within the city. As a result, turnover was traditionally high. In 2005 for example, 26,000 public apartments received

¹⁸ FPÖ Press Release, November 10, 2005. "Strache: Dreifaches Nein der FPÖ zur Öffnung der Gemeindebauten für Ausländer."

¹⁹ "Wien: Gemeindebau offen für Ausländer" Die Press. Nov 11, 2005.

²⁰ "Faymann: Erfolgsbilanz des Wiener Wohnbaus 2006." Rathauskorrespondenz, Vienna, December 12, 2006.

²¹ "Migration: Gemeindebau: Ein Drittel Neo-Österreicher." Die Presse, May 17 2006.

²² "Stadt muss günstige Wohnungen schaffen," BBC News, Region Graz, August 2, 2007

²³ SPÖ Press Release, 16 May 2006. "Gemeindebau - SP-Stürzenbecher: "Stadt Wien wickelt Wohnungsvermittlung an Drittstaatsangehörige vorbildlich ab"

new tenants. However, when seeking a new apartment, existing leaseholders are subject to the same requirements as new applicants: their income must not exceed mandated limits and they are subject to the waitlist. Facing lengthening waiting lists, leaseholders may have reasonably expected that their possibility for upgrading their housing situation would be minimal in the near future.²⁴

Given the prior existence of waiting lists in major Austrian cities, it is important to note that the economic consequences of expanded eligibility were experienced gradually following the reform. From this perspective, the implementation of the directive may be best viewed as a shock to perceptions concerning the relative demand for public housing and its fiscal sustainability. These concerns provided an opening for populist anti-immigrant parties, who rhetorically linked expanded housing eligibility to a sustained attack on the viability of the Austrian welfare state.²⁵

Empirical Strategy

To assess whether perceptions of distributional conflict over in-kind benefits drives support for anti-immigrant parties, we adopt a difference-in-differences design. Leveraging variation in the share of adults living in public housing, we evaluate whether municipalities strongly affected by the reform deviated from expected electoral trends. Specifically, we assess whether municipalities with high shares of residents in public housing voted at elevated rates for populist anti-immigrant parties (FPÖ and BZÖ) in the legislative elections of October 1, 2006, which directly followed the mandate to expand the beneficiary pool to include third country nationals.

The difference-in-differences design implies that the results will not be biased by unobserved time-invariant factors at the municipal level which may otherwise affect political support. However, the specification relies on the assumption that municipalities with high levels of public housing would exhibit parallel electoral trends in the absence of the 2006 reform, when compared to municipalities with lower public housing stock. This assumption is theoretically plausi-

²⁴ A third effect of the reform relates to a potential decline in the quality of public housing. One consequence of fiscal imbalance is a decrease in the share of funds available for regular renovation and improvement. Given higher rates of poverty among the newly eligible population, an additional concern related to quality is an increase in the negative externalities tied to higher rates of concentrated poverty.

²⁵ See Appendix A.5 for additional details on the politicization of the directive by Austrian parties.

ble for two reasons. First, the era of extensive public housing construction in Austria (1920-1960) significantly predates contemporary political dynamics, and was directly related to war-time destruction (see Appendix B.12). Second, public housing in Austria is widespread. Although urban areas have a higher concentration of housing than rural areas, as of the 2001 Housing Census, 90.5% of Austrian municipalities had social housing units (2001 Buildings Census). As a result, variance is largely in terms of degree rather than in kind. Observed trends across municipalities bear these assumptions out: as demonstrated in Appendix B.2, we fail to reject the hypothesis that municipalities with different levels of public housing, but similar levels of foreign settlement, followed parallel electoral trends prior to the legal directive ($p=0.28$).

The municipal-level analysis permits us to evaluate a substantive effect of the reform on a national electorate. However, at this level of aggregation, the data does not allow us to conclude with confidence that the effects are primarily driven by voters that are receiving public housing or are on the waitlist.²⁶ As a result, we conduct a subsequent neighborhood-level analysis in a high prevalence case. We focus on Vienna, where 43% of the population lives in social housing. Leveraging geodata on the exact location of municipal public housing, we match housing units to the appropriate electoral ward ($n=1,931$). Given that the share of adults living in public housing ranges from 0 to 96% across wards, this variation enables us to examine electoral behavior among neighborhoods where public housing should be highly salient. In addition, the Vienna analysis enables us to draw on detailed data on the characteristics of public housing units, such as quality and existing ethnic composition, to further assess the underlying mechanism.

Results: Austrian Municipalities

We expect support for anti-immigrant parties to be elevated in municipalities where the reform activated zero-sum reasoning among a substantive share of voters, i.e. in those municipalities with a high share of residents living in public housing and a large population of newly eligible third-country nationals.²⁷ Using registry data, we obtained the percentage of inhabitants in

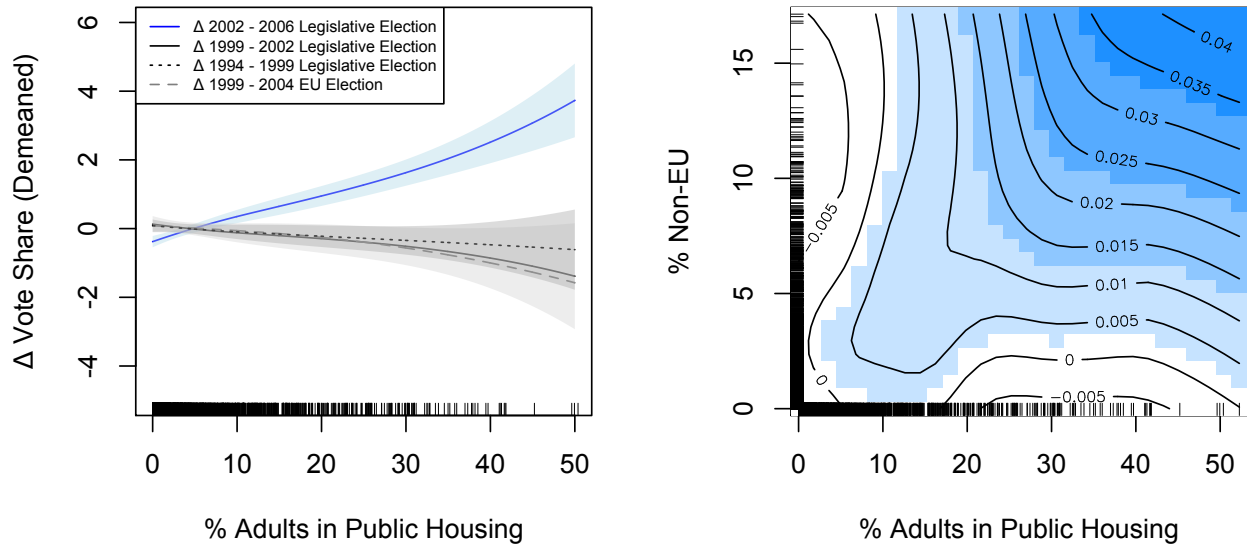
²⁶ Data on waitlists is not systematically collected. Absent stringent eligibility conditions and detailed data on economic risks, a population of potential recipients is difficult to single out. As a result, our empirical analysis focuses on the prevalence of the first group.

²⁷ Third country nationals are individuals who did not hold EU or Austrian citizenship at the time of the reform.

each municipality (n=2383) who were third country nationals in January 2006. From the 2001 Population and Building Census, we obtained the percentage of residents of voting age (18+) living in public housing units.²⁸

Given the possibility of threshold effects, we expect the relationship between our explanatory variables and the Far Right’s vote share to be non-linear. Accordingly, we begin by evaluating trends using a non-parametric approach. The left-hand panel of Figure 1 plots the change in vote share for anti-immigrant parties across elections, as a function of the proportion of adults in public housing.²⁹ The results demonstrate that the 2006 election was exceptional: while in prior elections the level of public housing did not significantly predict changes in support for anti-immigrant parties, in the 2006 elections, municipalities with a high share of residents in public housing deviated from this trend and voted in increased numbers for anti-immigrant parties.

Figure 1: Effect of Public Housing and Foreign Settlement on Municipal Vote Share



Left: Local linear fit between the share of adults in public housing and the change in support for anti-immigrant parties between 2002 and 2006 (demeaned), with 95% confidence intervals. *Right:* GAM interaction between the share of adults in public housing and immigrant settlement; contours represent the change in support for anti-immigrant parties between 2002 and 2006 (demeaned). Crossing a contour line represents an expected change in the outcome; darker colors indicate larger increases.

²⁸ Population data on public housing occupancy is only available in 10-year intervals. In the analysis that follows, given limited construction during the period, we assume that public housing in 2001 reflects the housing situation in 2006. We do not average 2001 and 2011 estimates because the latter are post-treatment.

²⁹ We demean to provide clear comparisons regarding the distribution of votes across municipalities in each election. The dependent variable consists of votes for the FPÖ and the BZÖ. The BZÖ is a splinter party of the FPÖ that did not exist before the 2006 election. As a robustness check, we re-ran the analysis focusing only on FPÖ vote shares.

We next assess whether the tendency to vote for anti-immigrant parties was amplified by the presence of third-country nationals. In the right-hand panel of Figure 1, we use a generalized additive model (GAM) to flexibly plot the interaction between the intensity of the distributional conflict (% Non-EU Residents) and its prevalence (% in Public Housing). The results are presented as a contoured heat map; crossing a contour line alters the point estimate, while darker colors indicate municipalities with larger increases in anti-immigrant vote share between 2002 and 2006. The results suggest that the interaction is significant: citizens in municipalities facing potential distributional conflict were most likely to exhibit increased support for anti-immigrant parties following the expansion of housing eligibility. In contrast, municipalities that did not face a credible threat (low non-EU population) or that did not have many affected native residents (low public housing share), did not vote in higher numbers for anti-immigrant parties.

To obtain interpretable point estimates, we rely on parametric models. In order to minimize functional form assumptions, we divide municipalities into bins corresponding to different levels of public housing and third country population. We then fit a first differences model of the form:

$$\Delta VoteShare_{i,06-02} = \alpha + \sum_{p=1}^4 \theta_p PH + \sum_{q=1}^4 \gamma_q NonEU + \sum_{p=1}^4 \sum_{q=1}^4 \beta_{p,q} (PH * NonEU) + \epsilon_i$$

where *VoteShare* indicates the percentage vote share for anti-immigrant parties in municipality *i*, *PH* represents a dummy variable for each bin *p* of public housing, and *Non-EU* is a dummy variable indicating each quartile, *q*, of non-EU resident population.³⁰

Table 1 displays the marginal effect of public housing from this specification, holding the quartile of foreign population constant. The results indicate that municipalities with a substantial share of residents in public housing deviated from historic electoral trends following the reform. Relative to municipalities with low public housing stock, municipalities with at least 20% of adults in public housing and a sizable share of foreign residents increased their support for anti-

³⁰ See Hainmueller, Mummolo and Xu (2018) for a discussion of the value of binning interactive models. We bin public housing at discrete points along the distribution to permit equivalent comparisons across different levels of foreign settlement. Substantively similar results are obtained using a linear specification (Appendix B.5), different bins for each variable (Appendix B.6), or incorporating additional pre-treatment periods (Appendix B.4).

immigrant parties by an additional 2.3 percentage points, plus or minus 0.6.³¹ Given that municipalities in the baseline category increased their support for Far Right parties by 3.9 percentage points on average between 2002 and 2006, these estimates suggest an additional 59% increase in relative support within strongly affected municipalities.³² Consistent with expectations, this effect is not visible in municipalities lacking a sizable share of third country nationals.³³

Table 1: Marginal Effect of Public Housing on Anti-Immigrant Vote Share, 2002-2006

	Level of Third Country Nationals				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
0-5% (Baseline)	-	-	-	-	-
5-10%	0.011 (0.006)	0.006 (0.003)	0.007 (0.003)	0.007 (0.003)	0.006 (0.003)
10-20%	0.010 (0.010)	0.010** (0.003)	0.011** (0.003)	0.012** (0.003)	0.010** (0.003)
> 20 %	-0.006 (0.010)	0.023** (0.003)	0.023** (0.004)	0.023** (0.004)	0.021** (0.004)
<i>Covariates</i>					
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2374 municipalities. SER = 0.028.

Low and High refer to the 1st and 4th quartiles.

* $p < 0.01$, ** $p < 0.001$

Before proceeding, we rule out several alternative explanations for these findings. First, increased support for anti-immigrant parties could be driven by compositional factors correlated with, but substantively unrelated to, the provision of public housing. For instance, if public hous-

³¹ Pooling all municipalities with more than 20% of public housing results in conservative estimates. As seen in Figure 1, effect sizes continue to increase at higher levels of public housing. We set the top bin at 20% to ensure overlap with respect to different levels of foreign population.

³² The baseline category refers to municipalities with 0-5% public housing, within the highest quartile of third country nationals. The expected difference in vote share relative to municipalities in the lowest quartile is greater: 2.7 percentage points.

³³ In Appendix B.7, we substitute the total share of non-citizens for the non-EU population. Effect sizes are slightly larger (+2.8 percentage points), suggesting that individuals may have difficulty distinguishing between EU and non-EU nationals.

ing density is closely correlated with local income levels, and low income voters were particularly likely to vote for anti-immigrant parties in 2006 (but not in prior years), the observed deviation from trends could be unrelated to the EU legal ruling. Accordingly, the right-hand side of Table 1 examines if our results are robust to controlling for features of the electorate often associated with support for the Far Right.³⁴ Differences in the electorate's education and income levels, as well as features of the local economy (unemployment rate and the manufacturing sector's job share) do not appear to be driving our results.³⁵ Finally, areas with the largest demand shock (i.e. the areas with the largest share of immigrants) may also be areas that saw the largest increase in the immigrant population between the two elections. As demonstrated by Hopkins (2010), swift demographic change can translate into anti-immigrant sentiment, especially if immigration is a politically salient issue. As shown in column (4), our results are robust to controlling for changes in the size of the Turkish and Yugoslav foreign-born population between 2002 and 2006, groups which have traditionally attracted hostility from voters.

An alternative explanation is that results are driven by electoral trends. Given that support for anti-immigrant parties was relatively low in the 2002 legislative elections,³⁶ it is possible that increased support in 2006 represents a reversion to the mean. However, the available evidence is inconsistent with a simple electoral reversal. As shown in Appendix B.2, support for the Far Right across Austrian municipalities was comparatively lower in areas with the highest public housing density prior to the reform. In 2006, the increased support among such municipalities thus represents a sharp break from prior trends. Similarly, as shown in Appendix B.3, placebo tests for the 1999 and 2002 legislative elections and the 2004 EU election suggest that a similar relationship cannot be detected prior to the implementation of public housing reform.

Next, we evaluate an additional observable implication of the hypothesis. If the argument holds, we would expect effect sizes to be higher in areas in which public housing is compara-

³⁴ Covariates are unavailable for each election year within the data. Accordingly, we use covariates gathered in the 2001 census, and examine effect heterogeneity across the difference in vote share across the 2002 and 2006 elections.

³⁵ More generally, given that public housing stock is widely available across the income distribution, the correlation with local socioeconomic characteristics is in fact quite weak. Correlation coefficients are 0.25 for income, 0.22 for employment, 0.21 for tertiary education.

³⁶ Divisions within the FPÖ leadership following the party's membership in the coalition government undermined the electoral appeal of the far right and led to the creation of the BZÖ in 2006 (Mudde 2013).

tively more attractive than private alternatives. Absent slack in the housing market, demand by third country immigrants can be expected to generate financial stress in the form of higher construction demands resulting in downstream rent increases and less frequent building renovation. Moreover, if public housing is attractive relative to other housing options (e.g. renting in the private sector), exit options for public housing beneficiaries will be limited.

To measure geographic variation in rental markets, we draw on household-level data from the Austrian Microcensus, a rotating panel which surveys a representative sample of 1% of Austrian households each year. In addition to labor market data, the Microcensus records the county of residence as well as information on housing costs, permitting a geographic analysis of differences in rental markets across Austria. Given sample size limitations, we pool data from 2000 to 2003 at the district level ($n=120$), adjusting for inflation.³⁷ This yields a median of 181 households per district (see Appendix A.2). For each district, we calculate the average monthly rent, per square meter, separately for privately-owned apartments and public housing.³⁸ Given coarse data, we discretize the measure and assess whether the ratio between public and private rental prices within a district is above or below the national median.³⁹

Figure 2 displays the effect of this price ratio using a local linear specification. Consistent with our argument, we find that our results are largely driven by districts where public housing is particularly valuable relative to private rentals. In areas where public housing has a less attractive rent differential, the increase in vote for the Far Right is muted. In contrast, in districts where public housing is comparatively valuable, effect sizes are larger. For instance, for municipalities with 20% of population in public housing, the effect of moving from a slack to a tight rental market is 1.2 percentage points, with the gap widening across the distribution.⁴⁰

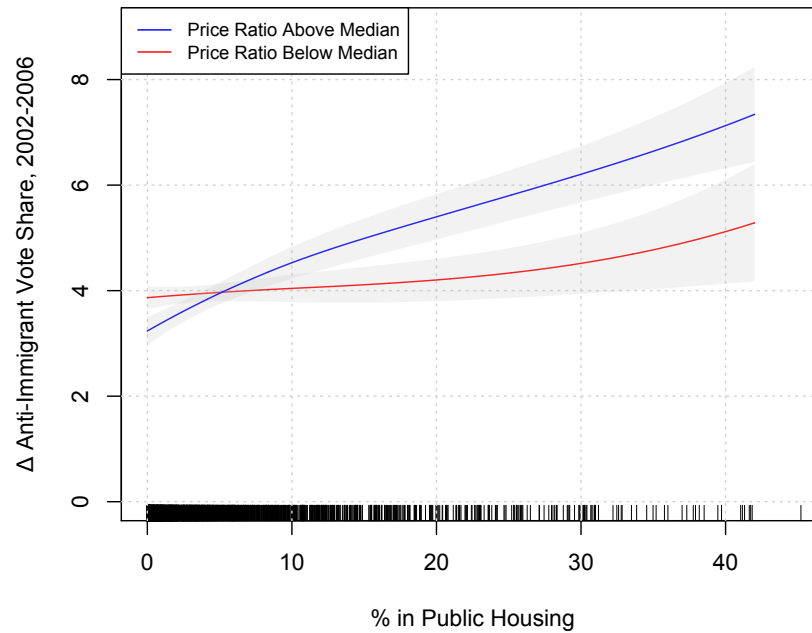
³⁷ Q4 2003 is the last quarter for which microdata with geographic identifiers are available. We acknowledge that rental prices may have shifted in the interim.

³⁸ A separate analysis suggests that this price gap is not driven by lower public housing apartment quality. See Appendix A.3.

³⁹ Specifically, we divide the price of private housing by the price of public housing within a district, and then separate districts into two equally sized bins, above and below the district median. The median ratio in our data is 1.06.

⁴⁰ See Appendix B8 for parametric specifications and additional robustness checks.

Figure 2: Change in Support 2002-2006, By District Rental Market



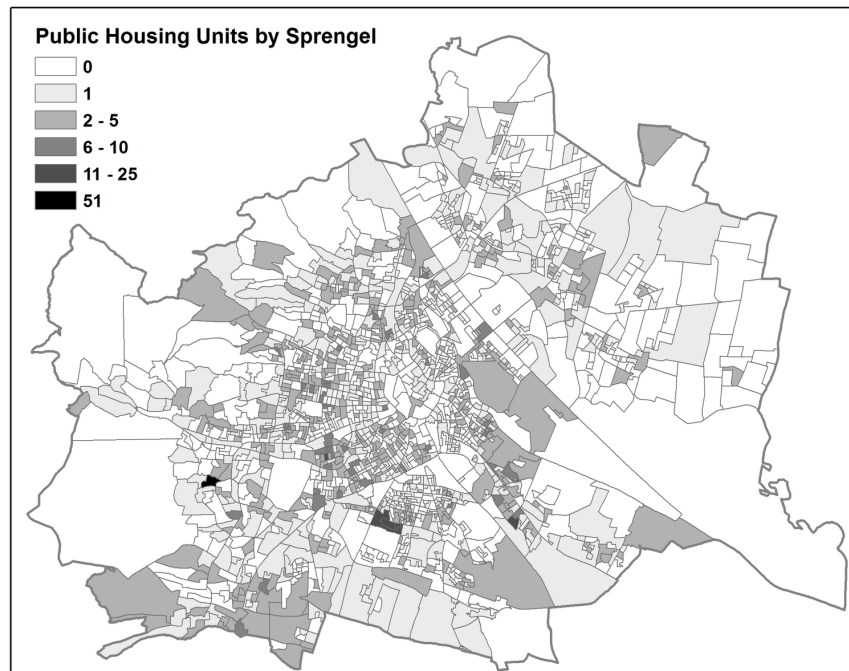
Local linear fit of the share of adults in public housing on the change in anti-immigrant vote share between 2002 and 2006, with 95% confidence intervals. ‘Price Ratio Above Median’ refers to districts in which the ratio of the average monthly rent between public apartments and private apartments is above the national median (i.e. private apartments are comparatively more expensive relative to public housing).

Results: Electoral Wards in Vienna

Although the pattern of increased support for anti-immigrant parties following the legal reform is consistent with the argument advanced in this paper, an analysis of aggregate municipal outcomes does not allow us to determine with confidence that the increased support for anti-immigrant parties following the reform is driven by voters reliant on public housing. As a result, the aggregate findings are potentially subject to ecological inference bias. To supplement these findings and further assess the underlying mechanism, we draw on detailed data from a case where we expect perceptions of distributional conflict to be especially prevalent. We focus on Vienna, which has the highest share of public housing stock in the country, at 42.8%, as well as a significant share of foreign citizens. Given that public housing units are asymmetrically dispersed across neighborhoods, Vienna provides additional variance to assess the effects of the reform.

To conduct the analysis, we obtained geodata on the location of public housing units from

Figure 3: Geocoded Public Housing Units, Viennese Electoral Wards



the Vienna city government, and mapped them to electoral boundaries. Figure 3 maps the distribution of public housing by electoral ward, using geodata on the location of public housing apartments in Vienna ($n=209,375$ apartments, 4,610 buildings), matched to the appropriate electoral ward ($n=1,920$). Given that multiple voters can reside in an apartment, we linked these boundaries to census tract data on the number of native adults (18 and over) living within public housing units (See Appendix C.1). This approach allows us to credibly proxy the percentage of voters in each electoral ward who reside in public housing (*% Public*): the share of such voters ranges from 0-96% across polling stations.⁴¹

As demonstrated by the left-hand panel of Figure 4, patterns in Vienna mirrored those across the country as a whole: wards with a high proportion of residents in public housing units substantially increased their support for anti-immigrant parties in the 2006 elections. Importantly, this trend is not observed in prior electoral cycles. As seen in Appendix C.4, this tendency is robust to the inclusion of local covariates, indicating that compositional effects are unlikely to be driving the results. We next assess whether there is an interaction between public housing and

⁴¹ See Appendix C.9 for alternate measures of public housing density.

local diversity. Given that wards with a high share of residents in public housing did not, by definition, include many foreign residents prior to the EU directive, we measure the percentage of third country nationals at the census tract level ($n=241$).⁴² The right-hand panel of Figure 4 uses a generalized additive model (GAM) to evaluate the interaction between this measure and public housing density. The results suggest that the majority of the variation in increased support for anti-immigrant parties can be explained by public housing density. However, these effects are heightened in census tracts where a sizable share of residents are third country nationals. A binned first difference estimate suggests that wards with at least 60% of adults in public housing increased their support for anti-immigrant parties by 5.0 percentage points, plus or minus 1.6, relative to wards with 0-10% of residents in public housing (See Appendix C.4). Given that support for the Far Right rose by an average of 7.4 percentage points in the latter category between 2002 and 2006, this represents a relative increase of 73%.⁴³

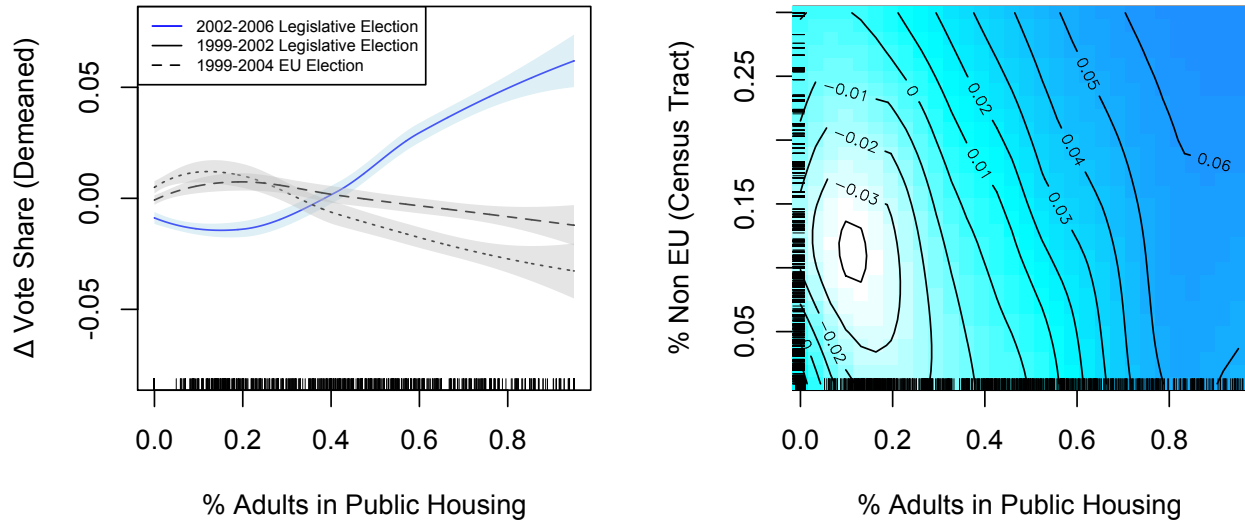
We identify three alternative explanations for these sharp changes in local voting behavior. First, individuals might derive utility from neighbors who share their language, values and customs, a preference for what Card, Dustmann and Preston (2012) term "compositional amenities." In other words, our results might be an artifact of the type of social benefit examined, namely one that is geographically bounded and necessitates direct interaction with other benefit recipients. Thus, the apparent zero-sum thinking in the face of a distributional conflict might simply be the expression of a parochial preference for homogeneity. While parochialism, as a causal explanation, is insufficient to account for the timing of the surge in electoral support for anti-immigrant parties, it may have been reactivated when residents of public housing faced the prospect of foreigners moving down the hall.

Available data permits us to test this argument by examining how responses to the EU legal directive varied by the existing diversity in housing blocs. Although third country nationals

⁴² Perceptions of local diversity are likely to be formed at a higher level of aggregation than the ward. Depending on commuting patterns, it is plausible that individuals' perceptions of diversity may also be driven by city-wide demographics.

⁴³ A linear specification (Appendix C.3) provides substantively similar estimates. The GAM estimates visible in the right-hand panel of Figure 4 suggest larger effects. a shift from 30% to 70% of residents in public housing along with a shift from the 30th to the 70th percentile in non-EU population is associated with an additional 6.2 percentage point increase in support for anti-immigrant parties in the 2006 elections, plus or minus 1.6.

Figure 4: Effect of Public Housing on Anti-Immigrant Voteshare: Electoral Wards in Vienna



Left: Local linear fit between share of adults in a ward residing in public housing and the change in support for anti-immigrant parties between 2002 and 2006 (demeaned), with 95% confidence intervals. *Right:* GAM interaction between public housing and immigrant settlement; contours represent the change in support for anti-immigrant parties between 2002 and 2006 (demeaned). Crossing a contour line represents an expected change in the outcome; darker colors indicate larger increases.

were excluded from public housing prior to January 2006, naturalized foreign-born citizens and EU long-term residents were able to access public apartments.⁴⁴ If support for anti-immigrant parties is being driven by voters in public housing who value ‘compositional amenities’, we would expect voters in homogeneous housing units to respond more sharply to the legal change in an effort to preserve the status quo.

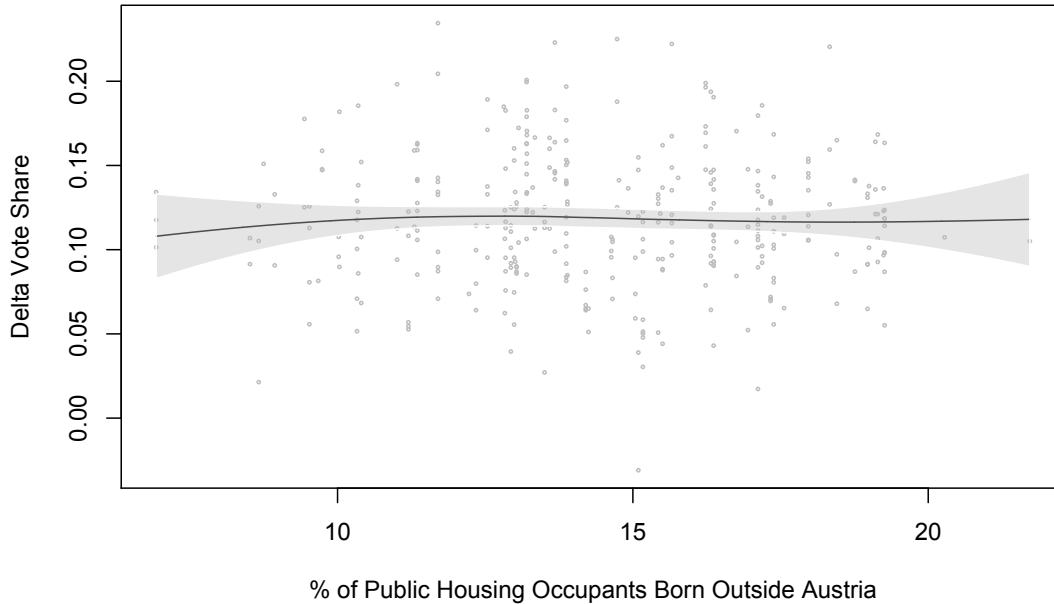
The data suggests that this pattern does not hold. Figure 5 plots the change in support for far-right parties as a function of the existing diversity of each public housing unit, restricting the analysis to electoral wards where the majority of residents live in public housing.⁴⁵ No relationship is apparent: that is, individuals in relatively homogeneous housing blocks were just as likely to cast votes for the far-right as individuals living in diverse housing units. Unless

⁴⁴ 83% of foreign-born citizens in public housing were naturalized Austrians born outside the EU, primarily from Turkey, Egypt, and former Yugoslavia.

⁴⁵ Identifying the specific behavior of voters in public housing, as opposed to the effect of a legal shock on ward-level results, is subject to the ecological inference problem. Accordingly, we restrict the sample to areas with 50% or more of residents in public housing to reduce bias. Similar results are obtained with a 25% threshold and a 75% threshold, see Appendix C.6

the threshold necessary to activate a threat of local diversity is quite high, these results are inconsistent with a mechanism based on simple parochial tendencies.

Figure 5: Existing Housing Diversity and Change in Vote Share, 2002-2006



Local linear fit between foreign-born occupants of public housing (measured at the ward level), and change in vote share for anti-immigrant parties between 2002 and 2006, gray shading indicates the 95% confidence interval.

A second alternative explanation involves a form of sociotropic thinking underlying sociological theories of "group threat" (Dixon 2006) or "linked-fate" Dawson (1995). In this view, support for anti-immigrant parties may emerge from a combination of group-level reasoning (ie. if group A wins then group B loses) and voters viewing their own prospects as closely tied to the success of a larger group. From this perspective, the loss of housing exclusivity may have threatened the perceived position of native Austrians relative to immigrants, invoking a broad threat response.

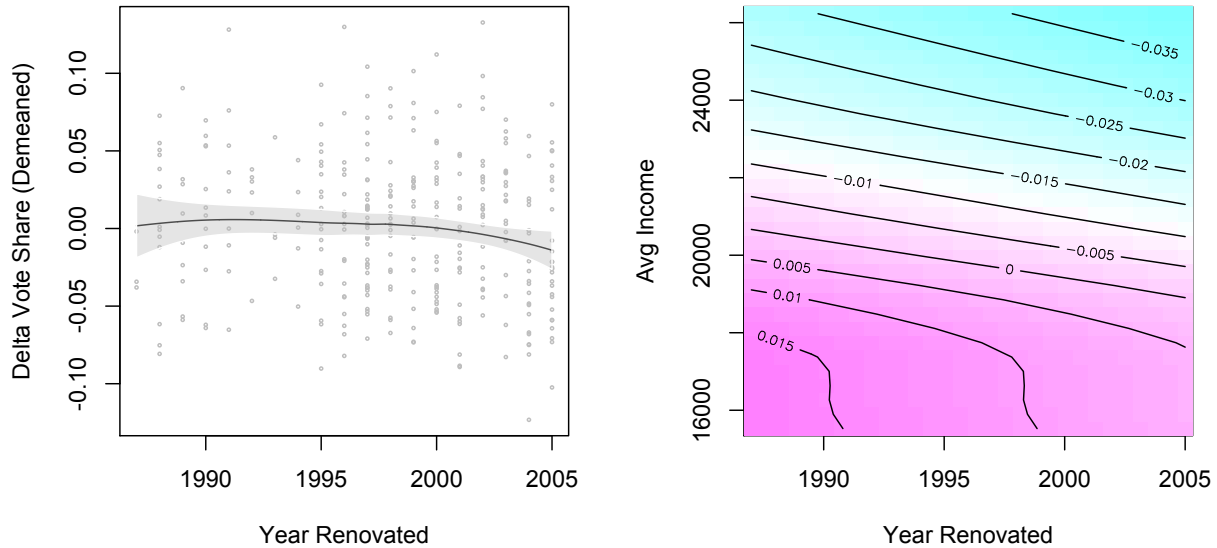
Although sociotropic reasoning likely plays some role in the scale of the observed response to the legal reform, this mechanism does not appear to predominate. If this channel were active, we would expect the reform to induce gains in all municipalities and neighborhoods with large shares of Austrian natives following the reform, regardless of the degree of local competition over public resources. Yet this pattern is not observed: homogeneous neighborhoods and municipalities voted for far-right parties at lower rates than the national average in 2006.

One final objection relates to our focus on the effects of the reform among neighborhoods in which a majority of voters already have access to the scarce benefit – in this case a public housing lease. These individuals are net beneficiaries of the social program and are assumed to be directly affected by the implementation of the EU directive. However, one might argue that once an individual gains access to a subsidized unit, she should no longer feel personally affected as her access to the public good is now secured. However, as previously discussed, we expect rent increases and a decrease in mobility to directly affect those already living in public housing.

While rent increases were uniformly applied across Vienna, the available data permits an assessment of the potential response to decrease mobility. Namely, if a decrease in perceived mobility influenced attitudes, we should observe stronger reactions among leaseholders assigned to less desirable public housing units, given that the legal reform curtailed their subsequent mobility. Figure 6 evaluates this hypothesis by drawing on data on local neighborhood income and the renovation date of each public housing complex. The left-hand panel suggests a mild relationship between renovation dates and support for anti-immigrant parties: individuals in newer, more desirable, units were slightly less likely to shift their votes following the reform. This effect is strengthened when adding the interactive effect of neighborhood wealth (right-hand panel). Indeed, a flexible interaction suggests that voters in less desirable units (nonrenovated apartments in poor neighborhoods) were most likely to cast votes for anti-immigrant parties following the reform. The alternative arguments mentioned above cannot account for this empirical pattern, providing additional evidence in favor of the materialist argument.

In sum, geodata from Vienna indicates that neighborhoods with high shares of existing beneficiaries reacted to distributional conflict by casting their votes in favor of anti-immigrant parties. It is important to note that our argument does not claim that parochialism or xenophobia is entirely absent from this reaction. Rather, these results may demonstrate a pathway that explains when parochialism may translate into politically consequential behavior. One key contribution of this paper is thus to show that latent parochialism may be activated by perceived material threats.

Figure 6: Public Housing Quality and Change in Support for Anti-Immigrant Parties



Left: Local linear fit of year of public housing renovation on the change in support for anti-immigrant parties between 2002 and 2006 (demeaned), with 95% confidence intervals. *Right:* GAM, interaction between renovation year and neighborhood average income; contours represent the change in support for anti-immigrant parties between 2002 and 2006 (demeaned). Darker colors indicate larger increases.

Conclusion

To address contradictory findings on the relationship between immigration, the welfare state and support for anti-immigrant parties, this paper has advanced a "disaggregated analysis" (Moene and Wallerstein 2001) of the welfare channel that theorizes cross-program differences in perceptions of distributional conflict. Building upon insights from Dancygier (2010), we have argued that in-kind benefits are most likely to generate perceptions of credible distributional conflict between immigrants and natives. Moreover, we expect the prevalence of zero-sum reasoning — and thus its observable effect in aggregate data — to be higher when social programs are non-residual, i.e. targeted broadly to the middle class in addition to low-income individuals.

Having outlined a set of scope conditions, we empirically test the political relevance of the welfare channel by identifying a most likely case characterized by variation in exposure to distributional conflict between immigrants and natives. In Austria, EU-induced shifts in housing eligibility provide the opportunity to identify the relationship between the intensity of distributional conflict and anti-immigrant vote share. This design improves on the existing empirical

literature in several ways. First, it offers a most-likely test with a straightforward interpretation. Second, because it measures anti-immigrant sentiment using vote choice, it also reduces the risks of ‘cheap talk’ associated with survey data. Like Dancygier (2010) and Money (1999), we focus on a real world outcome. While these studies utilize cross-sectional variation and process tracing to demonstrate the role of distributional conflicts over in-kind public transfers, our empirical strategy leverages exogenous variation to identify a substantive effect on national electoral politics.

Using a difference-in-differences design, we find that municipalities in Austria and electoral wards in Vienna most affected by the legal change were also more likely to deviate from secular election trends and to increase their support for anti-immigrant parties in the 2006 legislative elections. This effect is substantive: we find that anti-immigrant vote share increased by 59% in Austrian municipalities with more than 20% of residents in public housing, relative to lower prevalence municipalities. Consistent with the argument, we also observe increased point estimates in Viennese wards where a majority of citizens reside in public housing. Robustness checks indicate that these results are not driven by compositional effects, the political cycle, or an increase in the share of stigmatized immigrants.

This voting behavior appears to be rooted in economic concerns. First, effect sizes are especially large in municipalities where public housing is attractive relative to private rental options. In other words, our results are driven by areas where the threat of fiscal adjustment (i.e. a rent increase or decreased access) is credible. Indeed, in Vienna, rent increases materialized less than a year after the enforcement of the European directive. Second, no effect of the reform is visible in diversifying areas in which public housing was low and thus the in-kind benefit was of low prevalence. In alignment with this finding, our data on existing diversity within Viennese public housing units does not play a leading role in driving support for anti-immigrant parties. Nevertheless, it is important to note that a cultural reaction to immigrant benefit access cannot be fully ruled out. Indeed, the cumulative and interactive effects of self-regarding material and other-regarding compositional concerns is a defining feature of in-kind benefits. This combination points to the welfare channel as a possible pathway in which electoral support for anti-immigrant parties expands beyond a low-educated core with strong preferences for

homogeneity to a larger group motivated by a mix of cultural and material concerns.⁴⁶

Contra accounts that dispute the contemporary relevance of distributional conflict, our results demonstrate how pressure induced by immigrants' receipt of benefits can foster an anti-immigrant backlash. While we focus on the Austrian public housing program as a most likely case, we expect our findings to extend to a broad class of non-residual in-kind transfers. Indeed, public housing is not unique as a social transfer with supply fixed in the short-term, the consumption of which is based on residence and that benefits groups beyond the worst-off. Another most-likely candidate is public healthcare, such as the National Health Service in the United Kingdom. In a recent analysis, Becker et al. (2016) show that recent waves of Polish migration settled in rural and peri-urban areas, where public services have been chronically under provided. Consistent with the argument outlined in this paper, they demonstrate that lower-quality NHS service provision is associated with support for Brexit.

The extent to which these local experiences will aggregate to national-level politics is a function of the share of the population affected by distributional conflict. We see two main mechanisms through which this share will increase. One is a country-wide immigration shock of the kind experienced by many Western European states following EU enlargement. The other mechanism consists of a change in beneficiaries' perceptions of available resources. In both instances, elite-level discourse is likely to play a large role in framing perceptions of scarcity (Hopkins 2010; Barnes and Hicks 2018): in countries where welfare states are perceived as bankrupt and where elites have argued for austerity measures, the threat of retrenchment becomes more credible. One might reasonably expect that in such a context, a broader swathe of the native population will be susceptible to rhetoric blaming immigrants for perceived congestion.

Finally, our argument and findings provide a theoretical bridge between contrasting claims in the literature on the mediating role of the welfare state. According to Swank and Betz (2003), a comprehensive and generous system of social protection lessens economic insecurities induced by free trade and globalization and consequently weakens support for far-right parties (see also

⁴⁶ Indeed, attitudinal data supports the claim that 'this time might be different:' while the first wave of expansion of the Far Right (in the early 1990s) coincided with an increase in anti-immigrant sentiment Semyonov, Raijman and Gorodzeisky (2006), there is no evidence of such an increase in the most recent period (Hatton 2016).

Garrett (1998) and Rodrik (1997)). In contrast, we argue that distributional conflict between immigrants and natives over social spending can increase anti-immigrant sentiment, and by extension, support for such parties. By focusing on different types of social spending, we provide one way to reconcile these two arguments. In a context where globalization is understood as the free circulation of goods and capital, universal welfare states with generous flat rate transfers can more efficiently compensate those displaced by labor market shocks. Yet in a context where globalization also translates into large population movements, welfare states with a large universal in-kind component can become the source of distributional conflict that increases support for the Far Right. An exclusive interpretation of anti-immigrant sentiment as evidence of cultural backlash potentially disregards underlying concerns about access to social transfers in a context where fiscal adjustment has become a credible threat.

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HOW DISTRIBUTIONAL CONFLICT OVER IN-KIND BENEFITS GENERATES SUPPORT FOR ANTI-IMMIGRANT PARTIES

ONLINE APPENDIX

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A. Background: Public Housing in Austria

A.1. Background

Students of public housing in Europe distinguish between two ideal-typical housing programs (Scanlon 2017). In countries like Great Britain (especially since the late 1980s) and France (with the exception of central Paris), public housing targets the housing needs of “lower income households” (Scanlon 2017: 1). In contrast, in countries like Austria or Sweden, “social housing (is) a mechanism for providing for all types of households.” As mentioned in the main paper, eligibility criteria in Austria are only weakly related to income (more than 80% of households are eligible to apply). In addition, the system gives priority to people in employment who have enough income security to pay the rent (Reinprecht 2014: 69). Finally, the high quality of public housing makes it attractive to middle class households.

The relative attractiveness of the public sector can be attributed to a more favorable price to quality ratio. New social dwellings are “of similar quality to the rest of the housing stock, or even superior to new flats in the private rental sector” [62](Reinprecht 2014). In addition, public housing has played a leading role in terms of construction standards, especially those relating to the environment (e.g. thermal isolation) and social cohesion (e.g. inter-generational housing) (Reinprecht 2014). Absent a strong emphasis on means-testing, public housing has remained socio-economically diverse, preventing the decline in housing quality often associated with the concentration of poverty and unemployment (see Scanlon, Whitehead and Arrigoitia (2014), chapter 1). Austrian public housing is also attractive for tenure security: rental agreements in the private sector are often short-term (Mundt and Amann 2010). Short and fixed-term tenancies were facilitated by the Tenancy Act of 1982 which weakened Austria’s historic tenant protection. This Act also deregulated rents, allowing rent increases if tied to new amenities. This facilitating the emergence of a luxury private rental sector that does not cater to the needs of the median Austrian household.

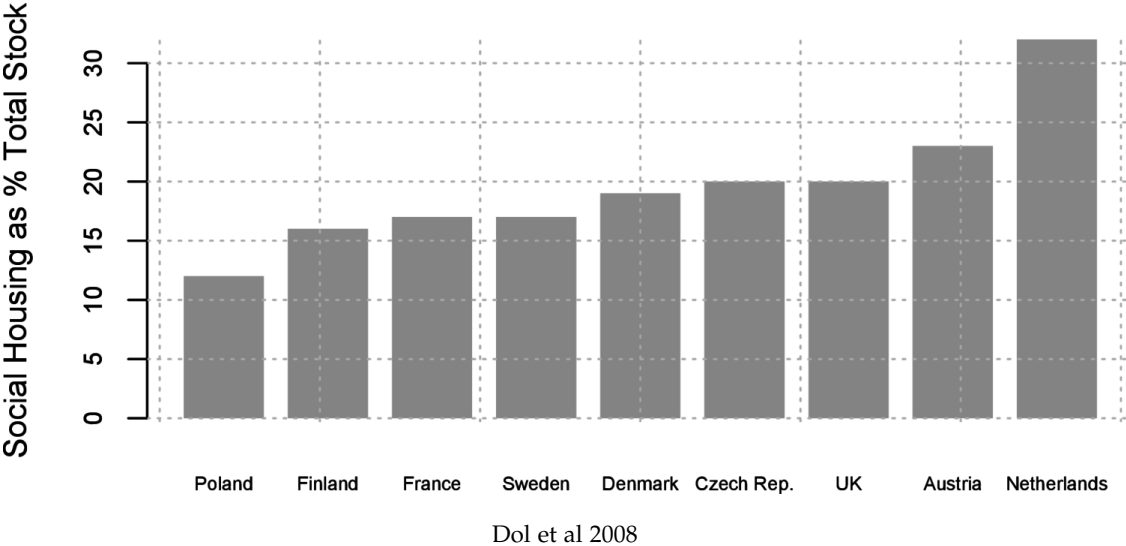
In Austria, public housing is seen as an integral part of the decommodifying welfare system. Its effect on the material well-being of Austrian households goes beyond providing housing for 1 in 4 households. It also affects rents on the private market. By providing high-quality housing at a lower price, Austria’s public housing sector directly competes with private provision: high-quality public housing is rented “at cost”, resulting in moderate rents that dampen rent levels in the private sector (Mundt and Amann 2010: 35) (see also Kemeny, Kersloot and Thalmann (2005)). The rent gap between the public and private sector is thus not as dramatic as in countries where housing programs mostly provide a safety net for those with acute housing needs and do not influence rents in the private market.

Public housing dominates the rented sector (59% of rented housing). This share has grown since the 1980s, when only 45% of the rental sector was considered public housing (Reinprecht 2014). 26% of dwellings are directly owned by municipalities or non-profit housing associations. In Europe, only the Netherlands has a larger public housing stock. In other words, unlike other housing programs in countries like France or Great Britain, public housing in Austria has mostly resisted retrenchment. This trajectory is in line with previous findings on non-residual programs’ resilience in what Paul Pierson calls the “Age of Austerity” (Pierson 2002).

Two thirds of public housing is owned and managed by non-profit and limited-profit housing associations (HA thereafter) and one third by municipalities. HA are required to reinvest profits

into renovation and new construction (Reinprecht 2014). In many HA, tenants also invest in renovation and construction via down payments. As a result, HA tend to attract households with higher incomes and higher social status than municipal housing(Reinprecht 2014). Given that each type of housing is regulated by local governments and subject to the reform, we consider both types of housing jointly in the main analysis. In practice, we expect that municipal housing will be more easily accessible to immigrants. As a result, not accounting for this heterogeneity can be expected to introduce a downward bias in the estimated effet of the reform.

Figure A1: Total Public Housing Stock, 2008



A.2. Aggregation of Mikrozensus Data

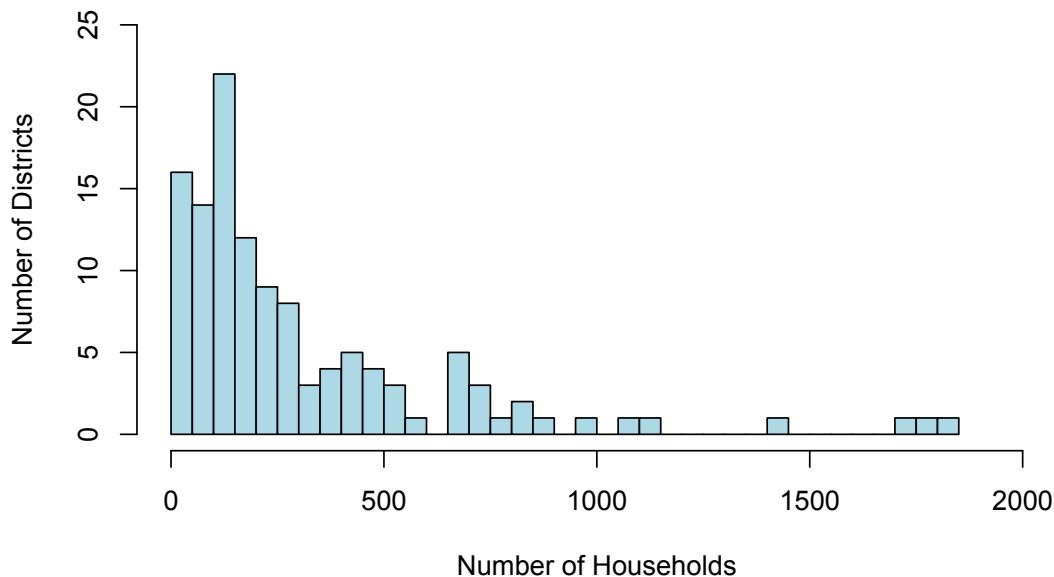
The following two sections, as well as a short section in the main text, leverage data on monthly rents collected in the Austrian Mikrozensus. The Mikrozensus, which consists of a rotating panel of 1% of Austrian households, is the only representative survey in Austria which collects information on housing costs.

Given that our interest is in geographic variation in housing, we pool all quarters from Q2 2000 to Q4 2003. While this predates our period of interest (2006), no indicator on ownership (public vs private) was collected in 2004, while geographic identifiers below the NUTS-3 level are unavailable after 2005. Results remain similar when omitting data from 2000 and 2001.

We restrict the sample to only those households paying monthly rent. After dropping households that were repeatedly sampled, our final dataset contains 37,998 unique households.

We pool households by district. Districts correspond to county ($n=97$), as well as each of the 23 districts of Vienna ($n=23$), for a total of 120 units. Figure A2 displays the number of observations per district in the dataset. The median number of households per district is 181. We drop all districts from the price data with less than 30 households ($n=6$).

Figure A2: Distribution of Household Data, Mikrozensus



To obtain the price ratio between public and private housing stock, we first calculate the mean price per square meter, by district, for each type of housing. We then divide the private price by the public price. Larger ratios indicate a comparatively more expensive private rental market.

Municipalities are nested within each district. Accordingly, we match the existing dataset to the district-level information using geographic identifiers.

A.3. Price Relative to Private Sector

Table A1 draws on data from the Mikrozensus to assess the overall price ratio between public housing and private units, controlling for available apartment characteristics, including the number of usable rooms, the decade of construction (dummy), type of appliances (full kitchen, full bathroom dummies), district, and municipal characteristics (size, rurality). The results are in alignment with the secondary literature, suggesting that public housing is cheaper than private housing. Moreover, this gap substantially increases when controlling for quality: after controlling for apartment characteristics, public housing is on average 1.3 Euros cheaper per square meter, suggesting average savings of nearly 23% when compared to the private rental market.

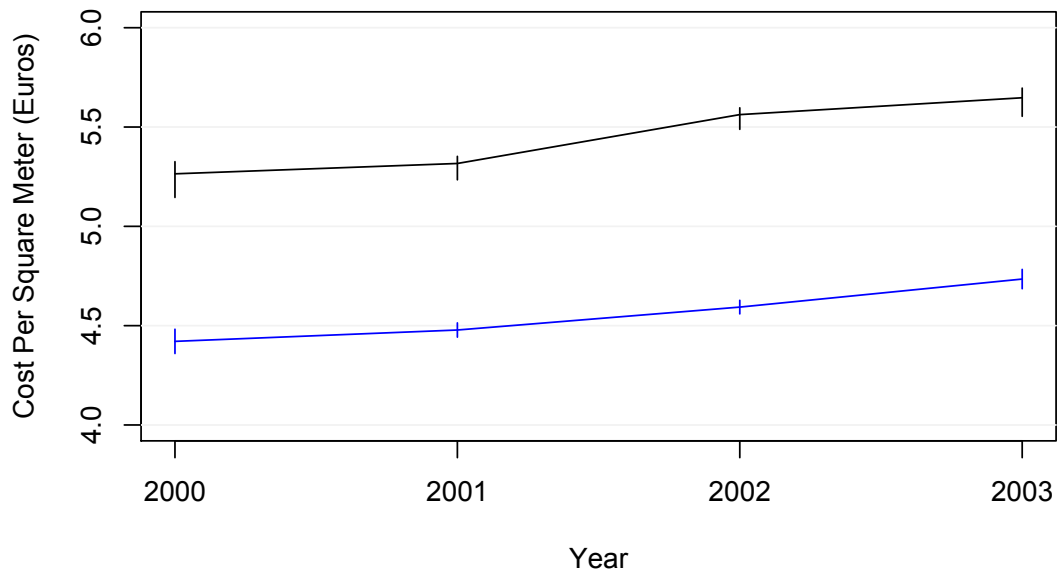
Table A1: Expected Price, in Euros, Per Square Meter (Public vs Private)

	(1)	(2)	(3)	(4)	(5)	(6)
Public (Dummy)	-0.903 (0.025)	-0.898 (0.025)	-1.462 (0.029)	-1.458 (0.028)	-1.281 (0.126)	-1.317 (0.124)
Constant	5.469 (0.023)	5.936 (0.065)	5.252 (0.077)	5.772 (0.097)	5.659 (0.110)	5.599 (0.253)
Number of Usable Rooms		Y	Y	Y	Y	Y
Decade of Construction			Y	Y	Y	Y
Appliances				Y	Y	Y
District Dummy					Y	Y
Municipal Characteristics						Y
Unique Households	37818	37818	37818	37818	37818	37818
adj. R^2	0.039	0.050	0.185	0.212	0.295	0.298

Robust standard errors in parentheses; models 5-6 clustered by district

Figure A3 plots the average nominal price for public and private rentals between 2000 and 2003, by year. Public apartments are plotted in blue, with private rentals in black. The gap is fairly stable across the pre-treatment period.

Figure A3: Change in Average Price, 2000-2003



A.4. Housing Situation of Noncitizens

Table A2 draws on data from the Mikrozensus to assess how the exclusion of foreigners from public housing affected their rental situation prior to the reform. The following table displays the results of a simple model which regresses non-citizen status on the average monthly rental price (per m²) in the private market. Additional specifications control for available indicators of apartment quality. Note that the Mikrozensus pools nationalities, and does not distinguish foreigners by EU status.

The results suggest that foreigners could expect to pay 75 cents more for private housing of a similar quality and size. This represents a 13 % premium. Given the price discrepancy, there should be greater demand for public housing among this group than among native citizens.

Table A2: Expected Price, in Euros, Per Square Meter (Private Rentals)

	(1)	(2)	(3)	(4)	(5)	(6)
Non-Citizen (Dummy)	0.748 (0.057)	0.667 (0.058)	0.729 (0.054)	0.944 (0.051)	0.746 (0.093)	0.750 (0.090)
Constant	5.317 (0.025)	6.166 (0.156)	5.258 (0.146)	5.977 (0.197)	5.900 (0.211)	5.709 (0.331)
Number of Usable Rooms		Y	Y	Y	Y	Y
Decade of Construction			Y	Y	Y	Y
Appliances				Y	Y	Y
District Dummy					Y	Y
Municipal Characteristics						Y
Unique Households	15932	15932	15932	15932	15932	15932
adj. R ²	0.011	0.038	0.167	0.213	0.295	0.299

Robust standard errors in parentheses; models 5-6 clustered by district

A.5. Political Reaction to the Legal Reform

The implementation of the reform was highly politicized, with the SPÖ, FPÖ, BZÖ, and the Green party adopting public positions in response to the EU legal directive.

SPÖ (Social Democratic Party): Historically, the SPÖ formally opposed opening public housing to non-citizens. However, following the EU directive, the SPÖ indicated prior to the 2005 Vienna municipal elections that they would likely support the implementation of the directive: a decision which a representative of the rival ÖVP termed "the surprise of the election campaign."¹ This decision was made concrete following the re-election of the Viennese mayor in October. Following the implementation of the reform on January 23, leaders stressed the benefit of membership in the European Union and the need to comply with European Union provisions. In a press release in February, a spokesman noted that : "the EU's Third Country Directive is applicable law and must therefore be implemented, even if Social Democrats take the view that not [all EU regulations] should be accepted uncritically." According to the press release, the SPÖ had always supported the "gradual opening of community housing for migrants."² Following implementation of the guidelines, the SPÖ stressed formal compliance (against charges from the Green Party) and attempted to reassure existing tenants that the influx would be minimal.³

While official press releases maintained a unified front, not all members of the SPÖ were in favor of adopting the provision. An SPÖ member of the European parliament gave several on-the-record critiques, arguing that "a blind application" of the EU directive would "lead to ghettoization." He further argued that the provisions should only be implemented with a quota.⁴

Grüne (Green Party): The Green party enthusiastically welcomed the provision and argued for its rapid implementation. Moreover, in Vienna, they strongly criticized the SPÖ for delaying implementation until the deadline.⁵ The Green party further argued that multilingual service should accompany the opening of public housing. This was a broad pattern: in Graz, the Green party accused the council of acting "half-heartedly" in its implementation of the reform.⁶

FPÖ (Freedom Party): The far-right freedom party campaigned heavily on the opening of public housing, arguing that it was a breach of democratic principles. In a press release, the party leadership argued that "the EU Directive, which obliges the City of Vienna to virtually lose its legal authority over its municipal property, is only one more demonstration that Austria gains more disadvantages than advantages from the European Union. The FPÖ is the only Austrian party that upholds the red-white-red banner and clearly rejects the EU in its current form." Strache

¹ Junge ÖVP Press Release, 13 October 2005. "Kroiher: Freude über Öffnung der Gemeindebauten für Ausländer durch SPÖ"

² SPÖ Press Release, 28 February 2006. "SP-Stürzenbecher: Auch durch Drittstaatenregelung in der Praxis keine Änderung bei sanfter Öffnung der Gemeindebauten für MigrantInnen"

³ SPÖ Press Release, 16 May 2006. "Gemeindebau - SP-Stürzenbecher: "Stadt Wien wickelt Wohnungsvermittlung an Drittstaatsangehörige vorbildlich ab"

⁴ "Gemeindebau-Öffnung: Swoboda warnt vor Ghettos." November 29, 2005, Der Standard.

⁵ Grüne Press Release, 10 November 2005. "Wien: Stadt Wien ist verpflichtet, Gemeindebauten zu öffnen"

⁶ "EU öffnet Wohnungen für Migranten." 25 January 2006, Der Standard

further argued that naturalized foreigners were being given preference in public housing.⁷ A representative in the Bundestag similarly argued that the SPÖ's characterization of a "gradual opening" was misleading. He argued that it would be best if Austria defied the EU ruling, and called "for a working group of experts, practitioners and lawyers to evaluate the legal situation and work out a reasonable solution with a sense of proportion to prevent social assistance and housing from being misunderstood as an invitation to third-country nationals."⁸ In debates concerning the revisions to the law in Vienna, Strache primarily stressed material concerns: "we believe that social benefits and special social benefits are primarily for citizens, and not for everyone... we are seeing that the directive on equal treatment will certainly ruin social housing in its present form...the circle of recipients is being expanded, and there is already too little money... we cannot give the poorest of the poor in our city the money that they actually need."⁹

BZÖ (Alliance for the Future of Austria): The far-right splinter party also campaigned on the reform, but primarily stressed cultural concerns. Leaders decried the cultural "mixing" of natives and foreigners in public apartments as a decision imposed by the SPÖ against the interests of the people.¹⁰ In Styria, councilors pushed for an inquiry into the number of foreigners benefiting from affordable housing. According to a local councilor sponsoring the proposal, "If... we have many Styrian families who can hardly afford to rent, I would at least like to know what percentage of apartments are occupied by foreign tenants and what is to be done in the future. Austrian tenants must be given priority when renting an apartment."¹¹

ÖVP (People's party): The center right people's party supported the EU directive, but did not stress the issue in its electoral campaigns.

⁷ FPÖ Press Release, November 10, 2005. "Strache: Dreifaches Nein der FPÖ zur Öffnung der Gemeindebauten für Ausländer."

⁸ FPÖ Press Release, March 1st 2006. "Herzog zu Gemeindebauöffnung: Ein EU-Diktat ohne Befassung und Einbindung der Bürger!"

⁹ Protocol: Wiener Landtag, 18th legislature, 6th meeting of 6 October 2006

¹⁰ BZÖ Press Release, 18 November 2005. "Schimanek: BZÖ gegen "Durchmischung" von Gemeindewohnungen!"

¹¹ BZÖ Press Release, 9 February 2007. "GROSZ: BZÖ fordert Erhebung von Ausländern in geförderten Mietwohnungen"

A.6. Public Opinion

In April 2006, a telephone survey (n=1001) conducted by the Vienna Institute of Social Studies asked citizens in the capital their voting preferences in the upcoming election, along with a series of questions about immigrants in the capital. Among these items was a binary question that asked whether citizens were "bothered" by "immigrants living in municipal apartments" (Sozialwissenschaftliche Studiengesellschaft. "Telefonumfrage 169 – WIEN 27. April 2006). The table below assesses whether answering this item in the affirmative was associated with vote intentions for the FPÖ or BZÖ in the 2006 legislative elections.

The dependent variable asks "if the national election was next Sunday, which party would you vote for?" In the analysis, we exclude individuals who did not answer the question, but include those who stated "None". We control for gender, age, unemployment, and schooling. In models 3 and 4, we include a self-reported measure indicating whether there are immigrants in the respondent's neighborhood, as well as an attitudinal measure indicating whether they believe new immigrants provide a cultural contribution to Vienna.

Table A3: Determinants of Far-Right Vote

	(1)	(2)	(3)	(4)
Bothered by Immigrants in PH	0.148 (0.030)	0.145 (0.031)	0.104 (0.032)	0.144 (0.031)
Female		-0.053 (0.025)	-0.048 (0.025)	-0.052 (0.025)
Age 26-35		0.001 (0.034)	0.006 (0.034)	-0.003 (0.034)
Age 36-50		0.025 (0.030)	0.032 (0.030)	0.022 (0.030)
Age 51-65		0.061 (0.033)	0.054 (0.032)	0.060 (0.033)
Age 66+		0.022 (0.032)	0.012 (0.033)	0.022 (0.032)
Unemployed		0.102 (0.081)	0.103 (0.078)	0.102 (0.081)
Secondary School		0.009 (0.028)	0.014 (0.027)	0.006 (0.028)
Vocational School		0.009 (0.030)	-0.003 (0.029)	0.007 (0.030)
University		-0.006 (0.045)	-0.024 (0.045)	-0.009 (0.045)
Immigrants Contribute to Culture			0.050 (0.013)	
Immigrants in Neighborhood				0.021 (0.023)
Constant	0.029 (0.009)	0.024 (0.036)	-0.074 (0.040)	0.015 (0.039)
<i>N</i>	527	527	497	527
adj. <i>R</i> ²	0.065	0.071	0.106	0.071

Linear probability model. Robust standard errors in parentheses

Although the findings should be interpreted with caution – along with overrepresenting women, a substantial share of respondents refused to answer the question on voting intentions – the results nevertheless provide suggestive evidence that concern over immigrants in public housing was correlated with voting for far-right parties. Moreover, this tendency persists after controlling for general attitudes towards immigrants in the city (model 3), and self-reported proximity to immigrants (model 4), suggesting that the effect is not solely due to cultural bias.

B. Municipal-level Analysis

B.1. Descriptive Statistics

The dependent variable is the share of valid votes cast for the two Austrian Far Right parties, FPÖ and BZÖ, within each municipality in the sample.

To measure the intensity of the distributional conflict generated by the reform we rely on two variables. The first variable measures the number of adults (aged 18+) living in public housing in 2001, collected during the 2001 Austrian Building Census. The second variable measures the percentage share of third country nationals in 2006 (% Non-EU). In an alternate specification, we measure the share of foreign-born within each municipality in 2006 (% Foreign Residents).

Table A4

	n	Mean	SD	p10	p90
<i>Anti-Immigrant Vote Share</i>					
2006 Legislative	2380	0.136	0.063	0.076	0.199
2002 Legislative	2381	0.097	0.051	0.051	0.153
1999 Legislative	2381	0.259	0.069	0.176	0.350
1994 Legislative	2378	0.212	0.065	0.135	0.294
1999 Euro	2381	0.230	0.070	0.147	0.323
2004 Euro	2381	0.062	0.048	0.023	0.114
<i>Independent Variables</i>					
% Adults in PH (2001)	2377	0.054	0.078	0.001	0.145
% Non-EU Residents (2006)	2379	0.023	0.028	0.001	0.061
% Foreign Residents (2006)	2376	0.048	0.045	0.009	0.106
<i>Covariates</i>					
% with Tertiary Education (2001)	2357	0.046	0.026	0.021	0.077
Average Income (2006)	2381	19161	3076	15887	22729
% Unemployed (2006)	2358	0.027	0.015	0.014	0.042
% Employed in Manufacturing (2001)	2358	0.351	0.088	0.233	0.460
Welfare expend., per capita (2006)	2358	126.51	90.74	52.78	193.45
Health expend., per capita (2006)	2358	104.32	131.30	5.48	161.27
Education expend., per capita (2006)	2358	220.60	131.85	65.30	346.31
Δ % Stigmatized Population (2002-2006)	2379	-0.000	0.007	-0.007	0.007

All variables are measured at the municipal level.

Average income is measured in Euros. Municipal expenditures are gross expenditures, scaled by the full population within each municipality in 2006. The change in stigmatized population refers to the percentage point change, at the municipal level, in the share of residents born in Turkey or former Yugoslavia.

The main specification uses bins for public housing and foreign population. While the latter is split into evenly sized quartiles, we set the former at discrete points along the distribution. This enables interpretable estimates as well as comparability across different levels of foreign settlement. Table A5 provides the number of municipalities in each bin of public housing. As seen in Appendix section B.6., the results are robust to alternating the selection of bins.

Table A5: Public Housing Bins

	0-5%	5-10%	10-20%	>20%
Municipality Count:	1613	358	266	137

B.2. Parallel Trends

The research design relies upon the assumption that municipalities with different levels of public housing would have followed parallel electoral trends in the absence of the legal reform. In this section, we evaluate the plausibility of this claim. We begin by fitting the following model on panel data prior to the electoral reform:

$$VoteShare_{it} = \alpha + \beta_{1:b,t:3}(PublicHousing_i * t) + \gamma_i + \delta_t + \epsilon_{it}$$

where t is a dummy variable indicating the election year and b indicates the bin of public housing. We include the 1994, 1999, and 2002 legislative elections in the panel. The 1995 election is omitted because it occurred following the failure to form a government after the 1994 election, and was characterized by strategic voting.

As argued by Autor (2003), if the trends are parallel, we should not be able to reject the hypothesis that the coefficients on the interaction between the treatment variable and previous time periods are jointly equivalent to 0. Table A6 displays the coefficients from this model, separately for the full sample and the subset of municipalities within a high Non-EU population. F-tests suggest we do not have strong evidence against the parallel trends assumption: for the upper bin, the p-values are 0.17 and 0.42, respectively.

Table A6: Parallel Trends, Across Bins of Public Housing

	Non-EU Population	
	All	High
<i>Level of Public Housing:</i>		
0-5% (Baseline)	-	-
5-10% * 1999	-0.001 (0.002)	-0.001 (0.004)
5-10% * 2002	-0.003 (0.002)	-0.003 (0.004)
10-20% * 1999	0.000 (0.002)	0.000 (0.003)
10-20% * 2002	-0.003 (0.002)	-0.001 (0.003)
> 20% * 1999	-0.003 (0.003)	-0.003 (0.004)
> 20% * 2002	-0.006 (0.003)	-0.005 (0.004)
adj. R^2	0.869	0.916

Standard errors in parentheses

The following figures plot the average vote share for municipalities within discrete bins of public housing. Figure A4 demonstrates that trends were parallel until the legal change between 2002 and 2006. These trends are preserved when subsetting to the top quartile of third country nationals (Figure A5).

Figure A4: Voting trends (All Municipalities)

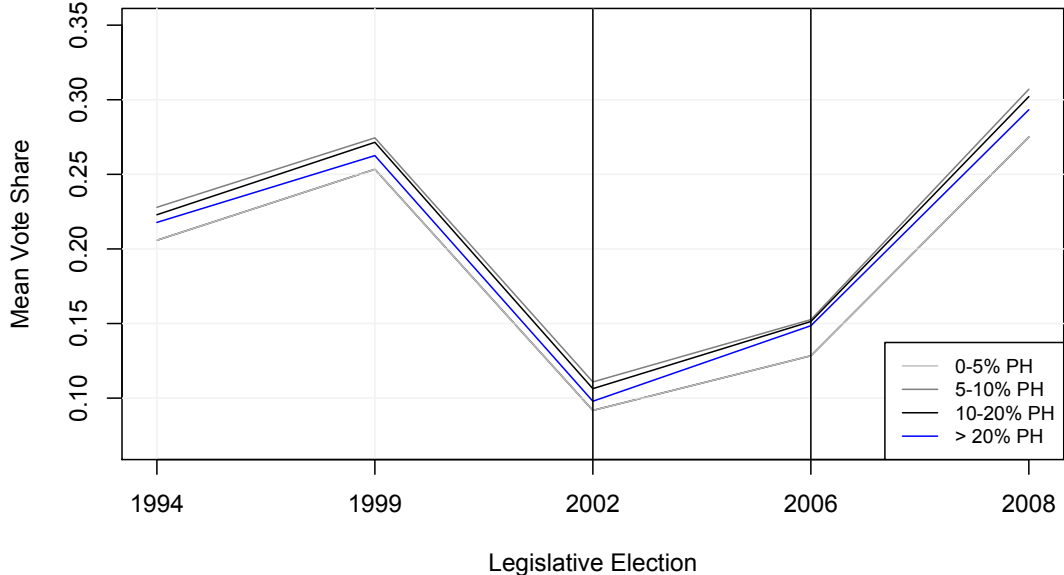
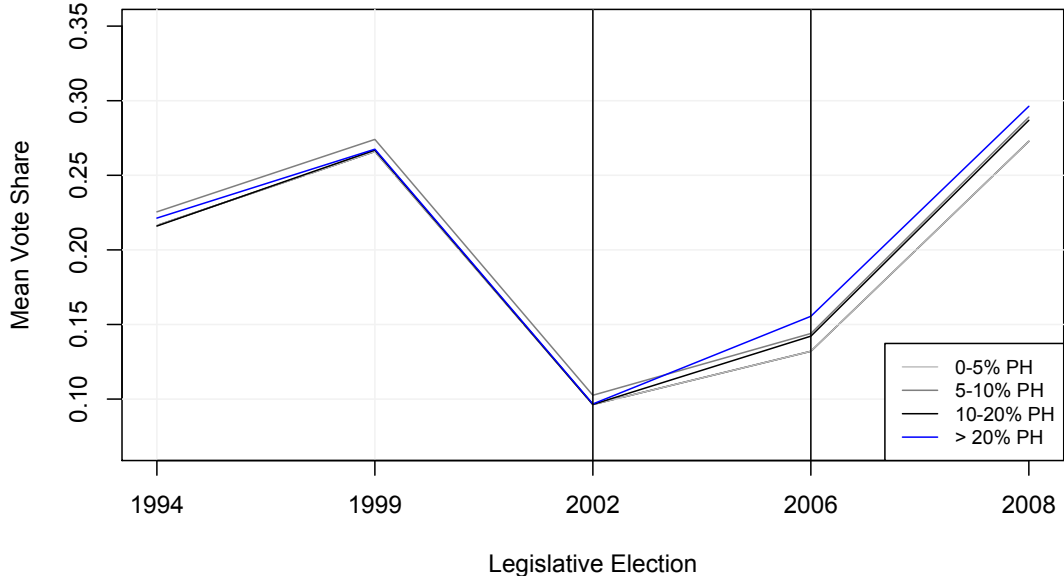


Figure A5: Voting trends (Top Quartile Non-EU)



B.3. Placebo Tests

Using a simplified first differences specification, we test for changes in vote share as a function of public housing in elections conducted prior to the EU legal directive:

$$\Delta VoteShare_{i,t_1-t_2} = \alpha + \sum_{p=1}^4 \theta_p PH + \epsilon_i$$

We examine changes in vote share between the 1994, 1999, and 2002 legislative elections, as well as the 1999 and 2004 EU elections. We then repeat the test within the subset municipalities with a high population of non-EU citizens in 2006 (upper quartile). This latter specification is identical to the specification in the main text, with the substitution of the dependent variable. We detect no substantive or statistically significant increase in the tendency to vote for anti-immigrant parties prior to the reform.

	All Municipalities			High Non-EU		
	99-02	94-99	EU: 99-04	99-02	94-99	EU: 99-04
<i>Level of Public Housing:</i>						
0-5% (Baseline)	-	-	-	-	-	-
5-10% PH	-0.002 (0.002)	-0.001 (0.002)	-0.004 (0.003)	-0.002 (0.004)	-0.001 (0.003)	-0.002 (0.005)
10-20% PH	-0.003 (0.002)	0.000 (0.002)	0.000 (0.003)	-0.001 (0.004)	0.000 (0.003)	-0.001 (0.004)
> 20% PH	-0.003 (0.002)	-0.003 (0.002)	-0.005 (0.003)	-0.001 (0.003)	-0.003 (0.003)	-0.004 (0.004)
<i>N</i>	2374	2369	2374	591	590	591
adj. R^2	-0.000	-0.001	-0.000	-0.005	-0.003	-0.004

Robust standard errors in parentheses

B.4. Panel Specification

We fit the following model on the 1994, 1999, 2002, and 2006 legislative elections:

$$VoteShare_{it} = \alpha + \sum_{p=1}^4 \theta_p PH + \sum_{p=1}^4 \beta_p (PH * PostReform) + PostReform + \delta_t + \epsilon_{it}$$

where *VoteShare* indicates the percentage vote share for anti-immigrant parties in municipality *i* in election *t*, *PH* represents a dummy variable for each bin *p* of public housing, δ_t represents a dummy variable for each election within the dataset, and *PostReform* is a binary variable set to 1 during the 2006 election. In this specification, the coefficients of interest are β_p , which indicate the expected change in vote share within each bin of public housing, relative to municipalities with the lowest level of public housing (bin 1). To assess how the results vary by the size of the newly eligible foreign population, regressions are fit on the full sample, as well as municipalities within the top quartile of Non-EU settlement. Note that a model which interacts each set of bins on the full sample yields similar point estimates.

Table A7: Change in Anti-Immigrant Vote Share Following Reform

	Municipalities, By Level of Non-EU Population					
	All	High	All	High	All	High
<i>Level of Public Housing:</i>						
0-5% (Baseline)	-	-	-	-	-	-
5-10%	0.003 (0.002)	0.004 (0.003)	0.003 (0.002)	0.004 (0.003)	0.003 (0.002)	0.004 (0.003)
10-20%	0.006 (0.002)	0.010 (0.003)	0.006 (0.002)	0.010 (0.003)	0.008 (0.002)	0.009 (0.003)
> 20 %	0.011 (0.003)	0.021 (0.003)	0.011 (0.003)	0.021 (0.003)	0.016 (0.003)	0.025 (0.004)
State Time Trends			Y	Y		
Bin Time Trends					Y	Y
<i>N</i>	9503	2375	9503	2375	9503	2375
adj. <i>R</i> ²	0.52	0.64	0.72	0.76	0.52	0.64

Standard errors in parentheses, clustered by municipality.

B.5. Linear Specification

Assuming a linear relationship, we fit a first differences model of the form:

$$\Delta VoteShare_{i,06-02} = \alpha + \theta \%PH_i + \gamma \%NonEU_i + \beta(\%PH_i * \%NonEU_i) + \epsilon_{it}$$

Table A8: Linear First Difference Model: Change in Anti-Immigrant Vote Share

	(1)	(2)	(3)	(4)
% Residents in PH	0.024 (0.012)	0.007 (0.015)	0.008 (0.015)	0.007 (0.015)
% Non-EU	-0.021 (0.030)	-0.053 (0.034)	-0.031 (0.035)	-0.014 (0.036)
% Residents in PH * % Non-EU	0.645 (0.164)	0.710 (0.255)	0.595 (0.261)	0.586 (0.258)
Constant	0.037 (0.001)	0.011 (0.007)	0.014 (0.007)	0.013 (0.007)
<i>Covariates</i>				
Socio-demographics		Y	Y	Y
Public Spending			Y	Y
Ethnic Change				Y
N	2376	2352	2352	2352
adj. R ²	0.034	0.033	0.049	0.051

Robust standard errors in parentheses

Model 1 suggests that moving from 0 to 30% Public Housing and 0 to 10% Non-EU population is associated with a 2.45 percentage point increase in anti-immigrant vote share.

Placebo tests confirm that prior elections lacked a similar relationship:

Table A9: Linear First Difference Model: Placebo tests

	(1)	(2)	(3)
	Legislative: 1999-2002	Legislative: 1994-1999	EU: 1999-2004
% Residents in PH	0.016 (0.014)	-0.007 (0.011)	0.023 (0.016)
% Non-EU	-0.147 (0.042)	0.050 (0.032)	-0.127 (0.052)
% Residents in PH * % Non-EU	-0.150 (0.194)	-0.211 (0.169)	-0.357 (0.233)
Constant	-0.160 (0.001)	0.047 (0.001)	-0.165 (0.002)
N	2376	2371	2376
adj. R ²	0.010	0.001	0.007

Robust standard errors in parentheses

The results are also robust to a linear specification using multiple time periods:

Table A10: Linear Model With Multiple Pre-Treatment Periods

	(1)	(2)
Post * % Residents in PH	0.033 (0.014)	0.032 (0.014)
Post * % Non-EU	-0.101 (0.035)	-0.100 (0.035)
Post * % Non-EU * % Residents in PH	0.469 (0.185)	0.476 (0.184)
Post Treatment	-0.076 (0.001)	-0.077 (0.001)
% Residents in PH	0.121 (0.026)	-0.047 (0.017)
% Non-EU	0.210 (0.055)	0.382 (0.053)
% Residents in PH * % Non-EU	-1.354 (0.307)	0.241 (0.261)
1999	0.047 (0.001)	0.047 (0.001)
2002	-0.115 (0.001)	-0.115 (0.001)
State Time Trends		Y
Municipalities	2376	2376
R ²	0.52	0.73

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

B.6. Alternate Bins

The results are robust to varying the bins of public housing.

Table A11: 0-10% Bottom Bin

	Level of Third Country Nationals				
	Low	High	High	High	High
0-10% (Baseline)	-	-	-	-	-
10-20%	0.009 (0.010)	0.008 (0.002)	0.009 (0.003)	0.009 (0.003)	0.008 (0.003)
> 20 %	-0.007 (0.010)	0.021 (0.003)	0.021 (0.003)	0.021 (0.003)	0.019 (0.004)
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2377 municipalities. S.E.R. = 0.028.

Table A12: 30% Top Bin

	Level of Third Country Nationals				
	Low	High	High	High	High
0-5% (Baseline)	-	-	-	-	-
5-10%	0.011 (0.005)	0.006 (0.003)	0.007 (0.003)	0.007 (0.003)	0.007 (0.003)
10-20%	0.010 (0.010)	0.010 (0.003)	0.011 (0.003)	0.012 (0.003)	0.011 (0.003)
20-30 %	-0.002 (0.011)	0.017 (0.003)	0.021 (0.004)	0.021 (0.004)	0.021 (0.004)
> 30 %	-0.020 (0.001)	0.032 (0.004)	0.028 (0.005)	0.027 (0.005)	0.026 (0.005)
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2377 municipalities. S.E.R. = 0.028.

In the following specifications, we split the non-EU population by the median and by terciles, respectively.

Table A13: Two Bins of Non-EU Population

	Level of Third Country Nationals				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
0-5% (Baseline)	-	-	-	-	-
5-10%	0.006 (0.003)	0.004 (0.002)	0.004 (0.002)	0.004 (0.002)	0.004 (0.002)
10-20%	0.007 (0.005)	0.007 (0.002)	0.007 (0.002)	0.008 (0.002)	0.007 (0.002)
> 20 %	-0.019 (0.005)	0.016 (0.003)	0.014 (0.003)	0.014 (0.003)	0.014 (0.003)
<i>Covariates</i>					
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2377 municipalities. S.E.R. = 0.028

Table A14: Terciles of Non-EU Population

	Level of Third Country Nationals				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
0-5% (Baseline)	-	-	-	-	-
5-10%	0.009 (0.003)	0.004 (0.003)	0.005 (0.003)	0.005 (0.003)	0.004 (0.003)
10-20%	0.013 (0.007)	0.007 (0.002)	0.008 (0.003)	0.008 (0.003)	0.008 (0.003)
> 20 %	-0.007 (0.010)	0.019 (0.003)	0.019 (0.003)	0.019 (0.003)	0.018 (0.003)
<i>Covariates</i>					
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2377 municipalities. S.E.R. = 0.028

B.7. Alternate Measures of Foreign Population

Although foreigners with EU citizenship already had access to public housing before the reform, individuals within affected municipalities may not have been able to distinguish between the EU and non-EU population. The table below replicates the analysis in Table 1 in the main text, substituting in the total population of non-citizens for third country nationals. The point estimates are slightly higher, suggesting that individuals may be unable to distinguish between these populations.

Table A15: Marginal Effect of Public Housing on Anti-Immigrant Vote Share

	Level of Non-Citizens				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
0-5% (Baseline)	-	-	-	-	-
5-10%	-0.003 (0.004)	0.008 (0.003)	0.009 (0.003)	0.009 (0.003)	0.009 (0.003)
10-20%	0.009 (0.011)	0.017 (0.003)	0.018 (0.003)	0.019 (0.003)	0.018 (0.003)
> 20 %	-0.019 (0.006)	0.028 (0.003)	0.026 (0.003)	0.026 (0.003)	0.026 (0.003)
<i>Covariates</i>					
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=2376 municipalities. S.E.R. = 0.028.

Low and High refer to the 1st and 4th quartiles.

* $p < 0.01$, ** $p < 0.001$

B.8. Rental Markets

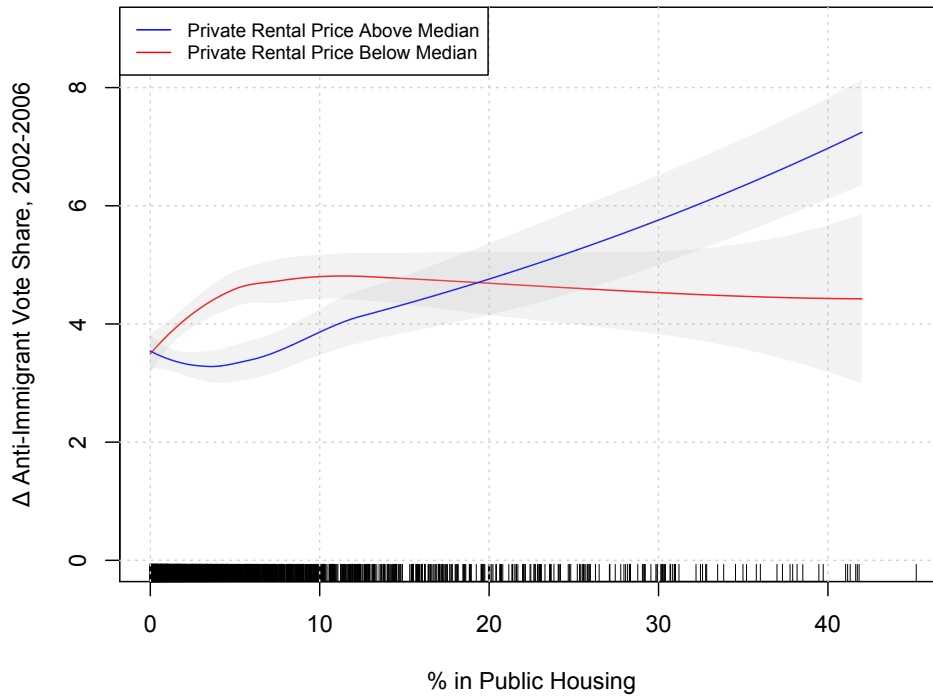
The main text displays a local linear fit between the share of public housing and the change in support for anti-immigrant parties between 2002 and 2006. In this section, we show similar results using a binned specification, fit separately for areas with low (1st quartile) and high (4th quartile) third country national populations. The results suggest that increases in anti-immigrant support are driven by municipalities with high third country national populations, nested within districts where public housing is comparatively more attractive.

Price Ratio: Third Country National Population:	Below Median		Above Median	
	Low	High	Low	High
<i>Level of Public Housing:</i>				
0-5% (Baseline)	-	-	-	-
5-10%	0.007 (0.006)	-0.001 (0.004)	0.017 (0.008)	0.007 (0.004)
10 - 20%	-0.013 (0.006)	-0.004 (0.004)	0.036 (0.017)	0.017 (0.003)
> 20%	-0.008 (0.014)	0.009 (0.006)	-0.003 (0.013)	0.031 (0.004)
<i>N</i>	321	209	229	373
adj. R^2	0.006	0.015	0.039	0.152

Robust Standard errors in parentheses

The main text assesses the relative attractiveness of public housing by comparing the ratio between public and private rentals. Similar, albeit weaker, results can be obtained when examining the rental price of private apartments alone.

Figure A6: Change in Support, by District Rental Market



Local linear fit of the share of residents in public housing on the change in anti-immigrant vote share between 2002 and 2006, with 95% confidence intervals. 'Private Rental Price Above Median' refers to districts in which the rental price for a private apartment is above the national median.

B.9. Municipality Subsets

Although the data suggest parallel trends, municipalities without any public housing may provide a poor comparison to locations with a substantial share of residents in public housing. Accordingly, we re-estimate the results after removing all municipalities with less than 1% of the population within public housing from the sample, leaving all bins at their prior values to provide a comparison. The results are similar.

Table A16: Marginal Effect, < 1% in PH

	Level of Third Country Nationals				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
1-5% (Baseline)	-	-	-	-	-
5-10%	0.012 (0.005)	0.006 (0.003)	0.006 (0.003)	0.006 (0.003)	0.006 (0.003)
10-20%	0.011 (0.010)	0.010 (0.003)	0.011 (0.003)	0.011 (0.003)	0.010 (0.003)
> 20 %	-0.005 (0.010)	0.023 (0.004)	0.024 (0.004)	0.023 (0.004)	0.021 (0.004)
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=1644 municipalities. SER = 0.029

To assess the possibility that small municipalities are driving the findings, we restrict to municipalities with a population of at least 1500, and observe similar results:

Table A17: Marginal Effect, Population Cutoff

	Level of Third Country Nationals				
	Low	High	High	High	High
<i>Level of Public Housing:</i>					
1-5% (Baseline)	-	-	-	-	-
5-10%	0.006 (0.010)	0.006 (0.003)	0.008 (0.003)	0.008 (0.003)	0.006 (0.003)
10-20%	0.029 (0.016)	0.011 (0.003)	0.014 (0.003)	0.015 (0.003)	0.012 (0.003)
> 20 %	-0.010 (0.019)	0.020 (0.003)	0.022 (0.003)	0.022 (0.003)	0.017 (0.004)
Socio-demographics			Y	Y	Y
Public Spending				Y	Y
Ethnic Change					Y

Robust standard errors in parentheses. n=1254 municipalities. SER = 0.026

B.10. Full Covariate Table

Due to space constraints, Table 1 in the main text did not display coefficients for the covariate specifications. They are provided below. Per capita expenditures are drawn from 2005 (the year prior to the reform)

Table A18: Marginal Effect of Public Housing, with Covariates

	(1)	(2)	(3)
<i>Level of Public Housing:</i>			
0-5% (Baseline)	-	-	-
5-10%	0.007 (0.003)	0.007 (0.003)	0.006 (0.003)
10-20%	0.011 (0.003)	0.012 (0.003)	0.010 (0.003)
> 20 %	0.023 (0.004)	0.023 (0.004)	0.021 (0.004)
% with Tertiary Education	-0.124 (0.067)	-0.096 (0.069)	-0.109 (0.069)
Average Income	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
% Unemployed	-0.304 (0.082)	-0.292 (0.079)	-0.296 (0.076)
% Employed in Manufacturing	-0.029 (0.015)	-0.027 (0.015)	-0.032 (0.015)
Municipal welfare expend., per capita		-0.000 (0.000)	-0.000 (0.000)
Municipal health expend., per capita		-0.000 (0.000)	-0.000 (0.000)
Municipal education expend., per capita		-0.000 (0.000)	-0.000 (0.000)
Δ % Stigmatized Population, 2002-2006			0.330 (0.128)
Constant	0.041 (0.015)	0.049 (0.015)	0.053 (0.015)
<i>N</i>	2352	2352	2352
adj. R^2	0.105	0.118	0.129

Standard errors in parentheses

B.11. Population Sorting

In this section, we examine if the patterns presented in the paper could be driven by systematic differences across municipalities in terms of immigrant sorting. Specifically, the interaction between public housing stock and foreign population could be an artifact of immigrants being more likely to move to municipalities who happen to both have a large public housing stock and a large foreign population. While such sorting would not contradict our argument (i.e. larger increases in the foreign population stock would increase perceived pressure on public housing), and is inconsistent with the placebo estimates, it would make the interaction term difficult to interpret: the increase in vote for the far right could also be due to non-material reactions to an expected increase in diversity. More generally, systematic patterns of sorting may indicate that time variant idiosyncratic factors could be driving our results, violating a key assumption for the difference-in-difference design.

As already documented in Figure 3 in the main paper (right panel), the increase in vote for the far right over the 2002-2006 period is not correlated with 2006 levels of non-citizens. Moving up on the y-axis, there is no evidence of an increase in vote for the far right in areas without public housing. Consistent with this evidence, a simple bivariate regression suggests a weak relationship ($t=0.93$). In addition, examining data between 2000 and 2006 we find no evidence that immigrants differentially sorted across municipalities on the basis of public housing stock ($t=0.46$). The same applies with regards to the existence of a reservoir of votes for the FPOE ($t=-0.07$) (proxied using 1999 vote share, a year when the FPOE had its largest electoral success).

B.12. Instrumental Variable Analysis

Our analysis focuses on heterogeneous municipalities across Austria. Given that the timing of the legal reform is exogenous, our effect is identified by the parallel trends assumption.

However, municipalities' stock of public housing at the time of the reform is not randomly assigned. This implies that it remains possible that municipalities with larger housing stock in 2006 might be different from municipalities with lower public housing stock in ways that could theoretically affect changes in support for the far right between 2002 and 2006 (but not in other periods, given the observed parallel trends).

Given that the majority of this housing was constructed in the immediate pre- and post-war periods, it is plausibly unconnected to broader political trends which would influence the likelihood of voting for anti-immigrant parties in 2006. To increase the confidence in this interpretation, we collected data on housing destroyed or damaged in the Second World War from the 1952 Austrian Housing Census. The data suggest that the percentage of dwellings affected in the war is strongly correlated with subsequent housing construction, as indicated by the percentage of residents living in public housing in 2001 ($t=11.85$).

Using this variation, we fit a two-stage least squares instrumental variable model of the effect of public housing density on the change in vote share for anti-immigrant parties between 2002 and 2006, saturated with all socio-demographic characteristics from Table S2. Our identification strategy first requires that our instrument, the intensity of war-time bombing, affects the 2006 public housing stock (i.e. instrument relevance, see the previous paragraph). It also requires that our instrument affects vote 2002-2006 differences in vote for the far right only through its effect on the size of the public housing stock in 2006 (i.e. the exclusion restriction). A key assumption is thus that the Allied Forces bombed Austria according to criteria unrelated to subsequent post-WWII variation in vote for the far right, especially for the 2002-2006 period. Under this assumption, our instrument is by design uncorrelated with any within-municipality variation in vote for the far right and likely satisfies the exclusion restriction. This instrument cannot address compositional effects of the population living in public housing, something we address both through controls (see section 2.1 above and 3.2 below) and through placebo tests (see section 3.2 below and Table 1 in the main paper).

The instrumental variable identification strategy returns estimates indicating that a 10% increase in public housing density was associated with a 3.5% percentage point increase in the expected change in anti-immigrant vote share between 2002 and 2006, plus or minus 1.8%.

C. Vienna Analysis

C.1. Measuring Public Housing Density

We use geodata from the Vienna city government to pinpoint the location of each public apartment building within electoral wards. Given that a) many individuals can reside within a single apartment, and b) not all residents are of voting age, we draw on additional data on the proportion of residents residing in public housing, aged 18 and over, at the census-tract level (2001 Austrian Housing Census). Electoral wards ($n=1,931$) are nested within census tracts ($n=241$). We assume that each ward's population composition mirrors that of the census-tract, except in cases where no public apartments were located within the ward. For instance, take a census tract with 30% of voting age citizen living in public housing. Any electoral ward within this tract will be assumed to have 30% of registered voters also living in public housing. Using our geodata, we then identify the electoral ward without any public housing: in these instances, the percentage of residents in public housing was recoded to 0. If a ward has boundaries that extend beyond a single census tract, we follow the same procedure but weigh tract-level measures according to the proportion of the ward's land area in each census tract. Similar results are obtained when dropping the latter wards, i.e. the wards that intersect multiple tracts.

C.2. Descriptive Statistics

Electoral data is measured at the ward level (sprengel). Wards with changing boundaries over the length of the dataset were dropped. No data is available from the 1994 legislative elections at this level of aggregation.

Table A19

	n	Mean	SD	p10	p90
<i>Anti-Immigrant Vote Share</i>					
2006 Legislative	1782	0.161	0.057	0.087	0.236
2002 Legislative	1782	0.082	0.025	0.052	0.115
1999 Legislative	1782	0.250	0.059	0.178	0.323
1999 EU	1782	0.092	0.022	0.065	0.119
2004 EU	1782	0.056	0.022	0.030	0.083
<i>Independent Variables</i>					
Flats per voter (2006)	1920	0.181	0.339	0.000	0.587
% Adults in PH - Imputed (2001)	1920	0.200	0.269	0.000	0.639
% Non-EU Residents (2006)	241	0.099	0.078	0.023	0.221
% Foreign Residents (2006)	241	0.140	0.094	0.043	0.271
<i>Covariates</i>					
% Economically Active	241	0.566	0.073	0.478	0.650
Average Income	241	19889	2921	17170	23716

C.3. Linear Specification

Table A20: Change in Support for the Far-Right, 2002-2006: Vienna Electoral Wards

	(1)	(2)	(3)	(4)
% Adult Citizens in PH	0.060 (0.005)	0.053 (0.008)	0.046 (0.005)	0.042 (0.008)
% Non-EU	-0.055 (0.029)	-0.069 (0.032)	-0.176 (0.031)	-0.184 (0.034)
% in PH % Non-EU		0.101 (0.085)		0.053 (0.085)
ln(Voters)			-0.001 (0.006)	-0.002 (0.006)
% Economically Active			0.053 (0.029)	0.053 (0.029)
Average Income			-0.000 (0.000)	-0.000 (0.000)
Constant	0.075 (0.005)	0.076 (0.005)	0.213 (0.042)	0.213 (0.042)
<i>N</i>	1782	1782	1782	1782
adj. <i>R</i> ²	0.135	0.136	0.268	0.268

Standard errors in parentheses, clustered by census tract

In substantive terms, Model 1 suggests that a shift from 20% to 80% of native adults in public housing is associated with an expected increase of 3.6 percentage points in anti-immigrant vote-share, holding the foreign population constant. Model 2 introduces an interaction term. Moving from 20% to 80% of residents in public housing, and from 3% to 20% in non-EU share (20th and 80th percentiles, respectively), is associated with a 4.9 increase in expected voteshare.

C.4. Binned Specification

Given the large number of wards with no public housing, we bin the share of residents in public housing at discrete points on the distribution. Models 1 and 2 control for the size of the foreign population, but do not evaluate an interaction:

$$\Delta VoteShare_{i,06-02} = \alpha + \sum_{p=1}^7 \theta_p PH + \epsilon_i$$

Models 3 and 4 (reported in the main text) subset bins by the level of non-EU citizens. Given that shares of non-EU citizens decrease as public housing population increases, we restrict the number of bins of the foreign population to two (above and below the census tract median):

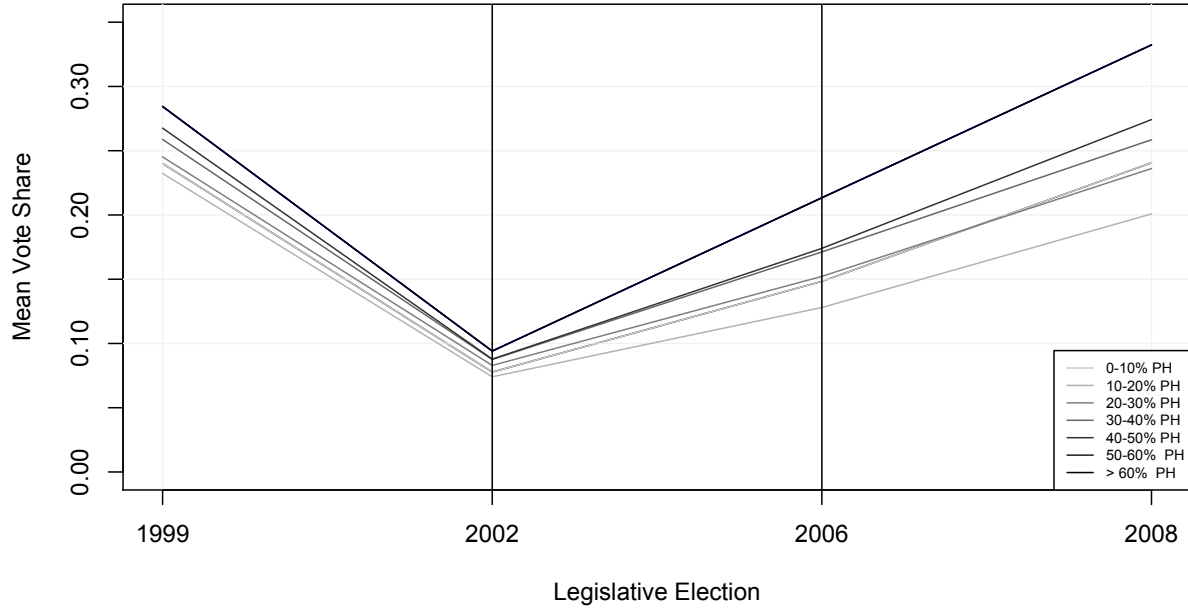
Table A21: Binned Specification

	(1)	(2)	(3)	(4)	(5)	(6)
			Non-EU Low	Non-EU High	Non-EU Low	Non-EU High
<i>Level of Public Housing:</i>						
0-10% (Baseline)	-	-	-	-		
10-20%	-0.020 (0.004)	-0.014 (0.004)	-0.035 (0.006)	-0.009 (0.005)	-0.021 (0.006)	-0.009 (0.004)
20-30%	-0.005 (0.005)	0.003 (0.004)	-0.025 (0.006)	0.009 (0.006)	-0.006 (0.005)	0.010 (0.005)
30-40%	0.009 (0.005)	0.010 (0.006)	-0.013 (0.007)	0.028 (0.007)	0.000 (0.010)	0.022 (0.007)
40-50%	0.012 (0.007)	0.011 (0.007)	-0.003 (0.006)	0.026 (0.010)	0.003 (0.006)	0.023 (0.010)
50-60%	0.031 (0.005)	0.025 (0.005)	0.015 (0.007)	0.045 (0.007)	0.013 (0.006)	0.039 (0.006)
> 60%	0.052 (0.004)	0.039 (0.004)	0.046 (0.005)	0.050 (0.008)	0.035 (0.005)	0.041 (0.009)
% Non-EU	-0.006 (0.027)	-0.142 (0.032)				
ln(Voters)		0.000 (0.006)			0.005 (0.008)	-0.007 (0.007)
% Economically Active		0.049 (0.027)			0.050 (0.027)	-0.028 (0.088)
Average Income		-0.000 (0.000)			-0.000 (0.000)	-0.000 (0.000)
Constant	0.075 (0.005)	0.194 (0.042)	0.082 (0.005)	0.065 (0.004)	0.164 (0.058)	0.214 (0.062)
N	1782	1782	892	890	892	890
adj. R ²	0.176	0.284	0.188	0.160	0.331	0.213

Standard errors in parentheses, clustered by census tract

C.5. Parallel Trends Plot

Given the absence of 1994 electoral data at the ward level, the parallel trends assumption cannot be formally verified across multiple pre-treatment periods. However, a plot of electoral trends by bin of public housing demonstrates that wards with high shares of public housing sharply increased their vote share for anti-immigrant parties following the reform.



C.6. Placebo Tests

Table A22: Change in Support for the Far-Right: Vienna Electoral Wards

	1999-2002 Legislative		1999-2004 EU	
% Adults in PH	-0.033 (0.004)	-0.033 (0.007)	0.011 (0.014)	0.024 (0.028)
% Non-EU		-0.029 (0.024)		0.027 (0.048)
% Adults in PH % Non-EU		-0.017 (0.062)		-0.184 (0.228)
Constant	-0.164 (0.002)	-0.161 (0.004)	-0.033 (0.004)	-0.035 (0.011)
<i>N</i>	1778	1778	1778	1778
adj. <i>R</i> ²	0.040	0.042	-0.000	-0.001

Standard errors in parentheses, clustered by census tract

Placebo tests of the linear model suggest a mild negative relationship between public housing and anti-immigrant vote share between 1999 and 2002. However, no relationship is visible with respect to the change in vote share between the 1999 and 2004 EU elections.

This negative relationship is not driven by the 2002 election, when there was no clear relationship between public housing and support for anti-immigrant parties, but rather by 1999. We include two robustness checks to assess the degree to which higher relative support in 1999 affects the subsequent findings. First, we re-estimate the linear specification in Table A20, controlling for the ward's vote share in the 1999 election. While effect sizes are attenuated, they remain substantively large, suggesting that the findings are not explained by a reversion to the mean.

	(1)	(2)
% Adults in PH	0.040 (0.005)	0.034 (0.008)
% Non-EU	-0.078 (0.023)	-0.089 (0.027)
1999 Voteshare	0.348 (0.034)	0.348 (0.034)
% Adults in PH % Non-EU		0.081 (0.081)
Constant	-0.007 (0.008)	-0.006 (0.008)
<i>N</i>	1778	1778
adj. <i>R</i> ²	0.279	0.279

Standard errors in parentheses, clustered by census tract

Second, we fit a binned panel specification on the 1999, 2002, and 2006 legislative elections:

$$VoteShare_{it} = \alpha + \sum_{p=1}^7 \theta_p PH + \sum_{p=1}^7 \beta_p (PH * PostReform) + PostReform + \delta_t + \epsilon_{it}$$

The table below displays the β coefficients. Models 2 and 3 include quadratic time trends at the bin and census tract levels, respectively. The results suggest that the increase in support after the reform represents a deviation from these time trends.

Table A23: Change in Support After Reform, Binned Panel Specification

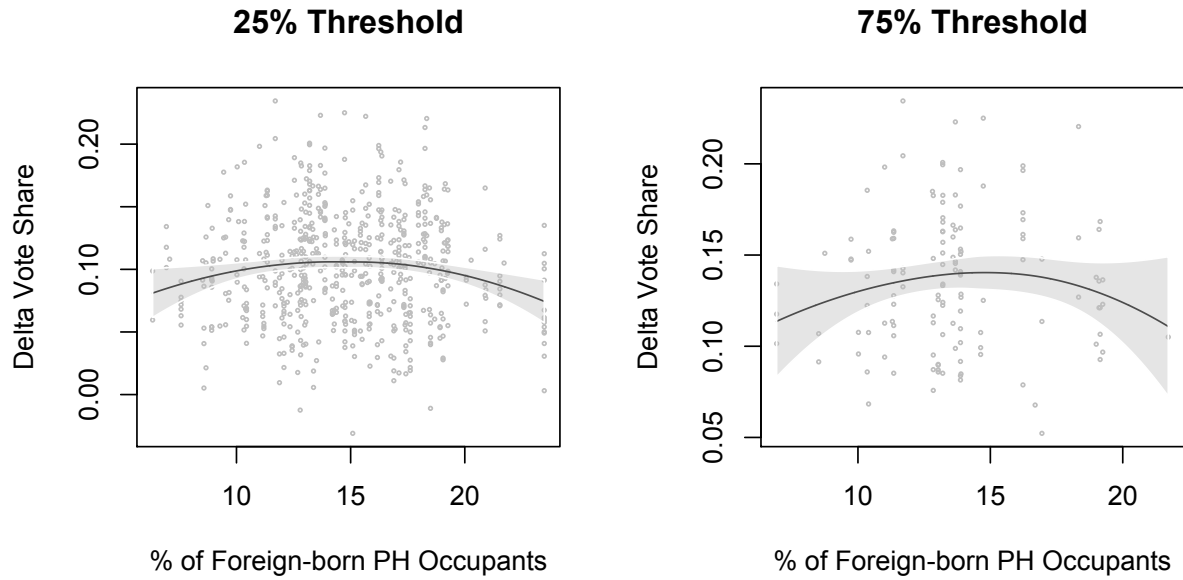
	(1)	(2)	(3)
<i>Level of Public Housing:</i>			
0-10% (Baseline)	-	-	-
10-20%	-0.016 (0.003)	-0.032 (0.008)	-0.010 (0.004)
20-30%	-0.003 (0.003)	-0.012 (0.011)	-0.000 (0.004)
30-40%	0.007 (0.004)	0.015 (0.014)	0.013 (0.004)
40-50%	0.006 (0.005)	0.028 (0.011)	0.005 (0.006)
50-60%	0.024 (0.004)	0.051 (0.011)	0.023 (0.006)
> 60%	0.038 (0.003)	0.088 (0.008)	0.032 (0.004)
Bin Trends (Quadratic)		Y	
Census Tract Trends (Quadratic)			Y
N	5358	5358	5358
R ²	0.71	0.71	0.84

Standard errors in parentheses, clustered by census tract

C.7. Alternate Thresholds for Figure 5

Figure 5 in the main text assesses the relationship between existing housing diversity and change in support for the far right, measured at the ward level, for all wards with more than 50% of residents in public housing. The figure below shows similar results using 25% and 75% cutoffs. No large increase is observed in wards with more homogeneous housing demographics prior to the reform.

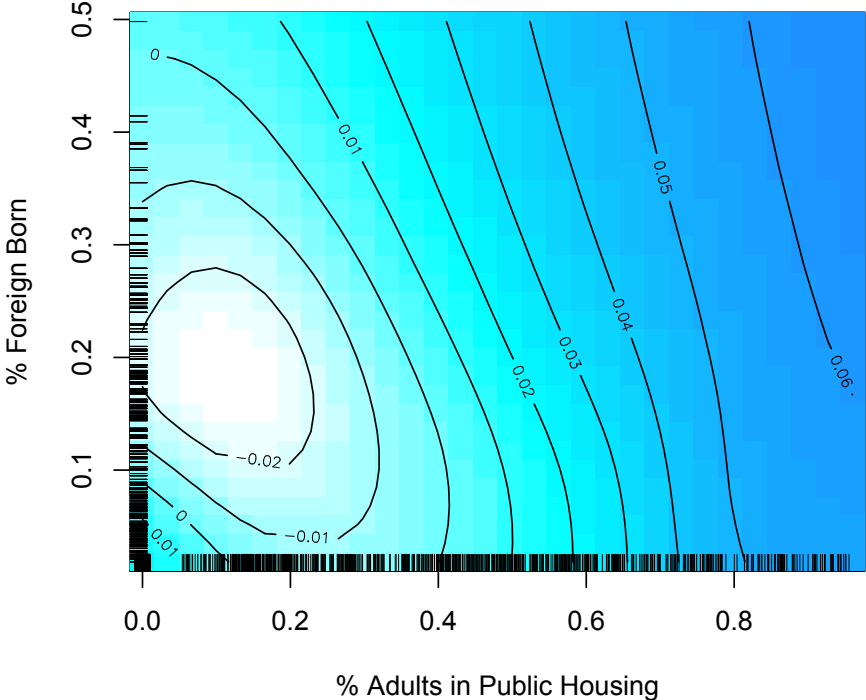
Figure A7: Cutoffs for Public Housing



C.8. Alternate Measures of Foreign Population

Voters may have difficulty distinguishing between the relative size of the Non-EU and Foreign-born population. Accordingly, we replicate the GAM analysis in the main text (Figure 5) using the share of foreign born population at the census tract level.

Figure A8: Effect of Public Housing and Foreign Population on Vote Share: Vienna



C.9. Alternate Approach - Flats per voter

As an alternate measure, we constructed a variable which measures the number of public apartments per registered voter in each ward. Due to micro-level data on the precise number of apartments in each ward, this measure requires no estimation. Because apartments vary in size and because of differences in family composition, this measure no longer captures the share of voting age citizens in public housing, but “public housing apartments per voter.” Moreover, it is more difficult to interpret substantively than the prior measure.

Table A24 and Figure A9 demonstrate that similar patterns are visible when using the apartments per voter indicator.

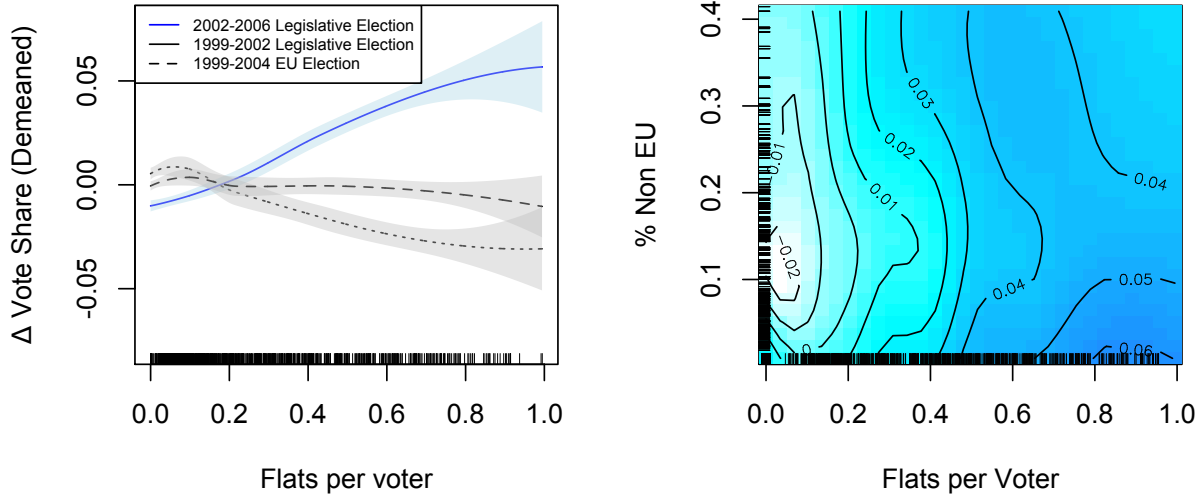
Table A24: Change in Support for the Far-Right, 2002-2006: Vienna Electoral Wards

	(1)	(2)	(3)	(4)
Flats per voter	0.043 (0.006)	0.029 (0.008)	0.035 (0.005)	0.021 (0.007)
% Non-EU	-0.067 (0.028)	-0.092 (0.031)	-0.189 (0.030)	-0.215 (0.032)
Flats per voter * % Non-EU		0.179 (0.070)		0.188 (0.065)
ln(Voters)			0.004 (0.006)	0.004 (0.006)
% Economically Active			0.045 (0.028)	0.044 (0.029)
Average Income			-0.000 (0.000)	-0.000 (0.000)
Constant	0.081 (0.005)	0.083 (0.005)	0.192 (0.042)	0.198 (0.043)
<i>N</i>	1782	1782	1782	1782
adj. <i>R</i> ²	0.117	0.122	0.269	0.275

Standard errors in parentheses, clustered by census tract

The following figure replicates Figure 5 in the main text, using the alternate measure of housing density.

Figure A9: Effect of Public Housing on Vote Share: Vienna



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