Far-right mass protests and their effects on internal migration

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Abstract

We examine how far-right mass protests shape cities' reputation and thus location choices of nationals. To this end, we first exploit that the city of Dresden (Germany) unexpectedly experienced such protests at the turn of the year 2014/15. Results from dyadic difference-in-differences and Synthetic Control analyses suggest that the number of (young) German adults who moved from another region to Dresden declined by around 10% due to the far-right mass protests. We complement our first analysis with a conjoint experiment where participants decide between two hypothetical cities. This experiment confirms that far-right rallies have a dissuasive effect and shows that left-wing people react stronger than right-wing people. It also reveals that far-right protests cause security concerns and concerns about finding like-minded people. The latter reaction is only observed for people that do not support the far right.

Keywords: far-right movements, location decisions, internal migration, political protest, political segregation, regional competition for talent, reputation of cities, right-wing populism, university students

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1 Introduction

Over the last 15 years, the world experienced an unprecedented number of mass protests (Brannen et al., 2020, Cantoni et al., 2024). The common feature of all these protests is that their participants want to achieve certain policy objectives. The related literature thus describes protesting as a measure via which interest groups try to shape political choices and, as a consequence, economic outcomes. The basic idea behind this view is that attending a rally is a costly action and therefore credibly signals private preferences to politicians and other voters, who then in turn might change their behavior (Battaglini, 2017, Lohmann, 1993, 1994, Opp, 2009, 2019).

This paper adds a novel perspective to the literature on political protests. To this end, we pay attention to mass rallies organized by far-right movements. In particular, we examine how people change their attitudes towards a city if they learn (e.g. from the press or social media) that this place experienced a far-right mass demonstration. We also analyze whether this updating is of socioeconomic relevance. More specifically, we study whether protest-induced shifts in attitudes lead people to change their location choices. Put differently, we ask how far-right mass protests affect the reputation of a city and thus the number of people who move there. Addressing this question is of importance for at least three reasons. First, the influx of (young and high-skilled) people is essential for local economic development (see e.g. Moretti, 2012). Identifying which factors play a role in the regional competition for talent is thus not only an objective of many labor and urban economists but also of great relevance for policy makers. Second, in many countries, transfers to municipalities are largely determined by population figures (Foremny et al., 2017). Protest-induced declines in the number of new residents therefore have direct budgetary effects for local governments. Third, without the influx from other regions, extremist attitudes are more likely to persist (Cantoni et al., 2020, Voigtländer and Voth, 2012). Consequently, if far-right mass rallies discourage liberal-minded people from moving to a specific place, they intensify political segregation and its adverse effects.

We proceed in two steps to investigate how far-right mass protests shape the reputation of a place and thus location choices. In the first step, we consider a specific series of far-right mass protests and study how these rallies affected the

¹Following Mudde (2019), far-right movements are defined as movements that aim to (re)create a monocultural state by closing the boarder to immigrants and giving 'aliens' a choice between assimilation or repatriation. This definition does not imply that far-right movements fully agree on the scope of assimilation. Put differently, some believe that only 'related' ethnic groups can assimilate [...], while others mainly hold that Islam is incompatible with their nation, meaning that Muslims cannot assimilate into 'western' societies (Mudde, 2019).

number of incomers, both in the short- and medium-run.² More specifically, we examine how far-right mass demonstrations that began in late autumn 2014 and took place in the city of Dresden (Germany) influenced the influx to this city in the following years. For several reasons, we believe that these mass protests are ideal for our purpose. First, the media coverage was substantial. We can therefore expect that people from outside recognized these protests. Second, the grassroots movement (known as Pegida³) that organized the vast majority of the rallies just emerged in late October 2014, while none of its founders had any experience in professional politics. The a-priori probability that this movement will be able to organize multiple protests with thousands of participants was thus close to zero. Third, in Germany, the far right only received little support and attention until 2014. It is thus unlikely that people precisely knew in fall 2014 how widespread extremist thinking was in a particular city. At that time, news regarding far-right mass rallies therefore provided new information about a city (and its residents) and had the chance to shape people's attitudes.

We make use of multiple data sets and different empirical approaches to study whether fewer people moved to Dresden due to the far-right mass protests. Our main data set is based on the German register of residents and covers all crossmunicipality moves in Germany. We exploit this data to build annual migration matrices. Applying a dyadic difference-in-differences approach, we show that the number of Germans who moved from another German state to Dresden declined considerably after the emergence of the far-right mass demonstrations. We further illustrate that mainly the influx of young German adults decreased and present results of Synthetic Control (SC) analyses to highlight that our findings hardly change if we apply another empirical approach. For the period from 10/2014 to 09/2019, our point estimates imply that, per year on average, almost 900 young German adults did not move to Dresden following the emergence of the far-right mass rallies. To examine which type of young people adjusted their residential choices, we exploit the German Student Register and highlight that a substantial share of them gained the highest school exit qualification. Furthermore, to show that the decrease in the number of in-migrating people can be attributed to the farright demonstrations, we make use of media data. In particular, we present evidence suggesting that Dresden got additional public attention from fall 2014 onwards due

 $^{^{2}}$ We use *short-run* to refer to the time in which the protests happened (i.e. late 2014 and 2015) and *medium-run* to refer to subsequent years (i.e. 2016 - 2019).

³Pegida is an acronym, standing for *Patriotische Europäer gegen die Islamisierung des Abendlandes* (engl.: *Patriotic European against the Islamisation of the Occident*).

 $^{^4}$ In the four years prior to the outbreak of the far-right mass protests, the average number of Germans who moved per year from another state to Dresden was around 10,000. 50% - 60% of them were young adults (i.e. aged between 18 and 29).

to the far-right mass protests but not because of other events.

In the second part of our project, we conduct a conjoint experiment in which participants (≈3000 Germans, aged between 18 and 45) make location decisions between two fictitious cities. These cities differ in a set of characteristics (for a similar approach, see Arntz et al., 2023). One of them is the frequency of protests against the admission of migrants and refugees. Our motivation for running the conjoint experiment is threefold. The first is to confirm in an alternative setting that people take into account far-right rallies when making location choices. Put differently, with our experiment, we can alleviate concerns regarding the external validity of the effects that we observe for the protests in Dresden. The second is to obtain an understanding of how far-right protests influence people's attitudes towards a city. Knowing exactly how the reputation of a city changes because of such demonstrations is of great practical relevance since it helps policy makers in affected places to design policies that mitigate their adverse effects on the number of incomers. Lastly, the experiment allows to examine how people's reactions to farright rallies depend on their own political views. We can thus answer whether they provoke political segregation.

Our stated-preference experiment produces three key results. First, it confirms that people care about far-right protests when making location choices and that they reduce the attractiveness of a city. Second, independently of their political stance, people consider a place as less attractive if far-right protests take place. However, effects are considerably stronger for supporters of left-wing parties. We therefore conclude that far-right mass protests cause political segregation. Third, because of far-right rallies, a city is perceived as less secure. People who do not support the far right are also more concerned about finding new friends and have worse expectations about the medium-run economic development of a city if far-right protests occur.

Related literature

Our paper contributes to various strands of literature in economics and political science. One is the literature on the effects of protests (for a recent review, see Cantoni et al., 2024). Existing empirical studies show how protests influence the decisions of policy makers and voters (see e.g. Aidt and Franck, 2015, Caprettini et al., 2024, Eady et al., 2023, Ellinas and Lamprianou, 2024, Fabel et al., 2022, Madestam et al., 2013, Mazumder, 2018, Wasow, 2020). Our new insight is that protests also influence people's location choices and thus decisions that are not primarily of political nature but have great economic and political consequences.

Furthermore, our results suggest that protest movements do not necessarily have to convince policy makers or other voters from their views to reach an objective. Put differently, we document a novel channel through which protests can shape economies and societies.

In addition, our study adds to the literature on right-wing populism and farright movements (for a recent review, see Guriev and Papaioannou, 2022). While various studies investigate the causes of the latest rise of the far right⁵, causal evidence on its consequences is scarce. Funke et al. (2023) conclude that populist leaders are detrimental for economic performance. Abou-Chadi and Krause (2020) and Bursztyn et al. (2020) show that the rise of the far right has an effect on the program of mainstream parties and social norms. Bracco et al. (2018) and Doerr et al. (2021) find that foreigners are less likely to move to a municipality if this place is governed by a far-right mayor. Slotwinski and Stutzer (2019) report that Swiss municipalities whose residents expressed strong support for an anti-minaret initiative experienced afterwards declines in the number of foreign incomers.⁶ We complement the aforementioned papers in three ways. First, we point out that not only foreigners but also nationals avoid places where the far right receives great support. Second, we establish that not only electoral successes of far-right parties affect location decisions but also far-right protests. This is noteworthy because it implies that the far right does not need to implement anti-migration policies to reduce immigration. Third, we are the first study that provides evidence on how people change their attitudes towards a place if locals express support for the far right. Thereby, we document the existence of reputational changes.

Our paper also speaks to the literature on internal migration. In this strand of literature, various studies investigate the role of economic factors such as wages, taxes, and amenities (see e.g. Diamond, 2016, Kennan and Walker, 2010, Kleven et al., 2020, Notowidigdo, 2020). Other well-established factors are crime (see e.g. Bayer et al., 2016, Bishop and Murphy, 2011) and environmental quality (see e.g. Banzhaf and Walsh, 2008, Boustan et al., 2020). By contrast, only relatively few studies examine how political factors influence location choices (Jia et al., 2023). Gimpel and Hui (2015) and Shafranek (2021) conduct experiments to show that people in the US prefer to have copartisans as neighbors or roommates.⁷ Downey

⁵Established drivers of right-wing populist voting are exposure to immigration (see e.g. Barone et al., 2016, Dinas et al., 2019, Dustmann et al., 2019, Halla et al., 2017, Hangartner et al., 2019, Steinmayr, 2021), international trade (see e.g. Autor et al., 2020, Colantone and Stanig, 2018, Dippel et al., 2022, Rodrik, 2021), austerity (see e.g. Fetzer, 2019), and economic crises (see e.g. Funke et al., 2016, Margalit, 2019).

⁶In addition, Pan (2023) suggests that fewer inventors move to a country that is governed by a populist leader.

⁷Mummolo and Nall (2017) argue that the preferences stated by US people in such experiments

and Liu (2023) report that college graduates in the US are less likely to move to states whose governor is a Republican. Pickard et al. (2022) study how the Brexit referendum affects internal migration in the UK and observe that people who are aligned with the Brexit preferences of their district are less inclined to move to another district. They also find that individuals who decide to move and do not share the majority opinion in their district of origin tend to choose a district as their new place of residence where they agree with the majority. Also using data from the UK, Efthyvoulou et al. (2023) show that migration flows between two districts are determined by their political similarity. Our project provides further evidence for the importance of political factors for internal migration. However, it differs in three notable ways from the existing studies: first, we consider protests instead of voting, second, we combine a survey experiment with an analysis of a natural experiment, and third, in the latter analysis, we use administrative data including the universe of moves rather than data from a survey.

With our study, we also contribute to the literature in education economics. In particular, we complement studies that investigate how young people choose their place of study. Existing studies mainly illustrate the importance of economic and social factors, including the distance to the family, living costs, tuition fees, the quality of the university, and the strength of the local labor market (see e.g. Alm and Winters, 2009, Beine et al., 2014, Dwenger et al., 2012, Koenings et al., 2020, Long, 2004, Spiess and Wrohlich, 2010, Winters, 2012). We are not aware of any study that documents a causal effect of political factors on the location decisions of national or international students. Our paper fills this gap.

Finally, we establish changes in people's expectations as the main channel via which far-right mass protests affect location decisions. This channel can also be found in studies that investigate the economic effects of "news shocks" (see e.g. Arezki et al., 2017, Beaudry and Portier, 2014, Ramey, 2011). In contrast to us, most of these studies have a macroeconomic focus. A notable exemption in this regard is Besley et al. (2024) who show how news about terror attacks influence location choices of tourists.

2 Conceptual considerations

People take into account multiple aspects when making location choices (see e.g. McFadden, 1978). Examples include earning opportunities, ecological factors, and leisure offerings (see e.g. Banzhaf and Walsh, 2008, Borjas, 1987, Glaeser et al., 2001). In this paper, we aim to show that location decisions are also shaped by

do not fit together with their actual moving behavior.

Figure 1 Supposed channel via which far-right mass rallies affect migration.



far-right protests. Figure 1 shows the presumed mechanism. The first step in our line of reasoning is that mass rallies of the far right attract media attention. As a consequence, people take notice of such protests, even if they live elsewhere. In particular, people learn in which city the far right is able to organize a rally with thousands of participants. We argue that this information has an effect on how people perceive this city and that this change in attitudes is especially likely to occur if people have little prior knowledge about it. Usually, this is the case for individuals who do not live in (or near to) the place where the protest happened. Lastly, when searching a new place of residence, people form expectations about how their well-being will be, depending on the residential decision. The change in attitudes induced by the far-right mass rallies shapes the expectation formation process and thus the location choices.

In theory, multiple reasons exist for why people take into account information about far-right mass protests when forming location choices. Because of anecdotal evidence and related studies (see Section 1), we focus on three of these reasons in the remainder of this paper. One reason is that a city might be perceived as less secure due to far-right mass protests. A second potential reason is that far-right mass demonstrations change people's expectations about how widespread rightest thinking is among the locals. As a consequence, people may update their beliefs about the likelihood of getting in touch with persons who share their views and interests. Whether the posterior probability is higher or lower than the prior may depend on the political stance of an individual. Finally, because of far-right mass protests, people may form new expectations with regard to the future economic development of a city. For instance, they may think that investors react to such demonstrations or that far-right mass rallies induce policy changes that in turn affect the economy. Whether people's economic expectations improve or become worse because of far-right mass protests is ambiguous from a theoretical point of view.

⁸Several information provision experiments suggest that people are more likely to react to new information when having little prior knowledge (see e.g. Lergetporer et al., 2018, Roth et al., 2022).

In sum, we hypothesize that mass protests organized by the far right have an effect on how people think about a city and thus influence their location choices. However, we also provide arguments for why people may react differently to such demonstrations: while some may feel attracted, others may be scared off. Hence, far-right mass rallies may fuel political segregation. The aggregated effect of such protests on migration is theoretically unclear.

3 The far-right mass rallies in Dresden and their effects on migration towards Dresden

We proceed in two steps to verify the hypotheses developed in Section 2. In the first step, we consider mass protests which (unexpectedly) occurred in the city of Dresden (Germany). Background information about these rallies and our related empirical analysis are presented in this section. In Section 4, we complement this analysis with a survey experiment in which people make location choices between hypothetical cities.

3.1 Institutional background

3.1.1 Pegida protests⁹

In fall 2014, many European cities experienced small rallies that aim to express solidarity with the Kurdish resistance against the terror group *Isis* in Syria and Northern Iraq. The city of Dresden was not an exception here. Among others, a solidarity rally was held in Dresden on 10 October 2014. About 300 people were attending. Accidently, this event was witnessed by Lutz Bachmann, a men with criminal record who ran a tiny PR agency at that time and lived in a suburb of Dresden. He made a short video of the rally and uploaded it on youtube. In the caption of this video, Bachmann complains about both the rally and the public authority that approved the event. One day later, he also opened the Facebook group *Patriotische Europäer gegen die Islamisierung des Abendlandes (Patriotic Europeans against the Islamisation of the Occident)* and invited some like-minded people to join his group. Among the 12 initial members, none had experience in professional politics. However, two of them posted xenophobic statements in the internet on a regular basis before joining this group. In their internal chat, the group members soon developed the idea of organizing protests against migration

⁹Since 2014, several books and articles have been written that describe the emergence and the development of the Pegida protests. The following overview is based on Dostal (2015), Geiges et al. (2015), Patzelt and Klose (2016), Virchow (2016), and Vorländer et al. (2015, 2018).

from the Arabic and Muslim world. The first Pegida rally was held on 20 October 2014 and had around 300 participants. Also in the next two weeks, participation remained rather low. 10

Surprisingly for many and even for the organizers themselves, the support for Pegida grew remarkably in November 2014.¹¹ More specifically, while only about 1,000 people participated in the rally on 3 November 2014, the total number of participants was more than five times larger on 24 November 2014. In the next weeks, the participation figures increased even further. Triggered by the Charlie Hebdo shooting in France, the record high was reached on 12 January 2015 as roughly 25,000 people joined the Pegida rally (for a detailed illustration of the development of the Pegida demonstrations, see Figure B.1).¹²

At the turn of the year 2014/2015, Pegida offshoots were founded in various German cities and some even abroad, but none of these offshoots was nearly as successful in mobilizing people as the original Pegida. In most cities, they thus disappeared rather quickly.

Pegida received great media attention, not only in Germany but also in other countries. For example, the New York Times published roughly a dozen articles about this far-right movement. In Germany, the public debate was also fueled by statements of leading politicians. For instance, Chancellor Merkel and President Gauck warned implicitly but unmistakably against supporting Pegida in their TV speeches on Christmas and New Year's Eve (Gauck, 2014, Merkel, 2014). Other German politicians labeled the leaders of Pegida as 'pinstriped Nazis' and 'Pied Piper.' Besides the public interest, there was also scientific interest in Pegida as sociologists and political scientists wanted to understand who participates in the Pegida rallies. The results of these studies suggest that most Pegida supporters were male, middle-aged, and employed. Their mean level of education was above average and they predominantly lived in Dresden and its surrounding places. In short, most protesters were local middle-class people.

On 21 January 2015, a self-portrait became public where Pegida leader Lutz Bachmann poses as Adolf Hitler. At the same day, it came out that the Public

¹⁰To avoid a stigmatization, the organizers strategically announced their first events as evening stroll of concerned citizens rather than as rallies against immigration.

¹¹In an interview with Germany's best selling newspaper (*Bild*) on 1 December 2014, Bachmann acknowledged that he did not expect at all that his rallies will receive so much support. The interview can be accessed via: https://www.bild.de/regional/dresden/demonstrationen/pegidaerfinder-im-interview-38780422.bild.html

¹²On 10 December 2014, the Pegida organizers published a program. The main demand was a substantial reform of the migration laws. Over time, the tone of the Pegida supporters also became more and more nationalistic. For instance, since November 2014, it was common that politicians were insulted as 'traitors of the people' and that the media was called 'lying press'. Both phrases belonged to the standard vocabulary of Hitler's Nazi Party.

Prosecutor Office investigates against him because of internet posts in which he insulted refugees.¹³ As a consequence, Bachmann stepped down. However, he still wanted to remain the unofficial leader of Pegida. Dissatisfied with this idea, six (relatively moderate) members of Pegida's organization team withdrew. Another immediate effect of these releases was that the support for Pegida dropped. For instance, only about 2,000 people attended the rally on 9 February 2015. Besides specific events such as the speech of the popular Dutch far-right populist Geert Wilders in mid-April 2015, the attendance figures oscillated around at this level until the end of the summer.

Due to the European migrant crisis, a second wave of Pegida demonstrations emerged in autumn 2015. The largest rally of the second wave occurred in mid-October 2015 as 15,000 people attended. Since then, the support for Pegida has declined slowly but continuously (see Figure B.1). The last time that the Pegida movement received great attention was in October 2016 as the city of Dresden hosted the celebrations honoring the Day of German Unity. Some supporters of Pegida strongly disturbed this festive event.

3.1.2 Additional information

In Appendix A, we give a plenty of further information about our institutional setting. First of all, we present details about three other far-right protests that received remarkable public attention and occurred in or near Dresden in summer 2015.¹⁴ Second, we inform about Dresden's development prior to the rise of the Pegida movement and point out why Dresden had a good reputation until then. Third, we sketch how the far right has developed in Germany, Saxony, as well as Dresden. Finally, we give information about the *Alternative for Germany* (AfD), which is currently the most popular far-right party in Germany.

3.2 Data

3.2.1 German register of residents

To receive information regarding migration behavior within Germany, we exploit administrative data sets provided by the Research Data Centers (RDCs) of the Statistical Offices of the Federation and the Federal States. These data sets are

¹³Because of these insults, Bachmann was convicted of inciting racial hatred in May 2016.

¹⁴In our empirical analysis, we cannot differentiate between the effects of the Pegida rallies on location decisions and the effects of the other far-right demonstrations. Therefore, we do not claim in the later parts of the paper that our estimates show how the Pegida rallies shaped Dresden's reputation and the influx to Dresden. Instead, we will interpret our results as the effects of all far-right demonstrations.

based on the German register of residents and cover all registered cases where a person moved from one municipality to another. For each move, we know the place of origin and destination as well as when it took place. We also have some personal information about the person that moved (e.g. age, gender, civil status, nationality). Variables that can be used as proxy for people's income, education level, or political attitudes are not available. Due to the German data protection laws, individuals cannot be tracked over time. In total, the data sets cover more than 40,000,000 moves for the period from 01/2000 to 12/2019. However, in our empirical analysis, we only consider moves made by Germans between 10/2006 and 09/2019 (for details, see next paragraph and Section 3.3).

We prepare the raw data in two ways to facilitate empirical analyses. First, we produce migration matrices that indicate how many people moved within a year from a specific place of origin (either a county or a state) to a particular county. Thereby, we define a year as period from October to September rather than as a period from January to December. The advantage of this strategy is that we can clearly differentiate between pre- and post-treatment periods. When creating our matrices, we also exploit the available personal characteristics, for instance to build specific migration matrices for males and females or migration matrices for specific age cohorts.

The second way of how we prepare the raw data is that we create time series, indicating how many people moved to a particular place in a particular year. As above, we define a year as period from October to September. In addition, when aggregating the data, we exclude within-state moves. We focus on moves across states because, in Section 2, we argue that far-right mass protests influence the attitudes and decisions of people who have little knowledge about the place that experienced the rallies. For people who live in the same state, this condition is unlikely to hold (especially in our case because Dresden is the capital city of the state of Saxony).

3.2.2 German student register

We complement our first data set with the German student register, another rich administrative data set provided by the RDCs. It includes information about all

¹⁵In Germany, all people are legally required to visit a registration office within two weeks after moving to a new place.

¹⁶Details about the data can be found in RDC of the Federal Statistical Office and Statistical Offices of the Federal States (2006, 2007, 2008b, 2009b, 2010b, 2011b, 2012b, 2013b, 2014b, 2015b, 2016b, 2017b, 2018b).

tertiary students enrolled in Germany.¹⁷ Our access to this non-public data set is limited to the academic years 2007/08 till 2017/18.¹⁸

In our study, we pay attention to three groups of students. The first includes German first-year undergraduates. To trace back the migration behavior of these students, we exploit that we know the institution at which they study and the county in which they completed their high school.¹⁹ We use these two pieces of information to produce time series indicating how the total number of first-year undergraduates that finished high-school in another state developed.

The second group of students whose migration behavior we study are advanced first-year students from Germany. Students belong to this group if they are in the first year of their program but enrolled for at least three years.²⁰ To identify how advanced first-year students move around, we exploit that our data set does not only indicate the current place of study but also the institution where a student was enrolled in the previous semester.²¹ Based on this information, we build city-specific time series reflecting how the number of advanced first-year students that previously studied in another state developed over time.

The last group of students that we consider comprises people who are enrolled for the first time at a German tertiary education institution and neither finished high school in Germany nor have German citizenship. Below, we refer to them as international first-year students.²² For our statistical analysis, we calculate for each German city the number of international first-year students per year.

¹⁷Details about the data can be found in RDC of the Federal Statistical Office and Statistical Offices of the Federal States (2008a, 2009a, 2010a, 2011a, 2012a, 2013a, 2014a, 2015a, 2016a, 2017a, 2018a).

¹⁸In Germany, academic years last from October till September.

¹⁹We acknowledge that our approach is imperfect because people do not necessarily begin their tertiary education directly after finishing high school. Thus, it happens that first-year undergraduates had moved to a place a while before they started to study there. However, we are convinced that such cases are relatively rare and thus believe that the resulting measurement error is negligibly small.

²⁰In Germany, undergraduate programs are typically designed as three-year programs. We thus choose three years as our threshold. We are aware that some of the students that we capture with our definition might not be in an advanced program. For instance, some students begin a second undergraduate program after completing their first one. It is also possible that we miss some advanced first-year students because some students finish their undergraduate studies in less than three years. In general, we think that the measurement error that results from these issues is minor.

²¹In contrast to the variable showing the county of high school graduation, missing information is a notable problem when using the variable that reflects the institution where a student was enrolled in the last semester. The reasons for the missing information are unclear. We find no evidence suggesting that the missing information is a specific issue for institutions located in Dresden.

²²The group of *international first-year students* includes three types of students: (i) non-German first-year undergraduates who received their high-school degree outside of Germany, (ii) non-German first-year graduates who neither did their high school nor undergraduate program in Germany, and (iii) non-German exchange and guest students.

3.2.3 Media data

As explained in Section 2, receiving media attention is a prerequisite for far-right mass protests to affect location decisions. To illustrate that the rallies in Dresden received considerable attention, we exploit the online database GBI-Genios wiso which includes digitized articles from more than 100 German newspapers. In our analysis, we focus on the nine newspapers with a national coverage (for a list, see Table C.1). More specifically, to measure how much public attention a particular place received at a particular point in time, we count the number of articles that mention the name of the place. We produce this measure on a monthly basis for the period from 01/2013 to 12/2019 and for every city with more than 200,000 inhabitants (for a list, see Table C.3). In addition, we generate sub-indices that show how many of the articles are related/unrelated to protest.²³

3.3 Empirical approaches

3.3.1 Dyadic difference-in-differences approach

We begin our analysis on the effect of far-right mass demonstrations on location decisions with a dyadic difference-in-differences approach (for a similar approach, see Besley et al., 2024). More specifically, we estimate the model:

$$\ln Y_{ijt} = \mu_{ij} + \beta \cdot \left(DD_{ij} \times \mathbb{I}_{t \ge 10/2014} \right) + \alpha \cdot X_{jt} + \xi_{it} + \nu_{r_jt} + \varepsilon_{ijt}$$
 (1)

where Y reflects the total number of people who moved from place of origin i to place of destination j in year t (defined as period from October until September). DD is a dummy variable that is equal to 1 for all origin-destination-pairs where Dresden is the place of destination. \mathbb{I} is also a dummy and equals 1 for the years 2014/15 onwards. β is the parameter of interest. Negative estimates of β suggest that fewer people moved to Dresden due to the far-right mass protests.

In addition to the outcome variable and our key explanatory variables, we add three sets of fixed effects to our regression model. First, the dyadic fixed effect μ captures all time-invariant factors that affect migration between places i and j, including geographical distance. Second, the origin-by-year fixed effect ξ controls for all factors that influence the total number of people who move away from a particular place. An example of such a factor is the spike in the number of high school graduates that various German places experienced between 2007 and 2016 because of state-level school reforms that aimed to reduce the number of school

²³Inspired by Vüllers and Hellmeier (2022), we use a keyword search approach to identify those articles that are related to protest (for the list of keywords, see Table C.2).

years. Finally, with the region-of-destination-by-year fixed effect ν , we take into account factors that have an impact on the attractiveness of a region. Among others, this fixed effect rules out that our estimates of β are biased because of a generally increasing aversion against living in Eastern Germany.

We complement our fixed effects with a set of time-varying destination-specific covariates to control for some well-established drivers of internal migration. More specifically, we aim to capture local economic shocks by controlling for GDP and unemployment. In addition, we add dummy variables that reflect whether a place (i) raises a tax on secondary homes²⁵, (ii) has a university that received the label university of excellence from the German government, (iii) has higher education institutions where most students need to pay tuition fees, and (iv) experiences a reform-induced spike in the number of high-school graduates.

When estimating (1), the standard assumptions of the difference-in-differences approach need to be satisfied. The most important of them is the parallel trend assumption, which requires that migration to Dresden would have developed in the same way as the migration to other places in absence of the far-right rallies. To increase the likelihood that this key assumption holds, we restrict the set of destinations to the 40 cities with more than 200,000 inhabitants (for a list, see Table C.3). Furthermore, based on a dynamic version of our baseline model, we provide some evidence in Section 3.4.1 that is consistent with the parallel trend assumption. Lastly, in Section 3.5.3, we exploit our media data to show that the existence of a confounding event is unlikely.

A well-known challenge when analyzing migration matrices is the presence of origin-destination pairs between which no moves occurred. In our setting, we can avoid such cases when using the 16 German states as places of origin and the 40 places with at least 200,000 residents as places of destination. Consequently, our main analysis is not based on log-like transformation that are defined at zero (for potential problems with such transformations, see Chen and Roth, 2024).

²⁴Following Dauth et al. (2014), we differentiate four regions: *East* (including the states of Brandenburg, Berlin Saxony, Saxony-Anhalt, and Thuringia), *North* (including the states of Bremen, Hamburg, Lower Saxony, Mecklenburg-Western Pomerania, and Schleswig-Holstein), *West* (including the states of Hesse, North-Rhine Westphalia, Rhineland-Palatinate, and Saarland), and *South* (including the states of Baden-Wuerttemberg and Bayaria).

²⁵As shown by Brox et al. (2024), migration figures of German cities change in notable way if they introduce a second home tax. The reason is tax evasion.

3.3.2 Synthetic Control approach

To allay potential concerns regarding our dyadic difference-in-difference approach, we complement this first procedure with Synthetic Control (SC) analyses.²⁶ We consider the SC approach as appropriate since it facilitates the analysis of cases where an aggregate unit (here: a city) experienced a treatment/shock, while the other units did not. The basic idea of the SC approach is to produce a synthetic unit that consists of untreated units and closely resembles the treated unit in the pre-treatment periods. Afterwards, the post-treatment development of the treated and synthetic unit are compared (see Abadie et al., 2015, Abadie, 2021).

Formally, the SC procedure can be described as follows. Let l_0 denotes a city (here: Dresden) in which far-right mass protests occur in period t_0 . In the other cities (l_1, \ldots, l_m) , such protests do not take place (here: all other German cities with more than 200,000 inhabitants). As common, we refer to $\mathcal{D} = \{l_1, \ldots, l_m\}$ as donor pool. Our main objective is to identify how the far-right mass rallies affect an observable outcome $(Y_{l_0,\tau})$, such as the total number of new residents. Put differently, we want to estimate:

$$\beta_{\tau} = Y_{l_0,\tau}^I - Y_{l_0,\tau}^N \qquad \forall \tau \ge t_0 \tag{2}$$

where $Y_{l_0,\tau}^I$ reflects the outcome if the far-right mass protests occur and $Y_{l_0,\tau}^N$ the outcome if such rallies do not happen (Abadie, 2021, Abadie et al., 2010). A key challenge in this regard is that $Y_{l_0,\tau}^N$ is not observable. To address this issue, the SC method produces the proxy:

$$\hat{Y}_{l_0,\tau}^N = \sum_{j \in \mathcal{D}} \omega_j \cdot Y_{j,\tau} \tag{3}$$

where $\omega = (\omega_{l_1}, \dots, \omega_{l_m})$ are non-negative weights that sum up to 1 and $Y_{\mathcal{D},\tau} = (Y_{1,\tau}, \dots, Y_{m,\tau})$ the observed outcomes of the cities in the donor pool. To specify the weighting scheme, we exploit pre-treatment characteristics of the treated and untreated units (for details, see Abadie, 2021). More specifically, as many other studies in economics and political science, we exploit pre-treatment outcomes as predictors (for a detailed discussion regarding the selection of the predictors, see Botosaru and Ferman, 2019, Ferman et al., 2020, Kaul et al., 2022).

The SC procedure produces unbiased estimates of β_{τ} if three conditions hold. First, the match in the outcome variable between the treated and synthetic unit is sufficiently close in the pre-treatment period. In the next sections, we provide

²⁶A concern may be that the size of the treatment and control group are very unbalanced. For instance, in our main regressions, the treatment group consists of 15 origin-destination-pairs, while the control group includes 585 of such pairs. To reduce the risk of imprecise coefficient estimates, it would be ideal to have groups of similar size.

some graphical evidence suggesting that this condition is met. Second, no other events exist that differently influenced the treated and untreated units during the post-treatment period (for supporting evidence, see e.g. Section 3.5.3). Third, units in the donor pool must be unaffected by the treatment. A potential concern in this regard is that the far-right mass protests in Dresden affected people's attitudes towards nearby places, such as Chemnitz or Leipzig. To alleviate this concern, we show robustness checks in the following sections where we drop such cities from the donor pool.

3.4 Main results

3.4.1 Dyadic difference-in-differences approach

Table 1 presents the results of six dyadic difference-in-differences analyses. These analyses have five features in common. The first is that we use annual migration matrices that are defined at the state-city-level. Second, we restrict the pool of destinations to the 40 German cities with more than 200,000 residents. Third, we drop all origin-destination-pairs that capture within-state migration. Fourth, our sample period lasts from October 2010 to September 2018. Lastly, the regression models include origin-destination fixed effects, region-of-destination-by-year fixed effects, origin-by-year fixed effects, and some time-varying destination controls (for details about the fixed effects and control variables, see Section 3.3.1). The main difference between the analyses concerns the group of people that we study.

Our dyadic difference-in-differences estimations suggest that the far-right mass protests significantly reduced the number of Germans who moved (from another state) to Dresden. We also find that this decline is sizable. More specifically, our point estimates imply a decrease of 9.2 percent (see Column 1). In the four years prior to the rise of the mass protests, the average number of German adults who moved per year from another state to Dresden was around 10,000. As shown in Column 2, the magnitude of our estimate is even slightly larger if we focus on the working-age population. We also observe that the overall decline is primarily driven by young adults (see Columns 3 and 4). However, we do not find notable differences between young German men and women (see Columns 5 and 6).²⁷

For producing unbiased estimates, our dyadic difference-in-differences approach requires that the parallel trend assumption holds. A common way to assess the plausibility of this assumption is to check whether the treated and control units developed differently in the pre-treatment period (Roth, 2022, Roth et al., 2023).

²⁷As illustrated in Table C.4, we obtain similar results if we use counties rather than states as places of origin.

Table 1 Dyadic difference-in-differences estimates (German population)

	(1)	(2)	(3)	(4)	(5)	(6)
$DD \; \times \; \mathbb{I}_{t \geq 10/2014}$	-0.092***	-0.111***	-0.133**	-0.041	-0.129**	-0.132**
	(0.0262)	(0.0282)	(0.0443)	(0.0375)	(0.0455)	(0.0464)
Observations Cohorts Gender Investigation period	5,400	5,400	5,400	5,400	5,400	5,400
	All	18 - 64	18 - 29	30 - 64	18 - 29	18 - 29
	All	All	All	All	Female	Male
	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19

Notes: This table shows estimates of Eq. (1), using different samples. The places of origins are the 16 federal states and the places of destination the 40 largest German cities (for a list, see Table C.3). Standard errors are clustered at two levels: origin-destination-pair and year. Origin-destination pairs are weighted according to their relevance in the pre-treatment period. We use the following notation to highlight estimates that are statistically significant from 0: $^*p < 0.10$, $^{***}p < 0.05$, $^{***}p < 0.01$.

To run this test, we use a dynamic version of our basic regression model. Figure B.4 presents the results for two of our outcome variables: (a) the total number of German incomers from another state and (b) the total number of young adult German incomers from another state. Reassuringly, we do not detect statistically significant differences in the pre-treatment period.

3.4.2 Synthetic control approach

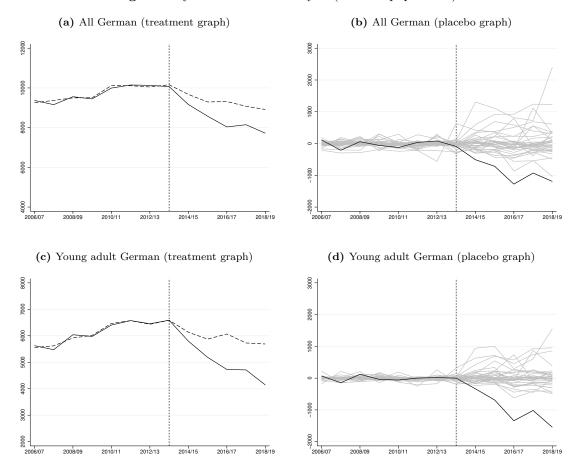
The dyadic difference-in-differences estimates reported in the last section provide first evidence for the hypothesis that far-right mass protests can affect people's migration behavior. In this section, we use the SC approach to substantiate this finding.

Figure 2 pressents the results of our SC analysis for two outcome variables: the total number of German incomers from another state (see upper part) and the total number of young adult German incomers from another state (see lower part). The evaluation period starts in October 2006 and ends in September 2019.²⁸ All pre-treatment outcomes are used to create the synthetic Dresden (hereinafter: *Syn-Dresden*). Details regarding the composition of SynDresden can be found in the notes supplementing Figure 2.

As evident in Figures 2a and 2c, only minor differences exist between Dresden (solid line) and SynDresden (dashed line) prior to the emergence of the far-right mass protests in fall 2014. The overlap is reassuring as it suggests that the key prerequisite of the SC methods is satisfied in our setting. Figures 2a and 2c also

²⁸We use a longer pre-treatment period in our SC analysis (eight years) than in our dyadic difference-in-differences analysis (four years) for multiple reasons. On the one hand, using only four pre-treatment periods is not enough to produce reliable estimates with the SC approach (see Abadie, 2021). On the other hand, extending the number of pre-treatment years in our dyadic difference-in-differences analysis is not possible due to the availability of our control variables. Furthermore, starting the period of investigation in October 2010 has the advantage that our fixed effects capture the Neo-Nazi remembrance marches in February 2009 & 2010 (for more details, see Appendix A.3.

Figure 2 Synthetic Control analysis (German population)



Notes: This figure presents results of SC analyses. In Panel (a) and (b), the outcome variable is the total number of German incomers who previously lived in another state. In Panel (c) and (d), the outcome variable is the total number of German incomers aged between 18 and 29 who previously lived in another state. In the left panels, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In the right panels, we show placebo graphs. In Panel (a), "synthetic Dresden" consists of Berlin (0.044), Halle (0.092), Hanover (0.12), Leipzig (0.103), Mainz (0.604), and Munich (0.038). In Panel (c), "synthetic Dresden" consists of Berlin (0.088), Cologne (0.041), Essen (0.306), Leipzig (0.164), and Mainz (0.402).

illustrate that Dresden and SynDresden developed differently after the rise of the far-right mass protests. More specifically, we observe that Dresden lost about 500 German incomers from other states (compared to SynDresden) in the period from October 2014 to September 2015. The vast majority of them are young adults. In the next year, the gap increased to around 750 people. In the last three years of our evaluation period, the discrepancy was about 1,000 people. The two placebo graphs indicate that no other German place with more than 200,000 inhabitants experienced such a notable decline in the total number of (young adult) German incomers from another state (see Figures 2b and 2d). In terms of effect sizes, it is also worth mentioning that the SC approach produces very similar results as the dyadic difference-in-differences approach (see Section 3.4.1).

We perform a series of robustness checks to show that the results presented in

Figure 2 are credible. First, as proposed by Abadie (2021), we conduct a leave-one-out analysis for both outcome variables. As shown in Figure B.5, the sizable negative effect of the far-right mass protests becomes apparent irrespectively of whether we exclude any particular city from the donor pool. Second, we allay the concern that other cities in Saxony or East Germany are also affected by the far-right mass protests in Dresden due to spillover effects. To this end, we depict in Figure B.7 that the treatment graphs change little if we drop all Saxon or East German cities from the donor pool. Finally, in Figure B.6, we highlight that our results remain unchanged if we determine the composition of SynDresden without taking into account the last pre-treatment year (2013/14).

3.5 Additional Results

3.5.1 German university students

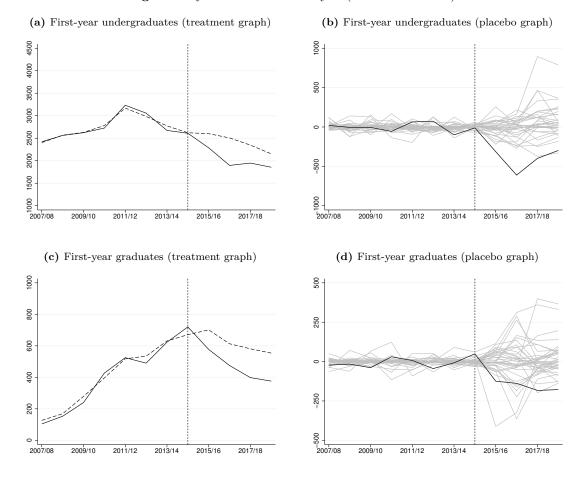
A key result of the analyses presented in Section 3.4 is that the total number of young German adults who moved from another state to Dresden decreased in a notable manner because of the far-right mass protests. In this section, we study which type of young people adjust their residential choices due to far-right mass rallies. More specifically, we investigate whether students constitute a substantial part of the people who changed their migration behavior. Students are a relevant group to examine for three reasons. First, students are relatively liberal-minded (see e.g. Majer, 2016). Second, a large share of them stays after graduating from university (see e.g. Conzelmann et al., 2023, Winters, 2020).²⁹ Finally, attracting students is conducive for local economic growth (see e.g. Andrews, 2023, Carneiro et al., 2023, Lehnert et al., 2020).

We divide our analysis into two parts. In the first part, we consider first-year undergraduates from Germany. We observe that the far-right mass rallies had a negative effect on the number of German first-year undergraduates who finished high school in another state (see upper part of Figure 3). In particular, our SC analysis suggests that Dresden lost about 400 first-year undergraduates per year because of the far-right mass protests.

The second part is devoted to the advanced first-year students from Germany. Besides the before-mentioned reasons, we believe that this group is of interest as advanced students are likely to respond similar to far-right mass protests as high-skilled career beginners. Figure 3 (lower part) shows that the number of advanced

²⁹Using data from a representative survey, Haussen and Uebelmesser (2018) calculate that 65 percent of the university graduates in Germany have their first regular job in the state where they completed their tertiary education. In Saxony, this share is a bit lower (57.2 percent).

Figure 3 Synthetic Control analysis (German students)



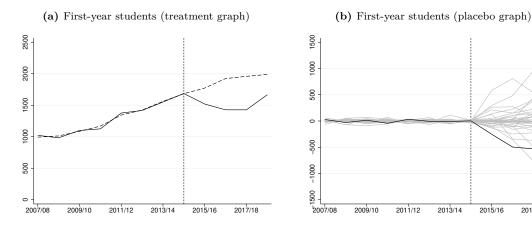
Notes: This figure presents results of SC analyses. In Panel (a) and (b), the outcome variable is the total number of German first-year undergraduates that finished high-school in another state. In Panel (c) and (d), the outcome variable is the total number of German first-year graduates who previously studied in another state. In the left panels, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In the right panels, we present placebo graphs. In Panel (a), "synthetic Dresden" is composed out of Berlin (0.038), Bremen (0.072), Chemnitz (0.367), Hamburg (0.265), and Munich (0.258). In Panel (c), "synthetic Dresden" (consists of Berlin (0.128), Magdeburg (0.578), and Munich (0.294).

students that previously studied in another state is lower for Dresden than Syn-Dresden in each year after the rise of the far-right mass rallies. The gap amounts to around 200 advanced first-year students per year.

In sum, the results shown in this section imply that fewer students enrolled at higher education institutions in Dresden because of far-right mass protest. When comparing the effect sizes reported in this section with those presented in Section 3.4.2, we can conclude that a substantial share of the young German adults that did not move to Dresden due to far-right mass rallies demonstrations are tertiary students. However, we also think that the residual between the reported figures (on average about 300 people per year) is large enough to draw the conclusion that not only students changed their migration behavior.³⁰

³⁰As described in Section 3.2.2, we are likely to make some measurement errors when using the German student register to capture the migration behavior of tertiary students. While these

Figure 4 Synthetic Control analysis (International students)



Notes: This figure presents results of SC analyses. The outcome variable is the total number of non-German first-year students. In the left panel, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In the right panels we present a placebo graph. In Panel (a), "synthetic Dresden" is composed out of Aachen (0.132), Berlin (0.062), Bremen (0.340), Dortmund (0.126), Essen (0.101), Freiburg (0.205), and Munich (0.034).

2017/18

3.5.2 International university students

While the focus of this study is to examine how far-right mass rallies affect the location choices of nationals, the question may arise how foreigners react to such protests. In this section, we consider international tertiary students to illustrate that foreigners also change their migration behavior due to far-right protests. We leave a more comprehensive analysis on this issue for future research.³¹

Figure 4 presents results from a SC analysis that examines how the far-right mass protests in Dresden affected the number of international first-year students. Reassuringly, we again observe only minor differences between Dresden and Syn-Dresden in the years prior to the start of the far-right mass rallies. In the post-treatment period, we observe, on average, a gap of about 400 international first-year students per year. Compared to the last pre-treatment year, this is a drop of more than 20 percent.

measurement errors may explain the residuals to a certain extent, we doubt that they can be fully responsible for them.

³¹We study the reactions of international students because of data availability and acknowledge that their reactions might not be representative for all foreigners. We still think this group of foreigners is interesting since attracting international university students is conducive for the local labor market (Beine et al., 2023). Furthermore, the migration behavior of international students is highly related to the international mobility of (highly) skilled workers (Beine et al., 2014).

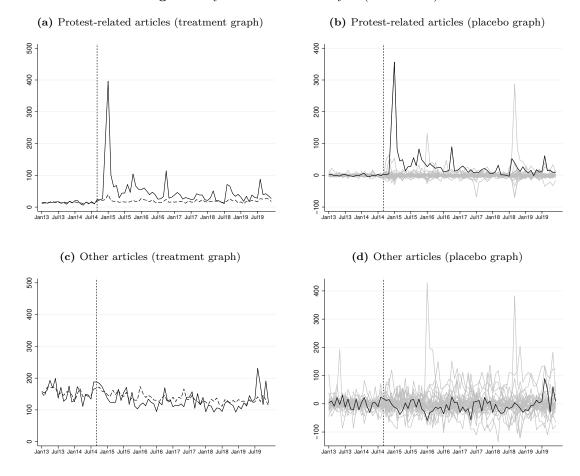
3.5.3 Media attention

In this section, we analyze our media data (for details, see Section 3.2.3). The purpose is twofold. The first is that media attention plays a major role in our conceptual framework because without reporting it is unlikely that people from outside learn about a far-right mass protest (for details, see Section 2). With our press data, we can document that the rallies in Dresden were indeed frequently mentioned in the German media and thereby illustrate that they are likely to be recognized by many Germans. Second, the estimation results reported in Section 3.4 are based on the assumption that no confounding events happened. We can substantiate this assumption by distinguishing between protest-related and other press reports. More specifically, if we find that the increase in Dresden's media coverage can fully be explained by protest-related articles, it is unlikely that our main results are biased due to a confounding factor.

In Figure B.3, we illustrate how the press reporting about Dresden developed between January 2013 and December 2019. More specifically, the black solid line reflects on a monthly basis the total number of protest-related articles printed in the supraregional newspapers included in GBI-Genios wiso (for a list, see Table C.1). The gray dashed line shows the total number of other articles in these nine newspapers that mention the city of Dresden. With regard to the latter, we only observe minor fluctuations over time. This pattern is reassuring since it indicates that the presence of confounding events is quite unlikely. Concerning the protestrelated articles, we observe that their number is negligibly small in the 21 months before the beginning of the far-right mass rallies. We consider this as noteworthy since it suggests that the outbreak of the mass rallies could hardly be anticipated and that they have the potential to reveal information about the city of Dresden (and its residents) that people from outside were hitherto not aware. Finally, for the period from October 2014 onwards, we find a notable and long-lasting rise in the number of protest-related articles. We also see some spikes, for instance at the turn of the year 2014/15 or in October 2015 and October 2016. The spikes nicely correspond with major protest events (for details, see Section 3.1). We thus have little doubt that the far-right mass protests in Dresden received sufficient public attention to got recognized by the vast majority of people in Germany.

To move beyond a descriptive description of our media data, we apply the SC approach. The results are shown in Figure 5. In the upper part of this figure, we present the results for the protest-related articles, while the lower part shows the results for the other articles. As in Section 3.4.2, we show treatment and placebo graphs and shift the respective leave-one-out graphs to the appendix (see Figure

Figure 5 Synthetic Control analysis (media data)



Notes: This figure presents results of SC analyses, In Panel (a) and (b), the outcome variable is the total number of protest-related articles. In Panel (c) and (d), the outcome variable is the total number of articles that are not related to protest. In the left panels, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In the right panels, we present placebo graphs. In Panel (a), "synthetic Dresden" is composed out of Berlin (0.003), Leipzig (0.044), Magdeburg (0.554), Mainz (0.226), and Munich (0.173). In Panel (a), "synthetic Dresden" consist of Cologne (0.042), Dortmund (0.052), Hanover (0.072), Karlsruhe (0.320), Kiel (0.182), Magdeburg (0.233), Stuttgart (0.023), and Wiesbaden (0.077).

B.9). For both types of articles, we observe a close match between Dresden and SynDresden in the period prior to the far-right mass rallies. For the articles not related to protests, we find the same pattern for the period from October 2014 onwards. By contrast, the total number of protest-related articles about Dresden notably exceeded the total number of protest-related articles about SynDresden. Furthermore, the placebo graph illustrates that no other major city in Germany experienced a comparable increase in the number of protest-related articles. The latter result suggests that peoples' attitudes toward the cities forming the control group or donor pool are unlikely to be heavily influenced by local protests in our period of investigation.³²

³²In Figure 5, we see two notable spikes in the number of protest-related articles apart from the spikes caused by the protests in Dresden. The first spike is in January 2016 and is triggered by rallies in Cologne. The reason for the rallies was massive sexual harassment against women by

3.6 Discussion

3.6.1 Alternative explanations

The results shown in Sections 3.4 and 3.5 are consistent with the hypothesis that far-right mass protests have an effect on internal migration because in the years following the rise of Pegida, we observe a substantial decrease in the number of people who moved from another state to Dresden. A concern might be whether another event happened in our period of investigation that negatively affected the influx to Dresden. Above, we already tried to address this potential concern. For instance, our dyadic regression model includes a large number of fixed effects and several control variables to reduce the risk that our results are biased due to a confounding factor (for details, see Section 3.3). Furthermore, in Section 3.5.3, we exploit media data to illustrate that Dresden received additional public attention only because of the far-right mass protests.

In this section, we discuss whether other political actions and events might be responsible for the observed decline in the influx to Dresden. A relatively salient issue in this regard is the parliamentary election in Saxony which took place on 31. August 2014. In this election, the Alternative for Germany (AfD) received 9.7 percent of all votes and entered for the first time a state parliament (for details about the AfD, see Appendix A).³³ As Dresden is the capital city of the state of Saxony, it might be that people changed their attitudes towards Dresden (and thus their migration behavior) due to the vote shares of the AfD. For two reasons, we doubt that this explanation applies. First, as presented in Table C.5, our dyadic difference-in-differences estimates only decrease slightly if we control for the vote share of the AfD.³⁴ Second, we do not find that the influx to Erfurt has notably changed since fall 2014 (see Figure B.8). We believe that Erfurt's development is informative because it is the capital of another state in East German (Thuringia). Furthermore, in Thuringia, state elections were held on 14. September 2014. The AfD obtained 10.6 percent of all votes in this election. In Erfurt, AfD's vote share was 9.5 percent (so even slightly larger than in Dresden). Consequently, if people

Arabic migrant at new years eve. All results presented above remain almost unchanged if we drop Cologne from the sample (not reported). The second spike is in September 2018, resulting from mass protests by and against the far right in Chemnitz, respectively. For two reasons, we are not concerned about these protests. First, the protests happened in the last month of our investigation period. Second, in Section 3.4.2, we show that our results hold if we drop other cities from Saxony from the donor pool.

³³In Dresden, the support for the AfD was below the Saxon average (8.2 percent).

³⁴We separately control for the city-level vote share of the AfD in the last European, federal, and state election. We also add the state-level vote share of the AfD in the last state election and interact this variable with dummy indicating whether a place of destination is the capital of a state.

reacted to the vote shares of the AfD in the 2014 state elections rather than the far-right mass rallies, we should find similar effects for Dresden and Erfurt. Since this is not the case, we consider it as unlikely that the decrease in the influx to Dresden can be explained by the election results.

A number of studies finds that protests can change the behavior of voters and policy makers (see e.g. Madestam et al., 2013). As elections for Dresden's city council took place five months before the rise of the far-right rallies (May 2014) and at the very end of our period of investigation (May 2019), we can rule out any explanation that presumes changes in the composition of the city council. In addition, the three final candidates in the mayoral election in July 2015 credibly signaled that they consider the far-right mass protests as harmful for Dresden. A concern may also be that the councilors elected in 2014 reacted to the rallies and implemented policies that lower migration. We think that this is unlikely for two reasons. One reason is that left-wing parties held a majority in the city council. Another reason is that most of the parliamentary groups were heavily engaged in initiatives highlighting that Dresden is an open and liberal place. Put differently, while we find comprehensive anecdotal evidence that the then active city council took measures that should improve the influx to Dresden, we are not aware of a new policy that aims to achieve the opposite.

3.6.2 Qualitative evidence for changes in Dresden's reputation

As outlined in Section 2, we believe that far-right mass protests change peoples' attitudes towards a city and thus their location choices. An objection against the analyses run so far might be that they only produce reduced-form evidence. Put differently, we lack results indicating that Dresden's reputation suffered from the far-right mass protests. Unfortunately, no data exists that allows to address this issue in a sophisticated manner. To our knowledge, the best available data set is a survey (known as *Brandmeyer Stadtmarken-Monitor*) in which a representative sample of Germans evaluates major German cities. One question in the survey is whether people think — on a scale from 1 (do absolutely not agree) to 10 (do absolutely agree) — that a city has a good reputation. When considering young German adults and comparing Dresden's rating in 2010 and 2020, we observe a decrease by 0.5. The mean rating of the other 33 cities evaluated in both surveys increased by 0.3. In the respective ranking, Dresden felt from rank 12 to 24.

Also in media reports, we find anecdotal evidence, suggesting that the far-right mass demonstrations in Dresden had an effect on the reputation of this city and

³⁵Using street-level data from Dresden, Bischof (2021) suggests that the Pegida protests had an impact on people's voting decisions.

thereby influenced people's migration decisions. For example, in March 2016, the Frankfurter Allgemeine Zeitung released an article, in which the spokesman of a semiconductor manufacturer acknowledges that these protests discouraged people from accepting job offers (Beeger, 2016). This article also includes a statement of the then-rector of the Dresden University of Technology (hereafter: TU Dresden), suggesting that the far-right mass protests complicated hiring processes. In line with our theory is also an article that was published by the Sächsische Zeitung in 2020. More specifically, this article quotes the then-rector of the Carl Maria von Weber College of Music with a statement, indicating that these rallies still raise concerns, in particular among the German applicants (Vollmer and Weller, 2020). This view fits well together with the experience of Bernhard Kelz who owns an advertisement agency in Dresden and states in a radio report by Deutschlandfunk Kultur that some aspirants rejected his job offer as they do not want to live in a city where thousands of people are willing to join demonstrations organized by the far right (Gerlach, 2021).

4 Experimental evidence on the role of far-right protests for location decisions

In the second part of this project, we use a conjoint experiment to improve our understanding about how far-right protests affect people's location choices. Our motivation is threefold. First, we want to illustrate in an alternative environment that far-right rallies influences individual location decisions. The experiment thus allays the concern that the results presented in Section 3 lack external validity. Second, we want to study how reactions to far-right protests vary depending on people's political views. Put differently, with our experiment, we want to answer whether such demonstrations cause political segregation. Third, in Section 2, we argue that far-right rallies change the reputation of a city. For data availability reasons, we could hardly present supporting evidence for this hypothesis in the previous section. We aim to address this issue with the experiment. In particular, we want to illustrate some concerns that arise when people recognize that a city experiences far-right protests. We believe that an in-depth analysis on how the reputation of a place changes due to such protests is of importance as its results help politicians and civil society actors in affected cities to design measures that mitigate the adverse effects resulting from far-right protests.

³⁶In January 2022, we were invited by the rectorate of the TU Dresden to present our study. In the following discussion, members of the rectorate confirmed that job candidates rejected an offer due to the far-right mass protests.

4.1 Design

Building upon Arntz et al. (2023), we apply a conjoint design to experimentally study how non-pecuniary factors shape location choices.³⁷ More specifically, our experiment has two main parts. Both parts have in common that they consist of seven rounds. In each round, participants must choose between two hypothetical cities based on six different characteristics. Four of these characteristics are well established determinants of location choices and appear in a similar way in the experiment conducted by Arntz et al. (2023). These characteristics are: (i) amount of cultural offerings, (ii) extent of social diversity, (iii) number of leisure offers for children, families, and teenager, and (iv) quality of the public infrastructure. In addition, our list of characteristics includes two political factors: (v) the extent of environmental activism and (vi) the frequency of far-right demonstrations. In the experiment, we label the latter as asylum- and migration-critical rallies to avoid stigmatization. Following Arntz et al. (2023), we allow each characteristic to vary between three different levels (low, medium, high). The profiles of the two places that participants compare in a specific round are randomly chosen. However, we make sure that the two profiles are not identical.

The first and the second part of the experiment differ in two aspects from each other. In the first part, people need to decide which of the cities they prefer as a place of residents. This part is completed by all participants. For the second part, participants are randomly allocated into four groups. Groups differ with regard to the decision that they have to make at the end of each round. People assigned to subgroup 1 need to indicate in which of the two cities they expect to feel more secure. People in subgroup 2 have to state where they expect less difficulties in finding people with similar interests and views. In subgroup 3, people are asked which city they expect to develop economically better in the medium-run. People in subgroup 4 need to state where they expect to find more parks and green areas. The idea of the last question is to have an outcome that is quite unrelated to farright protests.

Appendix D provides more details about the design of our experiment. More specifically, this supplementary section shows screenshots including the different components of the experiment. In Section D.1, we present the actual experiment where all descriptions are in German. For the sake of transparency, we provide a translated version in Section D.2.

³⁷We preregistered our experiment in the AEA RCT Registry (ID: AEARCTR-0012661).

4.2 Implementation

We conducted our experiment in December 2023 in cooperation with the survey company *Bilendi & respondi*. To be eligible for our experiment, people need to have a German citizenship and have to be between 18 and 45 years old. As the results presented in Section 3 suggest that especially fewer young German adults moved to Dresden due to the far-right protests, we defined that two-thirds of the participants are born after 1993. We also made sure that the number of men and women is balanced and that our sample is representative regarding the number of participants who live in Eastern and Western Germany.

In total, we have 3,067 individuals who completed the experiment. The median duration is 6.5 minutes. We exclude people from our sample if they finished the experiment in less than 3 minutes or more than 30 minutes.³⁸ Table C.6 presents sample characteristics for the 2,821 participants that we take into account in our analysis.

4.3 Regression model

As suggested by Hainmueller et al. (2014), we use the following model to analyze how information about far-right protests shaped peoples' choices in our conjoint experiment:

$$Y_{irc} = \beta_1 Prot_{irc}^m + \beta_2 Prot_{irc}^h + \sum_{j \in \{1, \dots, 5\}} \sum_{k \in \{m, h\}} \gamma_{j,k} X_{irc}^{j,k} + \xi_i + \varepsilon_{irc}, \quad (4)$$

where i denotes an individual, $r \in \{1, ..., 7\}$ a round, and $c \in \{A, B\}$ a city. The dependent variable (Y) is a dummy that is equal to 1 if a city is selected in a particular round by a particular participant. $Prot^m$ and $Prot^h$ are also binary variables indicating whether a city is characterized by a medium (m) or high (h) number of far-right protests. Finally, our regression model includes variables (X) reflecting which of the other characteristics have a medium or a high level and individual fixed effects (ξ) . The parameters of interest are β_1 and β_2 . They show whether the likelihood to be chosen depends on whether a place occasionally or frequently experiences far-right protests rather than as good as never.

³⁸We admit that the two thresholds are arbitrary. However, our results are robust to alternative choices (not reported).

Table 2 Main results (conjoint experiment)

	(1)	(2)	(3)	(4)
Frequency of far-right protests (occasionally)	-0.052***	-0.054**	-0.028*	-0.082***
	(0.0078)	(0.0223)	(0.0153)	(0.0127)
Frequency of far-right protests (frequently)	-0.276***	-0.214***	-0.224***	-0.344***
	(0.0094)	(0.0294)	(0.0179)	(0.0152)
Observations Individuals Participants considered in regression analysis	39,494	5,866	10,108	13,230
	2,821	419	722	945
	Main sample of	Supports of far-right	Supports of	Supports of left-wing
	participants	parties	center-right parties	parties

Notes: This table presents estimates of Eq. (4), using different samples. Standard errors clustered at the participant-level are reported in parentheses. We use the following notation to highlight estimates that are statistically significant from 0: *p < 0.10, **p < 0.05, ***p < 0.01.

4.4 Results

4.4.1 Preferred place of residence

As described in Section 4.1, participants need to decide in the first part of our experiment which of the two hypothetical cities they prefer as place of residence. Table 2 illustrates how this decision is affected by the information provided with regard to the frequency of far-right protests. More specifically, in Column 1, we present estimates of Eq. (4) for our full sample of participants. We observe that individuals take into account far-right protests when making location choices. In particular, people are less likely to choose a city as preferred place of residence if such rallies happen. We also find that the negative effect is much stronger if the far-right protests occur frequently rather than occasionally. Taken together, these results are consistent with the findings presented in Section 3.

A major reason for conducting our conjoint experiment is to get an idea about how people's reactions to far-right protests depend on their political attitudes. To address this question, we ask participants about their party preferences. As this information is sensible, we allow them to give no answer. About 25 percent of the participants made use of this opportunity. The other participants are assigned to one out of three groups: (a) supporters of the far-rights, (b) supporters of centerright parties, and (c) supporters of left-wing parties.³⁹ In Columns 2, 3, and 4 of Table 2, we report how the location decisions of these three groups of people are affected by far-right protests. We see for each group that such protests lower the likelihood that a city is selected as preferred place of residence. However, we also find that supporters of left-wing parties show a much stronger reaction. We thus conclude that personal political views influence the extent to which people adjust their location choices due to far-right rallies. Put differently, our results suggest that far-right protests are likely to cause political segregation.

³⁹As common for Germany, we classify the AfD as a far-right party, CDU/CSU and FDP as center-right parties, and SPD, Alliance 90/The Greens, and The Left as left-wing parties.

4.4.2 Specific expectations

The key objective of the second part of our experiment is to get a more detailed understanding of what happens in people's mind if they recognize that far-right protests occur in a particular city. As outlined in detail in Section 4.1, we thus randomly divided our participants into four groups and asked them about specific expectations rather than their preferred place of residence. In Figure 6, we report the results related to this part of our experiment. In contrast to Table 2, we only show estimates reflecting the effects of frequent far-right protests.⁴⁰

Figure 6 consists of four graphs, while each graph is related to one of the four questions that we raised in the second part of our experiment. As in Table 2, we present estimates four four different samples in every graph. The first estimates report the average reaction of all participants that had to answer the respective question. The other estimates show how individual reactions depend on people's party preferences.

Among the four aspects that we consider in our experiment, we observe that far-right rallies are most likely to cause security concerns. More specifically, our estimates imply that the likelihood of being chosen as securer city decreases, on average, by 40 percent. We also find that security concerns arise irrespectively of people's political stance. However, estimates are twice as large for supporters of left-wing and center-right parties compared to supporters of the far-right.

Another aspect for which we find that people's expectations are considerably shaped by far-right protests is the likelihood of finding people with similar views and interests. On average, we observe that far-right rallies make individuals less optimistic on this matter. When differentiating individuals based on their party preferences, we see that the estimates are only statistically significant from 0 for people who do not support the far right. With respect to medium-run economic development, we detect the same pattern, despite that the point estimates are a bit smaller.

Against our expectation, we also observe in our baseline analysis that people expect a lower quality of parks and green areas if far-right rallies frequently take place. However, compared to the other three groups, the estimate reflecting the average reaction is smaller. Furthermore, we do not find that reactions differ by people's political views.

⁴⁰Figure B.10 shows how people's expectations change if a city occasionally experiences far-right demonstrations. For the sake of brevity, we do not describe this figure in the reminder of this section.

Finding people with similar interests & views Medium-run economic development 0 0 Ŧ Ņ 4. 9 Personal security Number of parks and green areas 0 Ī Ŧ 4. Ī 9 9

Figure 6 Shifts in specific expectations (frequent far-right protests).

Notes: This table presents estimates of Eq. (4), using different samples. Standard errors are clustered at the participant-level. Whiskers reflect 95 percent confidence intervals.

4.5 Discussion

4.5.1 Methodological issues

In total, people made 14 decisions in our experiment. A concern might be that participants lost attention over time. Put differently, late choices might not be as reliable as early choices. For two reasons, we doubt that this issue is severe in our case. First, Bansak et al. (2018) show that declines in quality response are minor even if individuals have to make 30 choices in a conjoint experiment. Second, as reported in Table C.8, our estimates hardly change independently of whether we consider the first two rounds, the last two rounds, or two random rounds.

As mentioned above, we use Arntz et al. (2023) as role model for our conjoint experiment. However, a major difference concerns the list of city characteristics since they do not take into account political factors. While providing information about political aspects is not a unique feature of our experiment (see e.g. Gimpel and Hui, 2015), our novelty is that we do not use partisan composition. Thus, a concern might be that people consider it as striking that we use the frequency of far-right rallies to characterize a city. As a consequence, participants might have anticipated that this is the city characteristic of interest and could have adjusted

their behavior accordingly. For two reasons, we think that it is unlikely that this actually happened. One reason is that our list of city characteristics also includes the extent of environmental activism and thus another political factor. A second reason is that local protests in favor or against migration regularly took place in Germany in late 2023. Put differently, at that time, far-right rallies were neither an extraordinary phenomena nor the key topic of the public debate. As the same applies to actions demanding more climate protection, we are also not concerned that an imbalance exists in this regard between our two political factors.

4.5.2 In-depth analysis on security concerns

A key result of Section 4.4.2 is that people perceive a city as less secure due to far-right rallies. Interestingly, such a reaction cannot only be observed for people supporting a left-wing or a center-right party but also for supporters of the far right. For the former, a likely explanation is that they consider individuals who attend far-right protests as potentially violent. However, some doubts may arise whether this explanation also applies for far-right voters. An alternative may be that they interpret the rallies as signal that a city experiences problems due to incoming migrants or asylum seekers. Put differently, supporters of the far right might not be concerned about the protesters, but rather the (presumed) cause of the protests. If this logic applies, we should observe for far-right voters that their reactions to far-right protests depend on the extent of social diversity. Table C.7 shows that this is the case. More specifically, we find for supporters of far-right parties that they have greater security concerns due to frequent far-right protests if there is high social diversity. By contrast, for voters of left-wing or center-right parties, we do not see that the reactions to far-right rallies depends on the level of social diversity.

5 Conclusion

In this paper, we examine how far-right mass protests affect location decisions of nationals. To answer this question, we proceed in two steps. In the first step, we exploit a series of far-right mass rallies that unexpectedly emerged in the city of Dresden at the turn of the year 2014/2015. Using administrative data and two different empirical approaches, we show that these protests caused a substantial short- and medium-run decline in the total number of young German adults who moved from another state to Dresden. Many of the people that do not move to Dresden anymore are likely to be liberal-minded and have high intellectual skills.

Furthermore, as a second step, we run a conjoint experiment where participants need to choose between two hypothetical cities based on a set of characteristics. Our experiment confirms that far-right rallies influence people's location choices and show that individual reactions depend on people's political stance. With the experiment, we can also provide some insights on how people update their beliefs about a city if they recognize that far-right protests happen. More specifically, we observe that far-right protests raise security concerns. Among people who do not support the far right, we also find more pessimistic expectations with regard to future economic development and that they expect greater difficulties in finding people with similar views and interests.

In sum, our paper implies that far-right mass protests shape the reputation of a city and thus people's location decisions. More generally, we conclude from our analysis that widespread far-right attitudes constitute a great disadvantage in the regional competition for talented people. Our project also suggests that political activism can provoke political segregation.

We are convinced that our study does not only provide new relevant insights to different strands of literature in economics and political science but also suggests various paths for future research. For instance, an open question remains to what extent protests against the far right mitigate the reputational damage caused by far-right protests.⁴¹ Another pending issue is how other types of protests (e.g. for climate protection) affect location decisions and whether individual reactions to these protests also depends on people's political views.

⁴¹Lagios et al. (2022) present evidence from France suggesting that such counterdemonstrations reduce vote shares of far-right parties.

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Appendix for online publication

A Further background information

A.1 Other far-right rallies in Dresden

With more than 100 demonstrations, Pegida was responsible for most of the farright rallies that took place in Dresden between 2014 and 2018. Among the few others, three rallies stand out since they were widely covered in the press. All of them emerged due to openings of refugees centers and happened in summer 2015. Below, we provide more details about these other far-right protests.

A.1.1 NPD rally on 24 July 2015

On 24 July 2015, the local branch of the National Democratic Party of Germany (NPD) organized a rally in the inner-city of Dresden. The key reasons were the opening of a refugee center and the planned arrival of about 500 Syrian refugees. Roughly 200 NPD supporters attended this demonstration. Compared with the Pegida protests, this was a fairly low number. Nevertheless, the rally of the NPD received great public attention for two major reasons. First, the NPD supporters physically attacked a group of about 350 counterdemonstrators. Second, several people that supported the construction of the refugee camp reported that NPD followers considerably hindered their work in the past days. The chairman of the German Red Cross in Saxony, Rüdiger Unger, told journalists that he had never heard about such actions before.⁴²

A.1.2 Protests in Freital and Heidenau

Far-right demonstrations also happened in some of Dresden's small neighboring towns. Especially notable in this regard are the rallies in Freital and Heidenau. Below, we briefly describe both events. We think that mentioning these cases is important because the media typically characterized these towns as places near Dresden. Therefore, it is possible that people updated their beliefs regarding the city of Dresden when hearing about far-right rallies in Freital or Heidenau.

In summer 2015, people with far-right attitudes often met in front of refugee centers and welcomed the arriving refugees with insults and threats. Among the various places in Germany in which such events happened, Freital and Heidenau

⁴²For a related newspaper report, see e.g. https://www.independent.co.uk/news/world/europe/german-far-right-extremists-clash-police-protest-outside-dresden-refugee-camp-10415880.html.

became particularly well known (Vorländer et al., 2018). Freital got more public attention than many other places since the protests in front of the local refugee center lasted for a couple of weeks and took place on a daily basis from 22 June 2015 onward. In Heidenau, the NPD held a rally on 21 August 2015 to signal opposition against a new refugee center. Over the course of the rally, protesters threw stones, bottles, and fireworks at the police. At the end of the day, about 30 policemen were injured. Only one day later, supporters of the NPD launched an attack on the policemen who guarded a rally in Heidenau that was organized to express solidarity with refugees. As a reaction to these two events, both Vice-Chancellor Gabriel and Chancellor Merkel visited Heidenau (independently from each other) in the next week. During their visits, they were severely insulted by local protesters. In the policemen was a protester of the protesters.

A.2 Dresden's reputation and development before October 2014

In the years prior to the rise of Pegida, Dresden was a prospering place. Between 2010 and 2014, Dresden's population growth was the seventh highest among all German cities with more than 200,000 residents. At the same time, the number of unemployed people decreased by 20 percent and the GDP grew by around 13 percent, despite an extreme flooding in May/June 2013. In 2012, the TU Dresden belonged to the eleven German universities that were awarded as "University of Excellence" by the federal government. With this award, Dresden's status as the leading research location in East Germany was further consolidated. For students, Dresden was also an attractive place due to the relatively low rental fees and the absence of tuition fees. Finally, because of its wide range of cultural offerings, its baroque city center, and its Christmas market, Dresden was a very popular place among tourists from Germany and abroad.

Before the far-right mass protests started, Dresden had a high reputation. To substantiate this claim, we exploit the Brandmeyer Stadtmarken-Monitor 2010, a representative survey that evaluates the attractiveness of large German cities. In the overall ranking, Dresden reached the fourth place (out of 34 cities). Also in the subcategories that are of great importance for our study, Dresden performed extremely well in 2010. For instance, Dresden ranked third when Germans were asked whether a place has a good reputation.

 $^{^{43} \}rm{For}$ a related media report, see https://www.dw.com/en/refugee-protests-solidarity-in-freital/a-18538424.

⁴⁴For a related media report, see https://www.bbc.com/news/world-europe-34038557.

A.3 The far right in Germany, Saxony, and Dresden before 2014.

In contrast to other Central European states (such as Austria, France, and the Netherlands), far-right movements received quite little support and attention in Germany until the early-2010s (see e.g. Arzheimer, 2015). Hence, we believe that only two aspects from this time are crucial to note. The first is that the Saxon parliament was one of the few state parliaments in which a right-wing extremist party occupied a few seats. However, the National Democratic Party of Germany (NPD) was entering the Saxon parliament in 2004 and 2009 mainly due to the relatively strong support in rural regions. In Dresden, the vote share of the NPD was below average ($\approx 4\%$) and similar as in the other East German cities. Second, in every year in February, extremist-right movements organize a march through Dresden's inner city. The occasion is the anniversary of the bombing of Dresden in World War II. The largest marches took place in 2009 and 2010 with more than 5,000 people. 45 Both marches were accompanied by counter events. In 2010, the extremist-right groups even had to stop their march due to a sit-down blockade. In the same year, the city parliament (together with local players) also started to organize human chains against the marches. The first of these human chains included 10,000 people. Apparently, the countermeasures were successful as the participation in the Nazi marches dropped considerably in the next years (see Figure B.2). In February 2014, only roughly 500 people followed the call of the extremist right, while 11,000 people participated in the human chain.

A.4 The Alternative for Germany⁴⁶

Beginning in early 2013, the German party landscape has changed in a notable manner over the last years because of the rise of the Alternative für Deutschland (Alternative for Germany, AfD). Originally, the AfD was established as a special issue party whose only goal was to oppose the policy measures that the German government implemented to fight the Euro crisis.⁴⁷ With this policy agenda, the AfD received 4.7 percent of the votes in 2013 German federal election (and thus only marginally failed to enter the parliament) and 7.1 percent in the European

⁴⁵Participants came from all over Germany to Dresden to attend the marches. This is a crucial difference to the protests organized by Pegida where most attendees were from Dresden or its surrounding area (see e.g. ??).

⁴⁶We only give a very brief overview about the development of this party (for details, see e.g. Häusler et al., 2016 and Ulrich et al., 2022).

⁴⁷The initial party manifesto explicitly stated that the party does not take stance on any other policy issue rather than the Euro crisis and the bailout of Greece.

election in May 2014. In late summer 2014, the AfD entered the first three state parliaments because it won about 10 percent of the votes in three German state elections (Brandenburg, Saxony, Thuringia). The AFD vote share in Dresden was below average (8.2 percent) and similar as in Leipzig (7.3 percent), Potsdam (9.4 percent), Chemnitz (9.2 percent) and Erfurt (9.5 percent).⁴⁸

From late 2014 onward, the AfD gradually moved from an anti-Euro to an antimigration party. The Pegida rallies played a remarkable role in this development since AfD's party leaders disagreed on how to react to these mass rallies. While the party leader, Bernd Lucke, and its supporters dissociated themselves from the Pegida movements and its goals, other prominent members of the AfD called for close collaboration and publicly announced that they share the objectives of the Pegida organizers and supporters. This internal conflict stopped in July 2015 as Bernd Lucke was voted out as party leader and Frauke Petry, a popular figure of the national-conservative wing, became the chairwoman. As a consequence, Lucke and most of his supporters left the AfD. Since then, the AfD is predominantly an anti-migration party. In 2017, the AfD entered the German parliament as the largest opposition party. Today, members of the AfD holds seats in 14 out of 16 state parliaments. 49 However, in the east, the AfD is (much) more popular. Until now, the AfD has had no governmental power at the federal or state level. At the local level, the power of the AfD is also small because currently only two mayors exist who are affiliated with the AfD (as of May 2024). Both got elected in 2023.

⁴⁸Leipzig and Chemnitz are the two other major cities in Saxony, while Potsdam and Erfurt are the state capitals of Brandenburg and Thuringia. Elections results are obtained from the web database of the German Statistical Office (www.regionalstatistik.de).

⁴⁹The only state parliaments where the AfD is currently not present are the state parliaments of Schleswig-Holstein and Bremen. However, AfD members occupied seats in these parliaments in previous legislative periods.

B Additional figures

25000 20000 Total number of participants 15000 10000 2000 3021 THE ...30215 1105/15 1008/15 28/09/15 25/01/16 1,103/16 25/04/16 OHOTING ONO 16/06/15 300516 30103175 29/08/16 03/10/16

Figure B.1 Participation in Pegida demonstrations

Notes: The figure illustrates the number of participants in the Pegida rallies in Dresden. The data is from Berger et al. (2016).

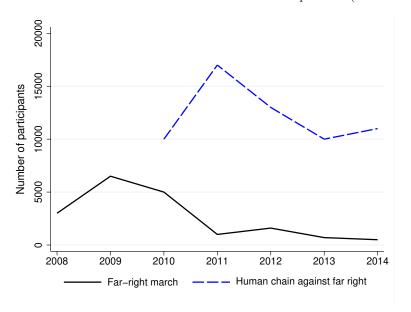
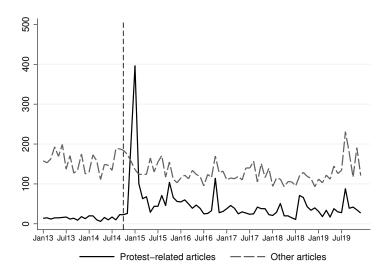


Figure B.2 Neo-Nazi remembrance marches and counter protests (2008 – 2014).

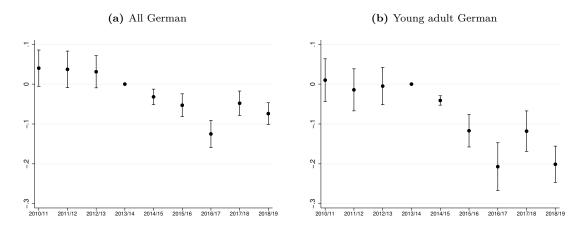
Notes: The figure illustrates the number of participants in (1) the far-right marches that occur every February in Dresden to remember the bombing of the city during World War II and (2) the human chain against the far right. We collect the data from various newspaper articles.

Figure B.3 Dresden's media attention (01/2013 - 12/2019)



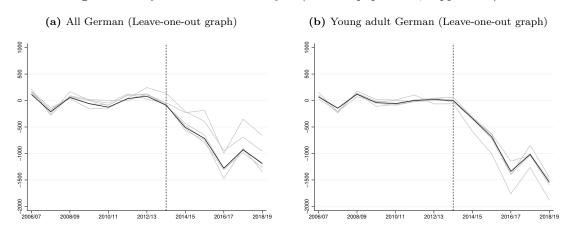
Notes: This figure shows for the city of Dresden on a monthly basis how the total number of protest-related and non-protest-related (other) articles printed in the supraregional newspapers included in *GBI-Genios wiso* developed between January 2013 and December 2019.

Figure B.4 Dyadic difference-in-differences estimates (German population)



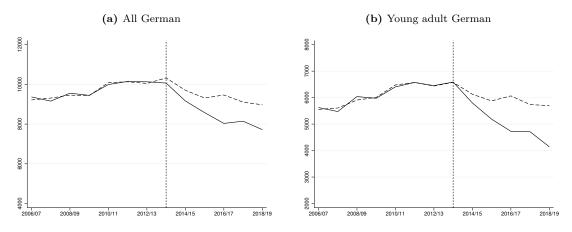
Notes: This figure shows estimates of an extended version of Eq. (1), using different samples. The places of origins are the 16 federal states and the places of destination the 40 largest German cities (for a list, see Table C.3). Standard errors are clustered at two levels: origin-destination-pair and year. Whiskers show 95 percent confidence intervals.

Figure B.5 Synthetic Control analysis (German population, supplement)



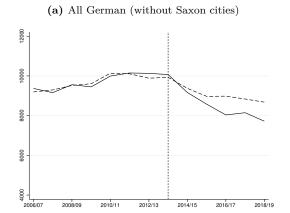
Notes: This figure presents the leave-one-out graphs that correspond to the SC analyses shown in Figure 2.

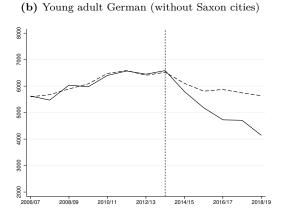
 $\textbf{Figure B.6} \ \, \textbf{Synthetic Control analysis (German population, 2013/14 not used for calculation of weights)}$



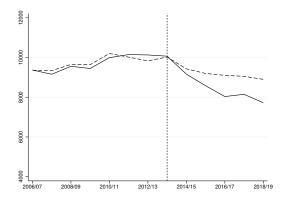
Notes: This figure presents results of SC analyses. In Panel (a), the outcome variable is the total number of German incomers who previously lived in another state. In Panel (b), the outcome variable is the total number of German incomers aged between 18 and 29 who previously lived in another state. In all panels, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In Panel (a), "synthetic Dresden" consists of Berlin (0.048), Essen (0.207), Hanover (0.009), Leipzig (0.177), Mainz (0.503), and Munich (0.056). In Panel (b), "synthetic Dresden" consists of Berlin (0.090), Cologne (0.021), Essen (0.291), Leipzig (0.162), and Mainz (0.436).

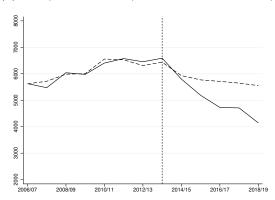
Figure B.7 Synthetic Control analysis (German population, restricted donor pools)





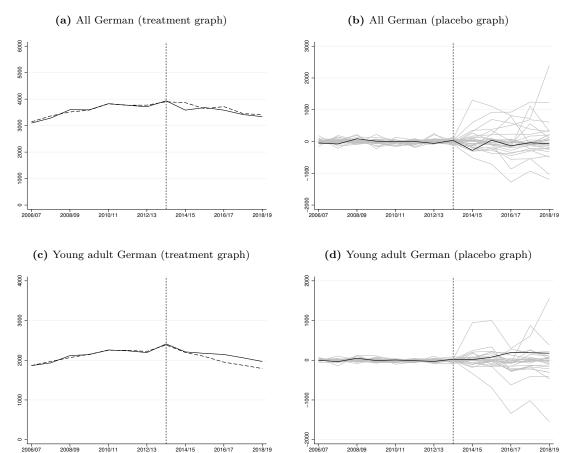
- (c) All German (without East German cities)
- (d) Young adult German (without East German cities)





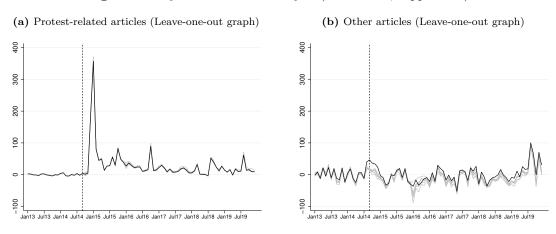
Notes: This figure presents results of SC analyses. In Panel (a) and (c), the outcome variable is the total number of German incomers who previously lived in another state. In Panel (b) and (d), the outcome variable is the total number of German incomers aged between 18 and 29 who previously lived in another state. In all panels, we compare the city of Dresden (solid lines) with "synthetic Dresden" (dashed lines). In Panel (a), "synthetic Dresden" consists of Berlin (0.08), Halle (0.244), Mainz (0.643), and Munich (0.033). In Panel (b), "synthetic Dresden" consists of Aachen (0.044), Berlin (0.079), Cologne (0.215), Halle (0.274), and Mainz (0.389). In Panel (c), "synthetic Dresden" consists of Berlin (0.07) and Mainz (0.913). In Panel (d), "synthetic Dresden" consists of Aachen (0.348), Berlin (0.113), Mainz (0.481), and Münster (0.058).

Figure B.8 Synthetic Control analysis (German population, Erfurt)



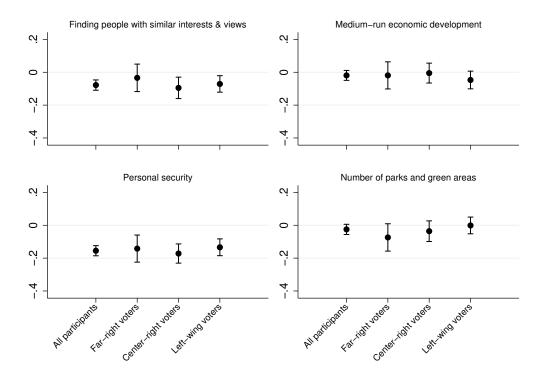
Notes: This figure presents results of SC analyses. In Panel (a) and (b), the outcome variable is the total number of German incomers who previously lived in another state. In Panel (c) and (d), the outcome variable is the total number of German incomers aged between 18 and 29 who previously lived in another state. In the left panels, we compare the city of Erfurt (solid lines) with "synthetic Erfurt" (dashed lines). In the right panels, we report placebo graphs. In Panel (a), "synthetic Erfurt" consists of Braunschweig (0.042), Kassel (0.332), Leipzig (0.114), Magdeburg (0.005), Mönchengladbach (0.479), and Münster (0.028). In Panel (c), "synthetic Erfurt" consists of Aachen (0.142), Bochum (0.174), Braunschweig (0.256), Kassel (0.074), Magdeburg (0.315), Münster (0.029), and Oberhausen (0.01).

Figure B.9 Synthetic Control analysis (media data, supplement)



 ${f Notes}$: This figure presents the leave-one-out graphs that correspond to the SC analyses shown in Figure 5.

Figure B.10 Shifts in specific expectations (occasional far-right protests).



Notes: This table presents estimates of Eq. (4), using different samples. Standard errors are clustered at the participant-level. Whiskers reflect 95 percent confidence intervals.

C Additional tables

Table C.1 List of supra-regional newspapers included in GBI-Genios wiso.

Newspaper	Newspaper	Newspaper
Börsen-Zeitung	Der SPIEGEL	Der Tagesspiegel
Die WELT	Die Zeit	FOCUS
${\it Handelsblatt}$	Tageszeitung (taz)	WELT am Sonntag

Table C.2 List of protest-related keywords.

Keyword	Keyword	Keyword
Demo (demo)	Demos $(demos)$	Demonstration $(demonstration)$
Demonstrationen (demonstrations)	demonstrieren (demonstrate)	demonstrierten (demonstrated)
Kundgebung (rally)	Kundgebungen (rallies)	Protest (protest)
$\begin{array}{c} \text{Proteste } (\textit{protests}) \\ \text{Pegida} \end{array}$	protestieren (protest)	protestierten (protested)

Table C.3 List of German cities with more than 200,000 inhabitants in 2020.

City	City	City	City
Berlin (3,664,088)	Bremen (566,573)	Mannheim (309,721)	Halle (237,865)
Hamburg (1,852,478)	Dresden (556,227)	Karlsruhe (308,436)	Magdeburg (235,775)
Munich (1,488,202)	Hanover (534,049)	Augsburg (295,830)	Freiburg (230,940)
Cologne (1,083,498)	Nürnberg (515,543)	Wiesbaden (278,609)	Krefeld (226,844)
Frankfurt $(764,104)$	Duisburg (495,885)	Mönchengladbach (259,665)	Mainz (217,123)
Stuttgart (630,305)	Bochum (364,454)	Gelsenkirchen (259,105)	Lübeck (215,846)
Düsseldorf (620,523)	Wuppertal (355,004)	Aachen (248,878)	Erfurt (213,692)
Leipzig (597,493)	Bielefeld (333,509)	Braunschweig (248,561)	Oberhausen (209,556)
Dortmund (587,696)	Bonn (330,579)	Kiel (246,601)	Rostock (209,061)
Essen (582,415)	Münster (316,403)	Chemnitz (244,401)	Kassel (201,048)

Table C.4 Dyadic difference-in-differences estimates (German population, counties as origins)

	(1)	(2)	(3)	(4)	(5)	(6)
$DD \times \mathbb{I}_{t \ge 10/2014}$	-0.081** (0.0176)	-0.099*** (0.0197)	-0.124*** (0.0309)	-0.016 (0.0288)	-0.117*** (0.0300)	-0.127*** (0.0315)
Observations	142,250	142,250	142,250	142,250	142,250	142,250
Cohorts	All	18 - 64	18 - 29	30 - 64	18 - 29	18 - 29
Gender	All	All	All	All	Female	Male
Investigation period	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19	10/10 - 09/19

Notes: This table shows estimates of Eq. (1), using different samples. The places of origins are the 401 German counties and the places of destination the 40 largest German cities (for a list, see Table C.3). Standard errors are clustered at two levels: origin-destination-pair and year. Origin-destination pairs are weighted according to their relevance in the pretreatment period. We use the following notation to highlight estimates that are statistically significant from 0: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table C.5 Dyadic difference-in-differences estimates (German population, controlling for AfD vote share)

	(1)	(2)	(3)	(4)	(5)	(6)
$DD \times \mathbb{I}_{t \geq 10/2014}$	-0.073**	-0.087**	-0.081*	-0.072*	-0.081	-0.080*
	(0.0253)	(0.0269)	(0.0408)	(0.0359)	(0.0473)	(0.0393)
Observations	4,800	4,800	4,800	4,800	4,800	4,800
Cohorts	All	18 - 64	18 - 29	30 - 64	18 - 29	18 - 29
Gender	All	All	All	All	Female	Male
Investigation period	10/10 - 09/18	10/10 - 09/18	10/10 - 09/18	10/10 - 09/18	10/10 - 09/18	10/10 - 09/18

Notes: This table shows estimates of Eq. (1), using different samples. The places of origins are the 16 federal states and the places of destination the 40 largest German cities (for a list, see Table C.3). Standard errors are clustered at two levels: origin-destination-pair and year. We use the following notation to highlight estimates that are statistically significant from 0: p < 0.10, p < 0.

Table C.6 Background characteristics of survey participants (final sample).

	Mean	Std. Dev.	Min.	Max.
Age	29.09	7.3827	18	45
Female	0.513	0.4998	0	1
Lives in East Germany	0.230	0.4211	0	1
Migration background	0.291	0.4540	0	1
Highest degree (high school)	0.226	0.4186	0	1
Supporter of left-wing party	0.335	0.4720	0	1
Supporter of center-right party	0.256	0.4364	0	1
Supporter of far-right party	0.149	0.3557	0	1

Notes: Our final sample includes 2,821 individuls. According to our coding, a person has a migration background if he/she was born in another county or has a parent or grandparent that was born abroad.

Table C.7 Personal security.

	Far-right voters	Center-right voters	Left-wing voters
Frequency of far-right protests (frequently)	-0.164** (0.0771)	-0.435*** (0.0506)	-0.481*** (0.0405)
× Social diversity (medium)	-0.069 (0.0819)	-0.080 (0.0550)	$0.0045 \\ (0.0431)$
× Social diversity (high)	-0.210*** (0.0779)	$0.010 \\ (0.0512)$	-0.052 (0.0444)
Observations Individuals	1,470 105	2,590 185	3,290 235

Notes: This table presents estimates of an extended version of Eq. (4), using different samples. Standard errors clustered at the participant-level are reported in parentheses. We use the following notation to highlight estimates that are statistically significant from 0: *p < 0.10, **p < 0.05, ***p < 0.01.

Table C.8 Results of conjoint experiment (robustness check).

	First two round	Last two rounds	Two random rounds
	Pa	nel A: Preferred place of resid	lence
Frequency of far-right protests (occasionally)	-0.030**	-0.074***	-0.077***
	(0.0149)	(0.0151)	(0.0147)
Frequency of far-right protests (frequently)	-0.309***	-0.308***	-0.317***
	(0.0153)	(0.0156)	(0.0153)
Observations	11,284	11,284	11,284
Individuals	2,821	2,821	2,821
	Panel B: Fir	nding people with similar inte	rests & views.
Frequency of far-right protests (occasionally)	-0.074**	-0.063*	-0.092***
	(0.0321)	(0.0320)	(0.0317)
Frequency of far-right protests (frequently)	-0.225***	-0.194***	-0.233***
	(0.0333)	(0.0338)	(0.3367)
Observations	2,804	2,804	2,804
Individuals	711	711	711
	Panel (C: Medium-run economic deve	elopment.
Frequency of far-right protests (occasionally)	-0.024	0.003	0.006
	(0.0309)	(0.0307)	(0.0312)
Frequency of far-right protests (frequently)	-0.091***	-0.166***	-0.088***
	(0.0315)	(0.0314)	(0.0322)
Observations	2,920	2,920	2,920
Individuals	730	730	730
		Panel D: Personal security.	
Frequency of far-right protests (occasionally)	-0.223***	-0.151***	-0.143***
	(0.0299)	(0.0295)	(0.0306)
Frequency of far-right protests (frequently)	-0.482***	-0.481***	-0.437***
	(0.0318)	(0.0310)	(0.0311)
Observations	2,836	2,836	2,836
Individuals	709	709	709
	Panel	E: Number of parks and gree	n areas.
Frequency of far-right protests (occasionally)	0.034	-0.006	-0.058*
	(0.0320)	(0.0319)	(0.0313)
Frequency of far-right protests (frequently)	-0.089***	-0.042	-0.084***
	(0.0316)	(0.0327)	(0.0315)
Observations	2,724	2,724	2,724
Individuals	681	681	681

Notes: This table presents estimates of Eq. (4), using different samples. Standard errors clustered at the participant-level are reported in parentheses. We use the following notation to highlight estimates that are statistically significant from 0: $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

D Supplementary material for experiment

D.1 German version (original)

Herzlich Willkommen!
Die Beantwortung des Fragebogens wird ca. 10 Minuten Ihrer Zeit beansprochen.
In Auftrag gegeben wurde diese Umfrage vom ZEW - Leibniz-Zentrum für Europäische Wirtschaftsforschung .
Ihre Angaben werden selbstverständlich anonym ausgewertet. Es werden keine Angaben zu Ihrer Person an Dritte weitergegeben.
Sollten Sie mittels eines Smartphones an dieser Befragung teilnehmen, kann es hilfreich sein, dieses im Querformat zu benutzen.
Vielen Dank für Ihre Unterstützung und viel Spaß beim Ausfüllen des Fragebogens.
Bitte beantworten Sie, bevor wir beginnen, folgende Fragen:
Sind Sie ?
Männlich
Weiblich
O Divers
C Kein Eintrag im Personenregister
In welchem Jahr wurden Sie geboren?

Besitzen Sie	die deutsche Staatsbürgerschaft?
\circ	Ja
0	Nein
In welchem I	Bundesland befindet sich Ihr Hauptwohnsitz?
\circ	Baden-Württemberg
\circ	Bayern
\circ	Berlin
\circ	Brandenburg
\circ	Bremen
\circ	Hamburg
\circ	Hessen
\circ	Mecklenburg-Vorpommern
\circ	Niedersachsen
\circ	Nordrhein-Westfalen
\circ	Rheinland-Pfalz
\circ	Saarland
\circ	Sachsen
\circ	Sachsen-Anhalt
\circ	Schleswig-Holstein
0	Thüringen

Wir möchten im **ersten Teil** dieses Experiments mehr über Ihre Vorlieben bei der **Wahl von Wohnorten** erfahren.

Stellen Sie sich vor, Sie ziehen um und müssen **zwischen zwei Städten entscheiden**. Dabei handelt es sich um **fiktive** Städte mit mindestens 100.000 Einwohnern, die anhand der nachfolgenden Aspekte unterschieden werden können.

Vielfalt des kulturellen Angebots: Wie viele Kultureinrichtungen (d.h. Museen, Theater, Kunstausstellungen, Konzerthallen etc.) gibt es im Stadtgebiet? Mögliche Ausprägungen: *gering - mäßig - groß*

Gesellschaftliche Vielfalt: Wie groß ist die Diversität im Stadtgebiet in Bezug auf Herkunft, Religion und sexuelle Orientierung? Mögliche Ausprägungen: *gering - mäßig - groß*

Migrations- und asylkritische Proteste: Wie oft finden im Stadtgebiet Demonstrationen von Gruppen statt, die sich gegen Migration, Asylsuchende oder Geflüchtete aussprechen? Mögliche Ausprägungen: *nie - vereinzelt - häufig*

Umwelt- und klimapolitischer Aktivismus: Wie oft sind klimaaktivistische Gruppen im Stadtgebiet aktiv?

Mögliche Ausprägungen: nie - vereinzelt - häufig

Zustand der öffentlichen Infrastruktur: In welchem Zustand befindet sich die Verkehrs- und Bildungsinfrastruktur der Stadt?

Mögliche Ausprägungen: schlecht - mittel - gut

Angebote für Familien, Kinder und Jugendliche: Wie ausgeprägt ist das Angebot an Sportund Musikvereinen, öffentlichen Spielplätzen, Schwimmbädern usw.? Mögliche Ausprägungen: *schlecht - mittel - gut*

In allen anderen Aspekten, die die Attraktivität von Städten beeinflussen können, unterscheiden sich die beiden Orte **nicht** wesentlich voneinander. Dies gilt insbesondere auch für ihre aktuelle wirtschaftliche Situation sowie die in den Städten gegenwärtig anfallenden Lebenserhaltungskosten.

Im Folgenden legen wir Ihnen **sieben Situationen** vor, in denen Sie sich jeweils zwischen zwei Städten entscheiden sollen. Nehmen Sie sich Zeit, die Stadtprofile sorgfältig durchzulesen und entscheiden Sie nach den Kriterien, die Ihnen persönlich am wichtigsten sind. Wir bitten Sie, auch wenn Sie sich unsicher sind, sich für eine der beiden Städte zu entscheiden.

Bitte beachten Sie, dass Sie nach Abgabe einer Antwort nicht mehr zurückspringen können,

Start of Block: Experiment Teil1		
	Stadt A	Stadt B
Vielfalt des kulturellen Angebots		
Gesellschaftliche Vielfalt		
Migrations- und asylkritische Proteste		
Umwelt- und klimapolitischer Aktivismus		
Zustand der öffentlichen Infrastruktur		
Angebote für Familien, Kinder und Jugendliche		
In welche Stadt würden S	ie lieber ziehen?	
Stadt A	C4-	-14 D
Ottaat A	Sta	dt B
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp	nts. Dieser Teil ist in	seinem
Sie befinden sich nun im zweiten Teil des Experime	nts. Dieser Teil ist in eriments identisch. Le	seinem ediglich ihre Aufgabe
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Expändert sich etwas, denn wir fragen Sie nun nach spe	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge	seinem ediglich ihre Aufgab n, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp ändert sich etwas, denn wir fragen Sie nun nach spe der Städte haben.	nts. Dieser Teil ist in eriments identisch. Le	seinem ediglich ihre Aufgabe
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Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Expändert sich etwas, denn wir fragen Sie nun nach speder Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge	seinem ediglich ihre Aufgab n, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Expändert sich etwas, denn wir fragen Sie nun nach speder Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge	seinem ediglich ihre Aufgab n, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp ändert sich etwas, denn wir fragen Sie nun nach spe der Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge	seinem ediglich ihre Aufgab n, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp ändert sich etwas, denn wir fragen Sie nun nach spe der Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge	seinem ediglich ihre Aufgab n, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp ändert sich etwas, denn wir fragen Sie nun nach spe der Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge Stadt A	seinem ediglich ihre Aufgaben, die Sie hinsichtlic
Sie befinden sich nun im zweiten Teil des Experime grundsätzlichen Aufbau mit dem ersten Teil des Exp ändert sich etwas, denn wir fragen Sie nun nach spe der Städte haben. Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur Angebote für Familien, Kinder und Jugendliche	nts. Dieser Teil ist in eriments identisch. Le zifischen Erwartunge Stadt A	seinem ediglich ihre Aufgaben, die Sie hinsichtlic

	Stadt A	Stadt B
Vielfalt des kulturellen Angebots		
Gesellschaftliche Vielfalt		
Migrations- und asylkritische Proteste		
Umwelt- und klimapolitischer Aktivismus		
Zustand der öffentlichen Infrastruktur		
Angebote für Familien, Kinder und Jugendliche		
Interessen und Ansichter		dt B
Statt A	Sta	at B
\bigcirc	(\mathcal{L}
	Stadt A	Stadt B
Vielfalt des kulturellen Angebots	Stadt A	Stadt B
Vielfalt des kulturellen Angebots Gesellschaftliche Vielfalt	Stadt A	Stadt B
Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste	Stadt A	Stadt B
Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus	Stadt A	Stadt B
Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur	Stadt A	Stadt B
Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus	Stadt A	Stadt B
Gesellschaftliche Vielfalt Migrations- und asylkritische Proteste Umwelt- und klimapolitischer Aktivismus Zustand der öffentlichen Infrastruktur	ch mittelfristig wirts	

	Stadt A	Stadt B
Vielfalt des kulturellen Angebots		
Gesellschaftliche Vielfalt		
Migrations- und asylkritische Proteste		
Umwelt- und klimapolitischer Aktivismus		
Zustand der öffentlichen Infrastruktur		
Angebote für Familien, Kinder und Jugendliche		

 \bigcirc

Von welcher Stadt erwarten Sie, dass es in ihr mehr Grünflächen und Parkanlagen gibt?

Stadt A	Stadt B
\bigcirc	\bigcirc

Wie wichtig sind Ihnen im Allgemeinen die folgenden Aspekte bei der Wahl eines Wohnortes von 0 (überhaupt nicht wichtig) bis 10 (sehr wichtig)?

Bildungsangebote
Freizeitangebote
Gesellschaftliche Diversivität
Lebenshaltungskosten
Nähe zur Familie
Ökologische Faktoren
Politische Faktoren
Wirtschaftliche Faktoren
Wirtschaftliche Faktoren
Wirtschaftliche Faktoren
Wirtschaftliche Faktoren
Wirtschaftliche Faktoren
Wirtschaftliche Faktoren

Was ist Ihr hö	ichster Schulabschluss?
\circ	Haupt- oder Volksschulabschluss
\circ	Mittlere Reife oder Abschluss der polytechnischen Oberschule
\circ	Abitur, Fachhochschulreife
\circ	Schulausbildung noch nicht abgeschlossen
\circ	Schule ohne Abschluss verlassen
\circ	Möchte nicht antworten
Studium Hab	en Sie ein abgeschlossenes Hochschul- oder Fachhochschulstudium?
0	Ja
\circ	Nein
\circ	Noch im Studium
\bigcirc	Möchte nicht antworten
Geburtsland \	Nurden Sie in Deutschland geboren?
\circ	Ja
\circ	Nein
\circ	Möchte nicht antworten

Wurden alle I	hre Elternteile in Deutschland geboren?
\circ	Ja
\circ	Nein
\circ	Möchte nicht antworten
Wurden alle I	hre Großeltern in Deutschland geboren?
0	Ja
\circ	Nein
\circ	Möchte nicht antworten
	n Sie freundschaftlichen Kontakt zu Personen, die von rassistischer ng betroffen sind bzw. sein könnten?
\circ	Täglich
\circ	Regelmäßig
\circ	Gelegentlich
\circ	Selten
\circ	Nie
\circ	Möchte nicht antworten

Welcl	her Parte	i stehen Sie am nächsten?	
(\supset	Linkspartei	
(\supset	Bündnis 90/Die Grünen	
(\supset	SPD	
(\supset	FDP	
(\supset	CDU/CSU	
(\supset	AfD	
()	Möchte nicht antworten	
Haben Sie Feedback?			
_			

D.2 English version (translation)

Welcome!	
Answering the questi	onnaire will take about 10 minutes of your time.
This survey was com Research.	missioned by the ZEW - Leibniz Center for European Economic
Your data will of cour third parties.	se be evaluated anonymously . No personal data will be passed on to
If you are taking part format.	in this survey using a smartphone, it may be helpful to use it in landscape
Thank you for your s	upport and have fun filling out the questionnaire.
Please answer the fo	llowing questions before we begin:
Are you ?	
O Male	
O Femal	е
O Divers	
O No en	try in the civil status register
In which year were yo	ou born?

Do you have	German citizenship?
0	Yes
\circ	No
In which fede	ral state is your main residence?
0	Baden-Württemberg
\circ	Bavaria
\circ	Berlin
\circ	Brandenburg
\circ	Bremen
\circ	Hamburg
\circ	Hesse
\circ	Mecklenburg-Western Pomerania
\circ	Lower Saxony
\circ	North Rhine-Westphalia
\circ	Rhineland-Palatinate
\circ	Saarland
\circ	Saxony
\circ	Saxony-Anhalt
0	Schleswig-Holstein
0	Thuringia

In the **first part** of this experiment, we would like to find out more about your preferences when choosing a place to live.

Imagine you are moving and have to choose between **two cities**. These are **fictitious** cities with at least 100,000 inhabitants, which can be differentiated on the basis of the following aspects.

Diversity of cultural offerings: How large is the number of cultural institutions (i.e. museums, theaters, art exhibitions, concert halls, etc.) in the city? Possible characteristics: *low - medium - high*

Social diversification: How diverse is the urban area in terms of origin, religion and sexual orientation?

Possible characteristics: low - medium - high

Anti-immigration and anti-asylum protests: How often do demonstrations against migration, asylum seekers or refugees take place in the city?

Possible characteristics: never - occasionally - frequently

Environmental and climate policy activism: How often are climate activist groups active in the city?

Possible characteristics: never - occasionally - frequently

State of public infrastructure: What is the state of the city's transport and education infrastructure?

Possible characteristics: bad - medium - good

Offers for families, children and young people: How extensive is the range of sports and music clubs, public playgrounds, swimming pools, etc.? Possible characteristics: *bad - medium - good*

In all other aspects that can influence the attractiveness of cities, the two locations **do not differ** significantly from one another. This also applies in particular to their current economic situation and the cost of living currently incurred in the cities.

Below are **seven situations** in which you are asked to choose between two cities. Take your time to read the city profiles carefully and make your decision based on the criteria that are most important to you personally. We ask you to choose one of the two cities, even if you are unsure.

Please note that once you have submitted an answer, you cannot go back to correct your decision. In addition, we would like to ask you to consider the seven following decision situations without interruption if possible.

	City A	City B
Diversity of cultural offerings		
Social diversification		
Anti-immigration and anti-asylum protests		
Environmental and climate policy activism		
State of public infrastructure		
Offers for families, children and young people		

Which city would you rather move to?

City A	City B
0	\bigcirc

You are now in the **second part** of the experiment. The basic structure of this part is identical to the first part of the experiment. Only your task has changed slightly, as we are now asking you about specific expectations you have regarding the cities.

	City A	City B
Diversity of cultural offerings	-	
Social diversification		
Anti-immigration and anti-asylum protests		
Environmental and climate policy activism		
State of public infrastructure		
Offers for families, children and young people		

From which city do you expect to feel safer in?

City A	City B
0	0

	City A	City B
Diversity of cultural offerings	City A	City B
Social diversification		
Anti-immigration and anti-asylum protests		
Environmental and climate policy activism State of public infrastructure		
Offers for families, children and young people		
From which city would you expect to meet pe	•	ests and views more
City A City B		
Ŏ	(Š
\cup		J
	City A	City B
Diversity of cultural offerings	J. 1, 1	
Social diversification		
Anti-immigration and anti-asylum protests		
Environmental and climate policy activism		
State of public infrastructure		
Offers for families, children and young people		
Offers for families, criticien and young people		
Which city do you expect to develop bett	er economically in the	e medium term?
City A	Ci	ty B
\cup	(\mathcal{I}
	City A	City B
Diversity of cultural offerings	Oity A	City D
Social diversification		
Anti-immigration and anti-asylum protests		
Environmental and climate policy activism		
State of public infrastructure		
Offers for families, children and young people		
Which city do you expect to have	more green spaces an	d parks?

City A

City B

In general, how important are the following aspects to you when choosing a place to live, from 0 (not at all important) to 10 (very important)?

0 1 2 3 4 5 6 7 8 9 10

Finally, we will ask you a few more questions about yourself.	
What is the zip code of your place of residence (primary residence)?	

What is your h	nighest school-leaving qualification?
\circ	Elementary school certificate
\circ	Secondary school certificate
\circ	A-levels
\circ	School education not yet completed
\circ	Left school without a qualification
\circ	Prefer not to answer
Do you have a	a degree from a university or university of applied sciences?
\circ	Yes
\circ	No
\circ	Studies not yet completed
\circ	Prefer not to answer
Were you bor	n in Germany
\circ	Yes
\circ	No
\circ	Prefer not to answer

Were all your parents born in Germany?		
\circ	Yes	
\circ	No	
\circ	Prefer not to answer	
Were all your grandparents born in Germany?		
0	Yes	
\circ	No	
\circ	Prefer not to answer	
How often do you have friendly contact with people who are or could be affected by racist discrimination?		
\circ	Daily	
\circ	Regularly	
\circ	Occasionally	
\circ	Rarely	
\circ	Never	
\circ	Prefer not to answer	

Which of the following parties do you prefer most?		
\circ	The Left	
\circ	Alliance 90/The Greens	
\circ	Social Democratic Party	
\circ	Free Democratic Party	
\circ	Union parties	
\circ	Alternative for Germany	
\circ	Prefer not to answer	
Do you have any feedback?		