



Homevoters vs. leasevoters: A spatial analysis of airport effects



Gabriel M. Ahlfeldt^{a,*}, Wolfgang Maennig^b

^a London School of Economics and Political Science (LSE) and CEPR, Houghton Street, London WC2A 2AE, United Kingdom

^b University of Hamburg, Von-Melle-Park 5, 20146 Hamburg, Germany

ARTICLE INFO

Article history:

Received 20 June 2013

Revised 3 March 2015

Available online 12 March 2015

JEL classification:

D61

D62

H41

H71

L83

I18

R41

R58

Keywords:

Airport

Berlin

Homevoter

Leasevoter

Noise

Referendum

ABSTRACT

We use a public referendum on a new aviation concept in Berlin, Germany, as a natural experiment to analyze how the interaction of tenure and capitalization effects influences the outcome of direct democracy processes. We distinguish between homevoters, i.e., voters who are homeowners, and leasevoters, i.e., voters who lease their homes. We expect that homevoters would be more likely to support initiatives that positively affect the amenity value of a neighborhood because some of the related benefits of leasevoters are neutralized by adjustments in market rents. Likewise, homevoters would be more likely to oppose initiatives that negatively affect the amenity value of a neighborhood. Our empirical results are consistent with these expectations, implying that public votes on local public goods do not necessarily reflect the spatial distribution of welfare effects in mixed-tenure environments.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

A central prediction of the standard theoretical urban economics framework is that any advantage that is specific to a particular location must be offset by a correspondingly higher rent or purchasing price of a property (e.g., Alonso, 1964; Roback, 1982; Rosen, 1974). To homeowners, an increase in the quality of location implies a windfall capital gain. During their remaining time in the home, homeowners receive those benefits as imputed rents as they benefit from an increase in service flow. Upon selling their home, homeowners receive the discounted flow of the remaining future benefits through a higher sale price. Homevoters, i.e., voters who are homeowners, thus unambiguously benefit from local improvements in location quality and are therefore likely to support

initiatives that induce positive amenities. This is the homevoter hypothesis (Fischel, 2001).

For renters in unregulated markets, however, the capitalization effect negatively compensates for an increase in service flow because of improvements in location quality. If a positive amenity change attracts households with stronger preferences for that amenity, the increase in rent will exceed the benefit sitting renters derive from the increase in service flow. In this case, the net effect on renters who stay put will be negative. Leasevoters, i.e., voters who lease their homes, may therefore be indifferent to or oppose initiatives that induce positive amenity.

If sitting renters are protected from rent increases due to rent control, they will enjoy the increase in service flow at no additional cost during the remaining tenure. However, unlike homeowners, renters do not receive a windfall capital gain when they vacate their home. Thus, even with rent control, homeowners derive higher net benefits from improved local amenities than renters do, though not to the same extent as in a free market. Leasevoters, in any case, are less likely to support initiatives that enhance local amenities than are homevoters.

* Corresponding author.

E-mail addresses: g.ahlfeldt@lse.ac.uk (G.M. Ahlfeldt), wolfgang.maennig@wiso.uni-hamburg.de (W. Maennig).

URLs: <http://www.ahlfeldt.com> (G.M. Ahlfeldt), <http://www.uni-hamburg.de/economicpolicy> (W. Maennig).

Several studies suggest that projected house price capitalization effects significantly influence the degree of support for public initiatives and projects (Ahlfeldt, 2011; Brunner and Sonstelie, 2003; Brunner et al., 2001; Dehring et al., 2008; Hilber and Mayer, 2009). More generally, the literature on the political economy of housing markets suggests a strong link among the nature of the political process, the ownership of land, and patterns of development (Baskaran, 2012; Cellini et al., 2010; DiPasquale and Glaeser, 1999; Kahn, 2011; Millard-Ball, 2012; Solé-Ollé and Viladecans-Marsal, 2013). Our contribution enriches this literature by explicitly differentiating between homevoter and leasevoter behavior in a public poll. We do so by examining an interaction effect between tenure (being a homeowner or renter) and the anticipated capitalization effect.

We apply our test of the homevoter hypothesis to the 2008 public referendum on the Tempelhof Airport in Berlin, Germany. Partly because of its history, Berlin possessed three relatively small airports in the early 1990s. Tegel Airport and Tempelhof Airport are centrally located within the boundaries of former West Berlin, whereas Schoenefeld Airport lies close to the southeastern boundary of Berlin and served East Berlin during the division period. On July 4, 1996, in a so-called *Konsensbeschluss* (“consensus decision” hereafter), the Prime Minister of Brandenburg, the Governing Mayor of Berlin, and the Federal Minister for Transport decided to redevelop Schoenefeld Airport into a large-scale international hub airport, named Berlin–Brandenburg International Airport, where all air traffic would be concentrated (Abgeordnetenhaus von Berlin, 1996). While alternative locations outside Berlin would have offered a more sparsely populated environment, Schoenefeld’s key advantages were the relatively short distance to the center of Berlin and the existing infrastructure (a runway and access to the highway and transit network).

The Tempelhof closure was scheduled for October 31, 2008. As this date approached, the intensity of the protests against the plan steadily increased. Opposition to the closure was stronger for Tempelhof than for Tegel because the former closure was imminent, whereas Tegel was announced to remain in operation until the opening of Berlin–Brandenburg International. In addition, Tempelhof was the object of emotional attachment because of its role as an important access point for the airlift during the 1948–1949 Berlin Blockade. Because the closures of Tempelhof and Tegel were legally binding requirements for the opening of the new major airport at the Schoenefeld site, the Tempelhof referendum was, in fact, a referendum on the new aviation concept as a whole. The referendum was held on April 27, 2008, and was approved by a majority of those who voted, but it failed to achieve the minimum favorable vote quorum of 25 percent YES votes (against the new aviation concept) at the total electorate.¹

The Berlin Tempelhof referendum provides a particularly interesting natural experiment to test the homevoter hypothesis. First, the referendum provides us with rich spatial variation in local costs and benefits. It was directly or indirectly connected to three airports whose location has been an artifact of the particular history of the city. Second, the Berlin housing market exhibits a large degree of spatial variation in terms of its tenure structure. Third, unlike many US markets, the German rental market is strongly regulated. The extent to which landlords can pass on increases in market rents to incumbent residents is limited. Renters are largely hedged against rent increases as long as they do not move out.² Because renters will therefore be less inclined to oppose initiatives

that bring positive local amenities, the robust evidence that we document on homevoter and leasevoter effects in this institutional context provides particularly strong support for the empirical relevance of the homevoter hypothesis.

After introducing our data in the next section, we proceed with our analysis in two major steps. In the first step, we estimate the property price effects associated with the new aviation concept (Section 3). Following Dehring et al. (2008), we argue that past announcement effects provide a noisy signal to homevoters and leasevoters. In the second step, we analyze homevoter and leasevoter effects by linking the voting outcome to the estimated price signal and the homeownership rate (Section 4). Section 5 presents extensions and robustness checks of the baseline models. The final section concludes the study.

2. Data

Our test of the homevoter hypothesis requires a variety of data at a spatially disaggregated level: first, the share of NO votes in the Tempelhof referendum, from which we infer the local support for the new aviation concept; second, measures of exposure to aircraft noise and accessibility to airport terminals to approximate the expected change in local amenity value; third, a set of socioeconomic voter characteristics to control for correlated preferences that impact voting decisions but are unrelated to local changes in the amenity value; fourth, a proxy of the proportion of voters that belong to home-owning households to distinguish between homevoters and leasevoters; and fifth, a comprehensive property transactions data set to estimate the announcement effect of the new aviation concept which serves as a measure of the price effects voters associate with the new concept. We describe the sources and the processing of the data in more detail below.

2.1. Spatial unit of analysis

The voting precincts form our main analysis unit according to which all other data were organized using a geographic information system (GIS) and the framework of the Urban and Environmental Information System of the Department for Urban Development and the Environment of the Berlin State government administration (*Senatsverwaltung für Stadtentwicklung Berlin, 2006*). In merging the data, we compute the precinct values as weighted averages of the spatial units that overlap with a given precinct, with the weights being proportionate to the respective shares of the geographic area of the precinct (Arntz and Wilke, 2007; Goodchild and Lam, 1980). All distance computations were made using this GIS framework with reference to precinct centroids.

2.2. Voting data

The data on the voting results for the Tempelhof referendum were obtained from the Statistical Office for Berlin–Brandenburg. Of the 881,035 votes that were cast, 650,464 votes were cast in person at the ballot box and can be used in the empirical analyses. These results are available as aggregated outcomes at the level of 1201 voting precincts and are merged with an electronic map of the precinct boundaries via a unique identifier variable.

The remaining votes were cast by mail (postal votes) and cannot be considered because a similarly detailed geo-reference is not available. The highest spatial disaggregation at which the voting outcome can be obtained separately for postal voters comprises the 12 city districts (Bezirke). Across Bezirke, the correlation coefficient between the share of NO votes among individuals who voted in person and the share of NO votes among all voters (which includes voters who voted in person and postal voters) is as high as

¹ More detailed information on the history of Berlin’s airports and the Tempelhof referendum is provided by Nitsch (2009).

² Housing rental law in Germany is highly regulated, complex, and biased toward renters. Landlords can only freely negotiate the rent when a new rental contract is signed. See Westerheide (2011) for details.

Download English Version:

<https://daneshyari.com/en/article/971145>

Download Persian Version:

<https://daneshyari.com/article/971145>

[Daneshyari.com](https://daneshyari.com)