

How Does Allowing Noncitizens to Vote Affect Local Government?

Authors:

Brian K. Strow^a

Claudia W. Strow^b

August 2023

Working Paper

The Center for Growth and Opportunity at Utah State University is a university-based academic research center that explores the scientific foundations of the interaction between individuals, business, and government.

This working paper represents scientific research that is intended for submission to an academic journal. The views expressed in this paper are those of the author(s) and do not necessarily reflect the views of the Center for Growth and Opportunity at Utah State University or the views of Utah State University.

^a Dean of Business Palm Beach Atlantic University

^b Professor of Economics Palm Beach Atlantic University

Abstract:

As of 2020, more than forty-four million foreign-born individuals reside inside the United States. This paper examines immigration as it relates to two well-known public finance models of optimal public goods provision, Lindahl pricing and the Tiebout model. As the major function of local governments is the provision of public goods, this paper suggests that local level voter participation by immigrants could improve preference revelation in Lindahl's model and provide a reinforcement to Tiebout sorting between jurisdictions. Furthermore, increased use of vouchers provided to students, native and foreign-born alike, increases direct preference revelation with regard to the specific public good of education. By using longstanding public finance models, this paper shows that policy ideas of the political left, increased voice (access to the voting booth), and right, increased freedom of exit (access to school vouchers), have theoretical benefit to increasing public good optimization.

Introduction

On May 11, 2023, Title 42, a restrictive US Covid-era immigration policy, expired. Title 42 allowed border agents to quickly expel many asylum seekers back to Mexico or their home countries. During the three years the policy was in place, 2.7 million migrant expulsions took place, while another 2.8 million migrants were allowed into the US (Hesson 2023). With the expiration of Title 42, analysts and policymakers have predicted that there will be an increase in the number of those actively seeking entry into the US (Dejarnis & Barnhart 2023). Indeed, there has been a recent surge in the number of minors attempting to reach the US, while sanctuary cities such as Chicago and New York report that they are struggling to provide resources to the many new migrants being bussed into their cities (Vyas 2023; Fung 2023).

As of 2020, approximately 44.1 million foreign-born people resided in the United States, representing 13.5% of the US population (Congressional Research Service 2022). The percentage foreign-born has risen over the last 50 years, to almost triple the amount estimated in 1970 (4.7%). Of these 44.1 million foreign-born residents, 22.5 million were naturalized citizens and 13.1 million were legal permanent residents (green card holders). A remaining estimated 8.4 million were unauthorized residents, though the actual number of illegal residents is likely much higher.

Concerns about immigration are growing among US adults. In 2022, immigration was one of the top four most important problems mentioned in a Gallup survey (Brenan 2022). By March of 2023, the percentage of adults citing immigration as a problem had almost doubled from the prior year (Statista 2023). Because immigration is a large and growing concern for US citizens and policymakers, there is need for a renewed focus on immigration policy. This paper seeks to analyze the impact of immigration on the optimal mix of public goods at the local level.

The Optimal Provision of Public Goods

The field of public finance examines the government's influence on the efficient allocation of available resources, the distribution of income among citizens, and the stability of the economy (Oates 1968). In terms of analyzing the efficient allocation of available resources, Charles Tiebout proposed that perfect competition between political jurisdictions leads to the optimal provision of public goods. Consumers move (vote with their feet) to jurisdictions that align with their preferred bundle of public goods, inclusive of tax incidence (Tiebout 1956).

Erik Lindahl suggested that the optimal level of public goods provision is achieved by charging residents for public goods in accordance with the marginal benefit that they receive from them. Assuming that a jurisdiction can correctly assess individuals' marginal preferences and valuation of public goods, a government can tax people accordingly, hence Lindahl pricing (Lindahl 1919).

Both economists' models, with their corresponding assumptions, reach the same outcome. In both cases, consumers end up paying for public goods in accordance with the benefits principle and the optimal production of public goods occurs. The benefit of Tiebout's model over Lindahl's is that Tiebout sorting is based on revealed preferences while Lindahl pricing is based on an implied knowledge of such preferences. Tiebout's model of voting with your feet forces public goods consumers to directly reveal their preference for public goods through their choice of residential location. In contrast, Lindahl's model relies on the belief that bureaucrats accurately know the

preferences and valuations of the people in their jurisdictions and are willing to implement taxes and bundles of public goods that are congruent with these preferences.

The purpose of this paper is to analyze the barriers to the optimal provision of public goods in both models brought about by large scale immigration of individuals, some of whom are prevented from voting in the political process. As only half of the US foreign-born population are naturalized citizens, the lack of voting rights among the remaining foreign-born residents amounts to the exclusion of more than 6% of the US population from revealing their preferences through the political process.

The impact from the lack of voting rates varies greatly by state. For example, in 2020 26.6% of Californians were foreign born as compared to only 1.6% of West Virginians (Congressional Research Service 2022). Further, while this paper focuses on voting barriers in a US context, the lack of voting rights among residents is not an issue solely for the US. According to the World Migration Report, in 2020 there were 281 million migrants across the globe. This amounted to 3.6% of the world's population and 4.9% of the global workforce (International Labour Organization 2021).

This disenfranchisement (or lack of ability to vote) prohibits these consumers of public goods from revealing their preferences for public goods via the ballot box and, in some cases, also reduces their incentive to vote with their feet. If a person has political voice, then they reinforce the preferences of the jurisdictions to which they choose to move. On the margin, this reduces the chances that their arrival in the jurisdiction may trigger a change in public goods allocation offered by the jurisdiction. This lower level of policy uncertainty lowers the cost of moving between jurisdictions.

These are indeed the two prime ways to influence poor institutions: voice and exit (Hirschman 1970; Landgrave & Nowrasteh 2016). However, the barriers to voting (with a ballot or with their feet) prevent many foreign-born residents from influencing inefficient institutions. And yet, citizens are reluctant to remove these barriers. Why?

One common concern is that if the presence of an underground economy for foreign-born workers prevents Lindahl pricing, then the removal of such barriers will lead foreign-born residents to free ride. This paper address that concern and illustrates that the government's ability to allocate tax liability at the local level is not complicated by the presence of the underground economy, as unauthorized immigrants pay most local taxes. The majority of public good provision occurs at the local government level, where all residents are primarily taxed, either directly or indirectly, in the form of property or sales taxes. Foreign-born immigrants are paying for locally provided public goods, but they have no say in the bundle of goods being offered. For example, public school offerings often do not represent the preferences of all individuals living in a district. This paper suggests that local level voter participation by immigrants could increase Tiebout sorting between public school districts and could lead to greater overall efficiency in public good provision. The next two sections examine optimal public good provision in the context of immigration using Lindahl's models and Tiebout's models respectively.

Lindahl Pricing and Information Costs

In order to optimize the provision of public goods, policymakers must ascertain the preferences of their constituents.¹ Gathering this information can be costly. One way to gain information regarding optimal public goods bundles is through the revealed preferences of voters in elections/referendums where the relative size of a public goods bundle is at stake. The greater the access to the ballot box, the greater the reliability of the information provided by the median voter. More votes lead to more information (at least in direction of a preference if not in the intensity thereof).²

However, it should be noted voters are not always rational (Caplan 2001 & 2007). Caplan goes as far as to say that “Ideas, not interests, drive most politically relevant thought....” (2001, 556). Rather than claim that all voters vote for their interests perfectly, the relevant question is whether or not an expansion of the ability to vote increases or decreases overall rationality. For instance, allowing two-year-olds to vote would likely cause an overall decrease in voter rationality. Allowing a higher percentage of parents with children enrolled in public schools to vote in school board elections is likely to increase efficiency of ballot-based preference revelation, as the outcome of the vote has a direct impact on the voters’ consumption of public goods.

The United States has limited voting access to varying groups throughout its history. Property ownership, sex, race, and religious affiliation were among the original barriers to the ballot box. The implicit assumption at the time was that these restrictions were either meant to keep irrational voters from voting, or they were meant to impose preferences of one group onto another. The Naturalization Law of 1790 stated that only “free white” immigrants could become naturalized citizens. As of 1802, foreign residents had to legally live in the US for a minimum of five years before they could apply for citizenship.

Many barriers to voting eventually fell. In 1856, North Carolina became the last state to remove property ownership as a voting requirement. The 14th Amendment (1868) extended citizenship to all males born in or naturalized into the US, while the 15th Amendment (1870) explicitly barred denial of voting rights based upon race. The 19th amendment (1920) extended the right to vote to women. It was not until 1947 that all Native Americans gained the right to vote and not until 1952 that people with Asian ancestry were given the right to become citizens. In 1964, the 24th Amendment removed failure to pay taxes as a barrier to the ballot box. The 26th Amendment (1971) lowered the minimum voting age to 18. With these amendments, the directional course of US voting rights has been in the general direction of expansion.

At the end of 2021, in an attempt to further expand the voting franchise, the New York City Council voted to pass a law that enfranchised eight hundred thousand noncitizen residents of New York City to vote in municipal elections. Six months later, a New York State judge struck down the law as violating the New York State Constitution (Allen 2022).

Interestingly, other localities in the United States have previously allowed noncitizens to vote in certain local elections, including in San Francisco, where a 2016 ballot initiative approved voting

¹ This statement does implicitly assume that aligning with constituents’ preferences is the correct public policy goal. While it is the position this paper adopts, it should be noted that some have argued that “preference error” can occur when individuals lack viable options, must choose between complex bundles of public goods, or lack sufficient information to truly realize their own true preferences (Lowery 1998). Further, politicians are quite different from an omniscient, altruistic power, and so likely have different public policy goals of their own.

² For more information on why democracies produce efficient results, see Wittman (1989, 1995).

in school board elections (Conklin 2021). The US Constitution does not ban noncitizens from voting in local elections (Raskin 1993; Gessioto 2018). As it stands, public opinion is sharply, and often fiercely, divided on the merits of noncitizen voting, even as 42% of children enrolled in Los Angeles schools have at least one undocumented parent (Goldberg 2021; Berman 2022).

The question of who to enfranchise politically can be approached via the lens of fairness or the lens of efficiency. According to Lindahl, fairness should be examined by following the benefits principle (1919). If people are taxed in accordance with the marginal benefit they derive from public goods, then there are no additional concerns that would arise from allowing noncitizens a political voice in the creation of the public goods mix. Involvement of more people in the political process would merely lower information costs.

A common concern that arises from the prospect of noncitizen voting is that noncitizens, on net, would become free riders and not pay “their fair share” of taxes in support of public expenditures. Governments in the United States not only collect taxes to fund public goods, but to also engage in income redistribution. Not surprisingly, the public’s taste for redistribution tends to fall as the level of immigration increases (Elsner & Concannon 2020; Alesina, Miano, & Stantcheva 2023). The use of the redistributive arm of the government attracts migrants interested in receiving income assistance to more redistributive areas (Peterson & Rom 1989). Thus, the argument for including noncitizen preferences for public goods production is much stronger if a government solely provides public goods and does not engage in income redistribution.

As a general rule, the relative amount of income redistribution/public goods provision increases as the level of government increases in the United States. The vast majority of federal government spending can be categorized as income redistribution (transfer payments). According to the Congressional Budget Office, \$4.1 trillion out of the \$5.7 trillion 2022 budget was dedicated to mandatory spending, with the four largest categories therein being Social Security, Medicare, Medicaid, and income security (Congressional Budget Office 2023). Benefits in these programs are both rival and excludable. At the state and local levels, the percentage of income redistribution is typically lower. Forty-four percent of states’ budgets from 2020 went to support public welfare, as compared to only 6% of local expenditures (Urban Institute 2023). School district spending is even less redistributive. For instance, many school districts provide free lunches to all students, regardless of income level, if a large number of students qualify for federal lunch assistance.

On the tax side of the equation, the Office of Management and Budget projects that in 2023, 83.4% of federal tax revenue will come from personal income taxes and payroll taxes. According to the US Census Bureau, the main sources of state tax revenue from 2020 were sales taxes (48.4%) and personal income taxes (36.5%) (US Census Bureau 2020). At the local government level, property taxes comprised 72.2% of local revenue, while sales taxes accounted for 17.3% of revenue and individual income taxes accounted for only 4.9% of revenue.

When it comes to local public finance, it is difficult to conclude that foreign-born residents pay a significantly smaller share of their income (as compared to citizens) to support local public goods production. In fact, recent a study suggests that undocumented residents pay a higher overall effective tax rate than do the top 1% of taxpayers (Gee, Gardner, & Wiehe 2016). With decreased access to formal saving institutions, foreign-born residents spend a higher percentage of their incomes on consumption. Accordingly, they not only pay sales taxes, but do so at a higher effective tax rate. And, while only approximately 31% of unauthorized immigrants own homes, a portion of

rent paid by renters is invariably used to pay property taxes (Kasperkevic 2017). The payment of local property taxes (paid by citizens and noncitizens alike) is consistent with the Tiebout model's head tax (Hamilton 1975 & 1976). And, increased public good benefits translate into higher property taxes. Thus, both citizens and unauthorized immigrants pay for their public goods in the form of property taxes (Oates 1981).

In contrast, the federal US tax system is largely dependent upon personal income taxes and payroll taxes. According to the benefits principle, if unauthorized immigrants work in the black market and do not accurately report income to the US Internal Revenue Service, then there is little justification for claiming that unauthorized immigrants should be granted the power to reveal their preferences through the national voting booth.³

However, this concern does not hold for the local level. Nonnative households are contributing to the local level tax base (even if they work in the black market) via consumption and rent. Not only that, nonnative households in some cases earn more than their native counterparts, as seen in table 1.

Some suggest that nonnative citizens should not be allowed to vote at the local level because of a lack of contribution to the tax base. Not only is that untrue, but if this argument is used, then effectively single native households should not be allowed to vote, as they contribute less than does the median noncitizen married household. But the idea that only married individuals (or more wealthy households) should be allowed to vote is clearly unjust.

Table 1. Median Income of Households in 2019

| | Native-born | Naturalized Citizen | Not a US Citizen |
|--------------------|-------------|---------------------|------------------|
| Married couple | \$105,792 | \$94,114 | \$73,751 |
| Male householder | \$70,346 | \$72,284 | \$58,895 |
| Female householder | \$48,415 | \$56,397 | \$36,212 |

Source: US Census, 2020

Taken together at the local level using the Lindahl pricing model, not only do foreign-born residents (authorized and unauthorized alike) face tax liability virtually indistinguishable from US citizens, local governments predominantly use this tax money to provide public goods. From an efficiency and fairness standpoint relative to the benefits principle, granting foreign-born resident noncitizens the right to vote in local elections increases economic efficiency, fairness, and societal utility by lowering information costs to public goods providers.⁴ The next section discusses the Tiebout model in this context.

³ Many unauthorized immigrants do pay billions of dollars annually to the US government via Individual Taxpayer Identification Numbers (and have social security benefits withheld that they will never be eligible to receive. Likewise, green card holders are required to pay income taxes. Further, more than 40% of US households bear no federal income tax liability while retaining the right to vote in federal elections.

⁴ Although some fear that immigrants lead to higher costs to society, research finds “the local fiscal effects of increased immigration to be relatively small” (Card 2007).

The Tiebout Model

Tiebout's model assumes, among other things: perfect information, a large number of jurisdictional options, and costless movement between political jurisdictions. Under these assumptions, the model states that people will sort themselves into jurisdictions consistent with their preferred bundle of public goods (inclusive of the taxes needed to provide said public goods).

Numerous benefits result from foot voting, including satisfying diverse public policy preferences, ensuring greater competition between jurisdictions, promoting the protection of oppressed local minorities, and guaranteeing the maintenance of exit rights (Somin 2010). Further, emigrants have a strong incentive to gain information about prospective jurisdictions. Thus, recent movers are in many cases more informed than long-time residents.⁵

Despite these benefits, barriers exist that prevent Tiebout sorting. Three major barriers include: nonzero information costs, a lack of jurisdictional options, and the transaction cost of moving between jurisdictions. Changing locations, especially when moving to a different state, region, or country, comes with substantial social and economic costs. Due to these costs, some individuals remain in a location that is less consistent with their preferences instead of moving. Nevertheless, there is ample evidence that people vote with their feet, just as Charles Tiebout hypothesized.

Evidence of Tiebout Sorting

For the first time since 1957, the US Census bureau listed Florida as the leading state for population growth in 2022. In 2022, Florida gained over 416,000 new residents, mainly because of net migration into the state (Perry, Rogers, & Wilder 2022). In 2022, Texas and Florida received the most net one-way U-Haul trips, while Illinois and California saw the most net one-way U-Haul trips out of their states (U-Haul 2022). Despite desirable weather and being named the "The Sunshine State" in 1970, Florida took 65 years to regain its position as the leader in population growth.

What contributed to this massive net migration to Florida in 2022? Perhaps it was in part the federal limitation on state and local tax deductibility, beginning in 2018. This change altered the relative cost of living in New York, New Jersey, California, and other high-tax states relative to Florida and other states that impose zero state income taxes. The net migration to Florida also likely resulted from the enhanced differentiation in government policies following the onset of the pandemic. Florida allowed its businesses and schools to resume operation much more quickly than did many other states during the COVID-19 pandemic. Why pay higher taxes when your children are not able to attend public school in person or play mask free in public parks, especially if a less-taxed and less-regulated environment exists?

The South as a whole has experienced net population growth in every year since 2017. The US population movements in recent years suggest that Tiebout sorting is occurring. Nevertheless, there are barriers that prevent efficient Tiebout sorting, and indeed overall US migration rates have

⁵ Even Somin, however, notes that it is theoretically possible for large-scale immigration from an illiberal culture to gain political control through the ballot box to undermine the very freedoms that allowed the immigrants to come (2008). In US terms, a petition was posted to Texas Governor Abbott's re-election campaign that used the phrase, "Don't California My Texas," referring to Californians voting to impose the very policies that caused them to flee California for Texas. Nowrasteh and Powell (2020) find no correlation between immigration and a loss of economic freedom in states in the United States. They explain, "Immigrants helped preserve, protect, defend and expand American free-market economic and political institutions" (222).

declined to a 70-year low, with only 8.4% of the population moving in 2022 (D’Amore, Marshall, & McKenzie 2022).

There are specific ways in which the presence of a large number of immigrants may impact Tiebout sorting. As illustrated in table 2, foreign-born noncitizens are substantially more likely to move in a given year than are their naturalized counterparts. They are also more likely to move within a county than natives or naturalized citizens. All three groups are more likely to move within a county than between counties and more likely to move between counties rather than between states. However, note that noncitizens are more likely to move within county, between counties, and between states than naturalized citizens are. And their interstate moving rate differs from that of natives by only 0.1 percentage point.

Table 2. Geographical Mobility by Citizenship Status

| | Movement in the Last Year | | |
|---------------------|---------------------------|--------------------------|------------|
| | Within county | Intercounty (same state) | Interstate |
| Native | 7.80% | 3.40% | 2.40% |
| Naturalized citizen | 5.40% | 1.90% | 1.50% |
| Noncitizen | 9.20% | 2.60% | 2.30% |

Source: US Census (2022) ACS 5-Year Estimates Detailed Tables 2009–2021

With respect to mobility, native and foreign-born mobility in the US between 1980 and 2000 were roughly similar (Basso & Peri 2020). Since then, foreign-born mobility has fallen relative to that of native residents due to a reduction in new immigration during times of economic crisis in the US. Foreign-born residents experience the greatest mobility within their first two years of arrival in the US. This group of immigrants is more strongly motivated by working conditions, and are “...about 2.5 times more responsive than the native population in moving to locations experiencing positive economic shocks and away from those experiencing negative economic shocks” (Basso & Peri 2020, 89). The largest variation in mobility between the native and foreign-born is seen amongst individuals with less than a high school degree. By being more mobile than their native counterparts, less educated immigrants help national labor markets adjust more quickly during economic shocks and therefore provide a positive economic externality to their surrounding communities (Basso & Peri 2020).

Information Cost and Immigrant Enclaves

When looking at the foreign-born population’s decision of where to move, local job market strength is the leading indicator, but immigrants are also more likely to move to locations where their ethnicity has previously immigrated and established roots (Card 2001). They move in enclaves because information and assimilation costs are lowered when there is feedback regarding local conditions and when a support network for new arrivals already exists. US cities with larger ethnic enclaves are therefore more quickly able to adjust to local economic shocks by increasing or decreasing immigration from those countries.⁶

⁶ The presence of economic incentives and enclave effects do not negate the proposition that immigrants also consider the public goods mix when making locational choices. Their intra-county mobility suggests some level of public goods bundle-specific mobility. Local tax policies, regulations, and policies regarding the provision of public goods impact both economic conditions within a locality, and the determination of an ethnic enclave to exist and persist over time. Longstanding members of the ethnic enclave may have the ability to move toward citizenship, which garners them voice in the political process. Their voice may influence the bundle of public goods in a way that is attractive to immigrants from a similar ethnic background.

If authorized and unauthorized immigrants were to gain access to the local political process, their collective voice could work to increase the attractiveness of a locality to others in their country of birth. This potentially important feedback loop is stifled when consumers of local public goods (inclusive of tax liability) are denied political voice. In this way, voice is not just an alternative option to exit, but one that is complementary to exit. Even so, as Somin notes “Unlike ballot box voters, ‘foot voters’ have little reason to be either rationally ignorant or irrational. Their decisions as to which jurisdiction to live in are individually decisive and not dependent on the outcome of a majority vote in which they have little say” (2010, 273). Put another way, if jurisdictional shoppers, such as foreign-born immigrants, are more likely to obtain information about their chosen locale than those who were merely born there, their presence in the voting booth would actually increase the level of information held by the median voter.

Immigration and Jurisdictional Choice

Movement within a county, where a public goods consumer could conceivably alter their residence without changing jobs, is the type of mobility closest to the idealized conditions in the Tiebout model. The relative mobility of noncitizens means that they can indeed “vote with their feet” if there are multiple jurisdictions (such as public school districts) to choose from, particularly within a county.

A lack of jurisdictional choice among a heterogeneous population decreases the optimal provision of public goods (Kollman, Miller, & Page 1997). For example, an increase in the number of public school districts in close proximity leads to increased competition for constituents and raises the educational outcomes of students (Hoxby 2000). Accordingly, house values increase by more than 3% for a one standard deviation increase in student test scores, indicating that educational quality motivates residential location choice (Nguyen-Hoang & Yinger 2011). In contrast, a lack of options for schools incentivizes the school district to perform as a monopoly, generating suboptimal educational performance. Over the 20th century, the number of school districts in the United States fell by over 90% (Kogan, Lavertu, & Peskowitz 2021). While some of this consolidation may have allowed school districts to improve economies, it has also decreased educational choice.⁷ Interestingly, the consolidation of school districts appears especially concentrated in areas with large immigrant populations. Thus, educational choice appears to be more limited in many large counties for the children of unauthorized immigrants.

Schools are largely funded through local property taxes. The percentage of school funding contributed by the federal government among the top ten largest school districts range from only 4.6% in New York City to 13.6% in Hillsborough, FL (National Center for Education Statistics 2020a). As public school attendance is typically based upon a student physically residing within the geographical boundaries of a school district, the extension of voting rights to authorized and unauthorized immigrants whose children are registered to attend school in a district could mitigate concerns citizens may have about foreign tourists voting in local elections—as well as increase voice feedback to influence local education policies (Kane 2022).

⁷ Evidence suggests that upper income school district consolidation leads to an initial decrease in property values while lower income school district consolidation leads to an initial increase in property values (Duncombe, Yinger, and Zhang 2016). In the short run, it appears that the loss arising from less educational choice among upper income households is greater than the benefits gained from taking advantage of economies of scale in education.

This added voice could complement Tiebout effects among the foreign-born. The policy implication, consistent with the Tiebout model, is that increases in jurisdictional competition improve the efficiency of public good provision.

Table 3. Immigration and School District Size

| US rank of largest school districts, by student population, 2018 | US county rank of largest number of unauthorized immigrant population, 2015–2019 |
|--|--|
| 1. New York City, NY | 1. Los Angeles, CA |
| 2. Los Angeles, CA | 2. Harris County, TX (Houston) |
| 3. Chicago, IL | 3. Dallas County, TX |
| 4. Miami-Dade County, FL | 4. Cook County, IL (Chicago) |
| 5. Clark County, NV | 5. Orange County, CA |
| 6. Broward County, FL | 6. Queens County, NY |
| 7. Hillsborough County, FL | 7. Maricopa County, AZ |
| 8. Houston IS, TX | 8. Miami-Dade and Monroe Counties, FL |
| 9. Orange County, FL | 9. Boston-Cambridge-Quincy, MA |
| 10. Palm Beach County, FL | 10. San Diego County, CA |

Source: National Center for Education Statistics, 2020a.

Source: Migration Policy Institute, 2019.

With respect to education, a second option to ascertain and implement preferences of parents has been gaining in popularity: school choice via charter schools or school vouchers (National Center for Education Statistics 2022a). Overall trends since 2009 in charter school enrollment are reported in table 4. Since 2009, the percent of school children in charter schools has more than doubled (rising from 3.3% in 2009–2010 to 7.5% in 2021–2022). During that same time period Hispanic student representation in traditional public schools increased from 22% to 27.8% while their presence in charter schools rose from 26% to 36.1%, indicating that Hispanic parents and students utilize choice within public schools more than non-Hispanic students (NCES 2020c & 2022b). However, Hispanic students represented only 12% of students enrolled in private schools in 2019, indicating that the cost of private schooling may be a barrier to the choice of a private education (Broughman et al. 2021).

Table 4. Enrollments of Public Elementary and Secondary Schools, 2009–10 and 2021–22

| | 2009–2010 | 2021–2022 |
|-----------------------------|------------|------------|
| Total enrollment | 49,081,519 | 49,089,640 |
| Number of charter students | 1,610,285 | 3,674,712 |
| Percentage charter students | 3.28% | 7.5% |

Source: National Center for Education Statistics, 2020b & 2022a

While the percentage of US students who use educational vouchers to attend private schools is only 0.5%, post-COVID use of vouchers has increased (Berands 2021). In 2023, Florida joined Utah, Iowa, Arkansas, West Virginia, and Arizona in passing major private school choice bills expanding the use of vouchers to a larger number of students (Kennedy and Shah 2023). School choice advocates in Arizona have even begun using Spanish language ads to inform residents that school vouchers can be used by documented and undocumented citizens alike (Berry 2019).

Ironically, the common partisan divide in the US has Republicans antagonistic toward noncitizen voting in school board elections while simultaneously supporting the use of public dollars to be directed to the noncitizen parents' school of choice. Democrats, on the other hand, often support noncitizen voting, but oppose the use of school vouchers. To be clear, both voting (voice) and the use of private vouchers (exit) represent an increase in public goods optimization as it relates to individual preference alignment. Currently, Republicans are expanding educational options more quickly to foreign-born residents via vouchers, than are Democrats via local school board voting rights for noncitizens.

In their discussion of quasimarket failure, Boettke, Coyne, and Leeson note that “The source of the quasimarkets' failure doesn't lie in the 'marketness.' It lies in their 'quasiness'” (2011). Their point is that while Tiebout (1956), Ostrom, Tiebout, and Warren, (1961) and Oates (1972) noted that public goods are most efficiently provided at the most decentralized level of government that internalizes relevant externalities, markets provide a more efficient mechanism of coordinating production with consumer preferences. That is, barriers to perfect Tiebout sorting among school districts can be overcome by granting educational choice directly to parents.

Transaction Costs of Immigrant Movement

A final transaction cost to consider is the enforcement of immigration policy. Local law enforcement's level of cooperation with federal authorities does vary by local jurisdiction. On one end of the spectrum, “sanctuary cities” strive to cooperate the least with federal immigration authorities. Given the large cost that deportation has on a family, it is not surprising that many of the counties with the highest number of unauthorized immigrants also contain sanctuary cities or, at a minimum, do not direct local resources toward immigration enforcement. It should be noted that there is some evidence that noncustodial arrests are elevated in sanctuary cities. This may indicate that the federal government may directly intervene more to enforce immigration policies in noncooperative communities (Chand 2021).

When costs associated with deportation, or the likelihood thereof, exceed the perceived benefit derived from maximizing public goods bundles, unauthorized immigrants are forced to settle for suboptimal bundles of public goods. This may explain why so many unauthorized immigrants tolerate a lack of school district choice. This uncertainty and variability of immigration enforcement across local jurisdictions imposes an extra movement cost for illegal immigrants and leads to suboptimal equilibria where unauthorized residents' locational choice is predominantly driven by the locational risk of deportation rather than the optimal provision of public goods.

Conclusion

The goal of public finance is to optimize the bundle of public goods provided relative to resident preferences. Two major mechanisms, voice and exit, help align resident preferences with the provision of public goods. Voice provides residents with the ability to make their preferences known via the ballot box. Exit allows residents the ability to make their preferences known through voting with their feet.

Implementation of Lindahl pricing relies upon knowledge of resident preferences. Allowing resident noncitizens access to the ballot box in local elections increases preference revelation. This preference revelation can also augment Tiebout sorting as new arrivals, who acquired location-specific knowledge in advance of their arrival, can reinforce the public goods mix that attracted them. Multiple local school districts have in fact expanded the political franchise to residents regardless of immigration status if their children are enrolled within schools in the district. This policy is consistent with public goods optimization. It is also consistent with the benefits principle as local tax burdens via property and sales taxes are assessed to the very people who consume the local public goods bundle.

The Tiebout model relies on the ability to move between a large number of political jurisdictions. Equal enforcement of immigration policy across the United States would decrease the cost of unauthorized immigrants moving between jurisdictions and could increase Tiebout sorting. Alternatively, in the case of education, expansion of charter schools and school vouchers are providing unauthorized immigrants greater direct say over the specific provision of education. This too is consistent with public goods optimization.

Whether it is through the ballot box (voice), freedom of movement unconcerned with deportation (exit), or the ability to self-select educational opportunities (charter schools and vouchers), public goods provision has more room to be optimized in the United States.

Foreign-born residents pay taxes that go to the provision of locally provided public goods. They also provide positive economic externalities through their mobility during economic shocks, thereby causing labor markets to clear more quickly.

As we note, there is a strong correlation between the quantity of disenfranchised residents and the size of local school districts in the US. In many major cities, the presence of supersized public school districts increases the costs of jurisdictional shopping for public education. This is particularly problematic given the decreased mobility between counties and states faced by immigrants.

Unauthorized immigrants do appear to include the chances of deportation in their jurisdictional choice. Removal or standardization of deportation risk would better allow unauthorized immigrants to pursue their jurisdictional choice based upon their optimal public goods bundle. If this were to materialize, we would expect that immigrants would choose a wider range of jurisdictional locations within the United States.

Any effort to decrease the cost of information, increase the number of jurisdictional options, and decrease the transaction costs associated with jurisdictional movement would increase Tiebout sorting. While self-sorting optimizes public goods production, vested political interests whose objective functions are not societal utility maximization clearly remain an obstacle to realizing Tiebout's idealized world.

Works Cited

- Alesina, A., Miano, A., & Stantcheva, S. (2023). Immigration and redistribution. *Review of Economic Studies* 90(1): 1–39.
- Allen, J. (2022, June 27). New York judge rules law allowing vote for mayor is unconstitutional. Reuters. *US News and World Report*. <https://www.usnews.com/news/top-news/articles/2022-06-27/new-york-judge-rules-law-allowing-non-citizens-to-vote-is-unconstitutional>.
- Basso, G., & Peri, G. (2020). Internal mobility: The greater responsiveness of foreign-born to economic conditions. *Journal of Economic Perspectives* 34(3): 77–98.
- Berman, R. (2022, January 18). The voting-rights debate Democrats don't want to have. *The Atlantic*. <https://www.theatlantic.com/politics/archive/2022/01/noncitizen-voting-new-york-democrats-immigrants/621276/>.
- Berands, M. (2021, August 23). The current landscape of school choice in the US. *Kappan*. <https://kappanonline.org/current-landscape-school-choice-united-states-vouchers-charter-schools-berands>.
- Berry, S. (2019, January 9). School choice advocates market vouchers to illegal aliens. *Breitbart*. <https://www.breitbart.com/politics/2019/01/08/school-choice-advocates-market-vouchers-illegal-aliens/>.
- Boettke, P., Coyne, C., & Leeson, P. (2011). Quasimarket failure. *Public Choice* 149: 209–224.
- Brenan, M. (2022). Government remains Americans' top problem in 2022. *Gallup*. <https://news.gallup.com/poll/406739/government-remains-americans-top-problem-2022.aspx>.
- Broughman, S., Kincel, J., Willinger, J., and Peterson, J. (2021). Characteristics of private schools in the United States: Results from the 2019–20 Private School Universe Survey. National Center for Education Statistics. <https://nces.ed.gov/pubs2021/2021061.pdf>.
- Caplan, B. (2001). Libertarianism against economism: How economists misunderstand voters, and why Libertarians should care. *The Independent Review* 5(4): 539–563.
- Caplan, B. (2007). *The myth of the rational voter: Why democracies choose bad policies*. Princeton, NJ: Princeton University Press.
- Card, D. (2001). Immigrant inflows, native outflow, and the local labor market impacts of higher immigration. *Journal of Labor Economics*, 19(1): 22–64.
- Card, D. (2007). How immigration affects US cities. CReAM Discussion Paper Series 0711, Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London. <https://ideas.repec.org/p/crm/wpaper/0711.html>.

- Chand, D. (2021). Explaining ICE's problematic IMAGE: A Public-Private-Partnership in Immigration Policy. Working Paper, Center for Growth and Opportunity at Utah State University.
- Congressional Budget Office. (2023). The budget and economic outlook 2023–2033 data supplement. 51134–2023-02-Historical-Budget-Data.xlsx (live.com).
- Congressional Research Service. (2022). Citizenship and immigration statuses of the US foreign-born population. <https://crsreports.congress.gov/product/pdf/IF/IF11806>.
- Conklin, A. (2021, December 15). *Where are noncitizens allowed to vote in the US?* Fox News. <https://www.foxnews.com/politics/united-states-noncitizen-voting-cities>
- D'Amore, K., Marshall, J., & McKenzie, B. (2022, March 7). US migration continued to decline from 2020 to 2021. US Census Bureau. <https://www.census.gov/library/stories/2022/03/united-states-migration-continued-decline-from-2020-to-2021.html>.
- Dejarnis, L. & Barnhart, E. (2023, May 11). Border officials prepare for surge of migrants as Title 42 immigration restrictions expire. *PBS News Hour*. <https://www.pbs.org/newshour/show/border-officials-prepare-for-surge-of-migrants-as-title-42-immigration-restrictions-expire>.
- Duncombe, W., Yinger, J., & Zhang, P. (2016). How does school district consolidation affect property values? A case study of New York. *Public Finance Rev* 44(1):52–79.
- Elsner, B., Concannon, J. (2020). Immigration and redistribution. IZA Discussion Paper No. 13676. SSRN: <http://dx.doi.org/10.2139/ssrn.3691389>.
- Fung, K. (2023, May 15). Greg Abbott fractures sanctuary cities. *Newsweek*. <https://www.newsweek.com/greg-abbott-fractures-sanctuary-cities-1800361>.
- Gee, L., Gardner, M. & Wiehe, M. (2016, February). Undocumented immigrants' state and local tax contributions. Institute on Taxation and Economic Policy. <https://itep.sfo2.digitaloceanspaces.com/immigration2016.pdf>.
- Gessiotto, M. (2018, November 12). The truth about illegal voting. *The Hill*. <https://thehill.com/opinion/judiciary/416225-the-truth-about-illegal-voting>.
- Goldberg, N. (2021, August 8). Is it time to let noncitizens vote in local elections. Some Americans think that's just nutty. *Los Angeles Times*. <https://www.latimes.com/opinion/story/2021-08-08/noncitizens-vote-school-board>.
- Hamilton, B. (1975). Zoning and property taxation in a system of local governments. *Urban Studies*12(2): 205–11.
- Hamilton, B. (1976). Capitalization of intrajurisdictional differences in local tax prices. *American Economic Review* 66(5): 743–53.

- Hesson, T. (2023, May 11). Title 42: What is the US border policy and what happens when it ends? *Reuters*. <https://www.reuters.com/world/americas/title-42-is-ending-us-mexico-border-what-is-it-what-happens-now-2023-05-05/>.
- Hirschman, A. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations and States*. Cambridge: Harvard University Press, vol. 25.
- Hoxby, C. (2000). Does competition among public schools benefit students and taxpayers? *American Economic Review* 90 (5): 1209–1238.
- International Labour Organization. (2021). *ILO Global estimates on international migrant workers results and methodology*. 3rd edition. https://www.ilo.org/wcmsp5/groups/public/---dgreports/--dcomm/---publ/documents/publication/wcms_808935.pdf.
- Kane, T. (2022, January 9). What’s wrong with noncitizen New Yorkers voting? *Why America?* <https://whyamerica.substack.com/p/whats-wrong-with-noncitizen-new-yorkers>.
- Kasperkevic, J. (2017, September 11). The American dream: How undocumented workers buy homes in the US. <https://www.marketplace.org/2017/09/11/american-dream-how-undocumented-immigrants-buy-homes-us/>.
- Kennedy, J., & Shah, N. (2023, March 28). DeSantis signs Florida’s biggest school voucher program expansion. *USA Today*. <https://www.usatoday.com/story/news/nation/2023/03/28/desantis-signs-floridas-biggest-school-voucher-program-expansion/11556334002/>.
- Kogan, V., Lavertu, S., & Peskowitz, Z. (2021, February 17). Who governs our public schools? Brookings Institute. <https://www.brookings.edu/blog/brown-center-chalkboard/2021/02/17/who-governs-our-public-schools/>
- Kollman, K., Miller, J., & Page, S. (1997). Political institutions and sorting in a Tiebout model. *American Economic Review* 87(5): 977–992.
- Landgrave, M., & Nowrasteh, A. (2016, May 26). Voice, exit, and liberty: The effect of emigration on origin country institutions. *CATO Economic Development Bulletin* No. 25.
- Lindahl, E. (1919). *Die Gerechtigkeit der Besteuerung: eine analyse der steuerprinzipien auf grenznutzentheorie*. Gleerup. (trans. as “Just Taxation: A positive solution,” 1958).
- Lowery, D. (1998). Consumer sovereignty and quasi-market failure. *Journal of Public Administration Research and Theory* J-PART 8(2): 137–172.
- Migration Policy Institute. (2019). Profile of the unauthorized population: United States. <https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/US>.
- National Center for Education Statistics. (2020a). Enrollment, poverty, and federal funds for the 120 largest school districts, by enrollment size in 2018: 2017–18 and fiscal year 2020. *Digest of Education Statistics*. https://nces.ed.gov/programs/digest/d20/tables/dt20_215.30.asp.

- National Center for Education Statistics. (2020b). Table 216.20, Enrollment of public elementary and secondary schools, by school level, type, and charter, magnet, and virtual status: 2009–10 through 2019–20. https://nces.ed.gov/programs/digest/d21/tables/dt21_216.20.asp?current=yes.
- National Center for Education Statistics. (2020c). Table 216.30, Number and percentage distribution of public elementary and secondary students and schools, by traditional or charter school status and selected characteristics: School years 2009–10 and 2019–20. https://nces.ed.gov/programs/digest/d21/tables/dt21_216.30.asp?current=yes.
- National Center for Education Statistics. (2022a). Table 216.20, Enrollment of public elementary and secondary schools, by school level, type, and charter, magnet, and virtual status: 2011–12 through 2021–22. https://nces.ed.gov/programs/digest/d22/tables/dt22_216.20.asp?current=yes.
- National Center for Education Statistics. (2022b). Table 216.30, Number and percentage distribution of public elementary and secondary students and schools, by traditional or charter school status and selected characteristics: School years 2011–12 and 2021–22. https://nces.ed.gov/programs/digest/d22/tables/dt22_216.30.asp?current=yes.
- Nguyen-Hoang, P., & Yinger, J. (2011). The capitalization of school quality into house values: A review. *Journal of Housing Economics* 20(1): 30–48.
- Nowrasteh, A., & Powell, B. (2020). *Wretched refuse? The political economy of immigration and institutions*. New York, NY: Cambridge University Press.
- Oates, W. (1968). The theory of public finance in a federal system. *The Canadian Journal of Economics / Revue Canadienne D'Economique* 1(1): 37–54.
- Oates, W. (1972). *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.
- Oates, W. (1981). On local finance and the Tiebout model. *American Economic Review* 71:93–98.
- Ostrom, V., Tiebout, C.M., & Warren, R. (1961). The organization of government in metropolitan areas: a theoretical inquiry. *American Political Science Review* 55(4). 831–842.
- Perry, M., Roger, L., & Wilders, K. (2022, December 22). Florida fastest-growing state for first time since 1957. US Census Bureau. <https://www.census.gov/library/stories/2022/12/florida-fastest-growing-state.html>.
- Peterson, P., & Rom, M. (1989) American federalism, welfare policy, and residential choices. *American Political Science Review* 83(3): 711–728.
- Raskin, J. (1993). Legal aliens, local citizens: The historical constitutional and theoretical meanings of alien suffrage. *Articles in Law Reviews & Other Academic Journals* 1044. https://digitalcommons.wcl.american.edu/facsch_lawrev/1044.

- Somin, I. (2008). Tiebout goes global: International migration as a tool for voting with your feet. *Missouri Law Review* 73(4): 1247–1264.
- Somin, I. (2010). Deliberative democracy and political ignorance. *Critical Review* 22(2–3): 253–279.
- Statista Research Department. (2023). US adults on the most important problem facing the country. <https://www.statista.com/statistics/323380/public-opinion-on-the-most-important-problem-facing-the-us/>.
- Tiebout C. (1956). A Pure theory of local expenditures. *Journal of Political Economy* 64: 416–416.
- U-Haul. (2022, January 4). U-Haul growth index: Florida has 10 of top 25 US growth cities. <https://www.uhaul.com/Articles/About/U-Haul-Growth-Index-Florida-Has-10-Of-Top-25-U-S-Growth-Cities-26381/>
- Urban Institute. (2023). State and Local Expenditures. <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/state-and-local-expenditures>.
- US Census Bureau. (2022). ACS 5-Year Estimates Detailed Tables 2009–2021. <https://www.census.gov/data/developers/data-sets/acs-5year.html>
- US Census Bureau. (2020). Table 1.10. State and local government finances by level of government and by state. Annual surveys of state and local government finances. <https://www.census.gov/programs-surveys/gov-finances.html>.
- Vyas, K. (2023, May 24). Surging numbers of young migrants try to reach US. *Wall Street Journal*. <https://www.wsj.com/articles/surging-numbers-of-young-migrants-try-to-reach-u-s-ce2bfc3e>.
- Wittman, D. (1989). Why democracies produce efficient results. *Journal of Political Economy* 97(6): 1395–1424.
- Wittman, D. (1995). *The myth of democratic failure: why political institutions are efficient*. Chicago: University of Chicago Press.