Immigrants in the Polycentric Metropolis: Centers, Housing, and Dispersion

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Abstract
The burgeoning literature on the settlement patterns of immigrants has not yet examined recent residential patterns of foreign-born populations in the context of local government geography. Yet local (municipal) government is an important arena for consideration of immigrant integration, political incorporation, and service delivery. This article explores the extent to which immigrants disperse across jurisdictions in three politically polycentric regions: the San Francisco Bay Area in the United States, the Randstad in The Netherlands, and Emilia-Romagna in Italy. Finding that dispersal is not consistently linked with city size in these regions, the article then explores the role of multifamily and rental housing, which consistently accompanies immigrant concentrations. To the extent that their entry into a larger number of jurisdictions offers a pathway toward political incorporation and integration, this finding suggests a role for inclusive housing policy across a wider range of city sizes.

Introduction
Immigration has increased in the past 25 to 30 years in the European Union (EU) and the United States, bringing with it both a growing backlash against immigrants (foreign-born residents) and increased efforts to improve the integration of immigrants into receiving communities. At the national level, policies and public discourse on both sides of the ocean are increasingly hostile

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toward immigrants with stricter admittance policies (CECODHAS, 2007) and increased difficulties gaining citizenship. This shift in policy goals is accompanied by a broader political shift to the right across many Member States of the EU and in the United States.

Regardless of the tenor of the debate at the national level, however, immigration continues, and subnational and local governments have often been left to respond in an ad hoc fashion to the needs of immigrants. In the United States, some local governments and states have reacted with punitive measures focused at illegal immigrants, but others—even outside central cities—have been much more accommodating (Jones-Correa, 2008). Although these local policy responses to immigration have begun to draw scholarly attention, less is known thus far about the characteristics of the settlement pattern and built environment that associate with higher or lower degrees of diffusion by immigrants across local governments within metropolitan areas.

To begin addressing this gap, this article examines whether and how polycentric urban regions (PURs)—which this article defines as metropolitan conurbations with multiple medium-size to large local governments—foster the dispersion of immigrants across a metropolitan area’s jurisdictions and explores policy and housing-market explanations for that dispersal. By considering regions in northern Europe, southern Europe, and the United States, the article seeks to find similarities and differences in regions with different immigrant and ethnic compositions, histories of social welfare policy, and housing market structures as a first step toward the generation of hypotheses that can be tested more broadly. The article approaches the issue by mapping and presenting quantitative data to begin to understand where immigrants live in these metropolitan regions and how their locations coincide with rental and multifamily housing.

The structure of the article proceeds as follows. The first section, which introduces the relationship among immigrant locations, the built environment, and polycentricity, is followed by a description in the second section of our three case-study regions. The third section describes immigrants’ concentration in those regions at the scale of municipalities, and the fourth section relates the level of concentration to housing type, tenure, and affordability. The final section brings together the findings and discusses policy implications. The article concludes that cities that (1) are large, (2) have high shares of rental housing, and (3) have high shares of multifamily housing all tend to accommodate higher than average shares of immigrants in the three regions, but the effect of these three factors varies substantially among the three regions. More research is needed to identify the role of individual and neighborhood factors, but, in particular, planners need to know more about the way in which housing and land use policies can build an urban pattern that enables immigrants to advance in whatever way they deem desirable.

**Immigrant Locations, the Built Environment, and the Polycentric Region**

When considering why immigrants live where they do within cities and neighborhoods, the article identifies four main sets of explanatory variables: (1) characteristics of the immigrant household, (2) established activity and settlement patterns, (3) characteristics of the built environment, and the (4) urban policy environment.
Characteristics of the immigrant household are probably the most important and best studied of the four variable sets. Studies of immigrants’ residential mobility and location decisions are embedded within a larger demographic literature. Such studies use microlevel data sets and provide keen understanding of the role of age, ethnicity/race, household structure, language acquisition, country of origin, education level, occupation, and gender in immigrants’ decisionmaking. This well-studied variable set may be considered the “agency” or “demand” side of the location equation; the remaining variable sets constitute the “structure” within which household and individual agents exercise their choices.

Second, immigrants and other ethnic groups base their decisions in part on an established geographic distribution of households across a housing market area according to class, race, ethnicity, household type, national origin, and sometimes religion. In cities with established enclaves of immigrants, new immigrants often gravitate toward these areas; they also often face discrimination when searching for housing elsewhere. A tight-knit community can offer a social network that can aid in the transition by offering connections to jobs, housing opportunities, and information. The location of employment opportunities also contributes to the spatial settlement patterns of immigrants. The jobs most often available to immigrants with low levels of education and/or limited language skills include low-wage jobs in what may remain in the industrial sector or in the service sector. The distributions of residences and employment do not usually change within the period in which a particular immigrant makes his or her location decision, although they might change within a few months in a very dynamic metropolitan area. In some situations, immigrants are isolated by deliberate policy.

Third, all households make decisions about location based in part on characteristics of the built environment. These decisions include the options they face in housing structures and tenure, which are in turn embedded within neighborhood environments. The availability of affordable and appropriate housing clearly shapes immigrants’ location decisions (Leerkes, Engbersen, and Van San, 2007). This set of built-environment characteristics generally changes more slowly than the distribution of households according to class, race, and so on across the metropolitan area. Immigrant households are particularly drawn to certain kinds of housing and neighborhoods. In particular, immigrants usually need to rent dwellings upon arrival and more often choose to live in multifamily or attached housing. Those who plan to return and maintain connections with family in their countries of origin may choose to rent as little as a room or even a bed for a few hours a day; even those who plan to settle permanently will often rent because they lack the income, wealth, employment stability, and credit history necessary to buy a house. In most urban areas, rental housing disproportionately concentrates in the multifamily housing stock. Attached housing further attracts immigrants because, in general, it is less expensive than detached housing and because it usually is established in neighborhoods where households do not need cars. Immigrants also sometimes seek neighborhoods where they can easily travel to a rich array of employment, social, religious, and cultural activities; such neighborhoods tend to have high land rents, which in turn contribute to market forces encouraging the development of high-density (multistory) housing.

Fourth, immigrant households (like all households) make decisions about where to live based in part on the urban policy environment in place at the time of their housing search. Some cities and nations welcome immigrants and accommodate them in short-term housing, for example. Legal
Immigrants who plan to remain for the long term may or may not have access to social housing; if allowed to live in social housing, certain immigrant groups (especially asylees) may be granted priority access to housing. As legal immigrants establish themselves in social housing, they may also provide access to undocumented coethnics. Social housing often isolates its residents, rather than integrating them, a problem that has led to a shift toward housing policies that disperse assisted tenants. Policies can also exclude immigrants, as when local governments in the United States require property owners to verify their tenants’ immigration status or establish law-enforcement relationships with U.S. Immigration and Customs Enforcement.

The housing policy environment extends far beyond assisted housing, of course, and into the realm of land use policy. Land use policy establishes the conditions under which new housing can be built and existing housing can be modified. To the extent that immigrants rely on attached housing, rigid housing regulation and enforcement that limit densification in established enclaves and flexibility in other locations may contribute to the creation of new enclaves. Plans and zoning ordinances, as well as infrastructure investment strategies, can facilitate or hinder the development of new high-density, mixed-use neighborhoods, which some observers have identified as important settlement sites for some immigrant households.

The third and fourth sets of explanatory variables—the built environment and urban policy—have longer periods of change than established activity and settlement patterns, and all three structural variable sets change more slowly than would be noticeable to a household over the course of its typical residential location search (usually considerably less than a year). The four sets of explanatory variables, illustrated in exhibit 1, influence one another at different time scales, arrayed top to bottom from fast to slow change.

Exhibit 1

Conceptual Model: Built Environment, Land and Housing Policy, Settlement Patterns, and Immigrant Location Choice
When decisionmakers and planners consider their choices for land use and housing policy, they consider—and often take as practically immutable—a range of built-environment characteristics. For example, cities often adopt zoning ordinances with maximum densities that match those of the existing built environment (arrow 1: built environment influences policy). Such regulations protect established neighborhoods, shielding them from the rapid or unconsidered change that might ensue in a deregulated environment (arrow 2: policy influences built environment), including the establishment of new immigrant neighborhoods.

Existing or prospective concentrations of low-income people, immigrants among them, can also influence both policy and the built environment. Decisionmakers might loosen zoning to allow immigrant clusters to intensify or conversely lock in certain policies to reduce the choices of immigrant households (arrow 3: concentrations of land occupants influence policy choice). Concentrations of immigrants can also lead to changes in the built environment—although mediated or moderated by land use policy—in, for example, the creation of more businesses in residential neighborhoods and the subdivision of existing housing structures and through the development of new structures in response to high demand (arrow 4: settlement pattern influences the built environment).

Individual immigrant households’ decisions are sometimes considered as a function of multifamily and rental housing stock (arrow 5: built environment influences household decisions), subsidized housing policies (arrow 6: policy influences household decisions), and residential patterns of coethnics as well as of “out groups” (arrow 7: settlement patterns influence household decisions). But households’ decisions can have feedback effects on the built environment (arrow 8), as when, for example, households partition housing structures. The same household would also influence settlement patterns (arrow 9), although perhaps only modestly, if it uses its new rooms to establish an informal business. Over the course of a few years, the sum total of individual household and worker decisions may have a marked effect on the settlement pattern and overall built environment, thereby occasioning shifts in the policy environment that reverse, dampen, or accelerate change in immigrant settlement patterns and the built environment.

Although many studies of immigration tend to treat the built and policy environments as exogenous variables and a few treat immigrant enclaves as dependent variables, a full understanding of why enclaves, built environment, and policies evolve is also fundamental to our understanding of immigrants’ location decisions. Although this article does not undertake at this point the explanation of the structural factors that are usually treated as exogenous to immigrants’ location decisions, it does outline some description of these location decisions and discuss directions for further research on “the structuring of structure,” concentrating in particular on the location of multifamily and rental housing in polycentric regions.

PURs offer a little-explored setting for the study of immigrant locations. Polycentrism is a multidimensional planning concept that has gained much ground recently in Europe and, to a lesser extent, the United States. Its exact definition is still under debate, but it generally encompasses a model based on multiple nodes of concentrated activities and population that are separated in space but functionally connected. The concept is used as both a normative ideal and a model for the observed reality of metropolitan areas. As a spatial planning strategy, polycentrism has its roots in Dutch spatial planning and has now spread to all levels of the EU thanks to the introduction in
1999 of the European Spatial Development Perspective (CSD, 1999). Supporters of polycentrism contend that it will integrate the diverse regions of the Member States of the EU, both spatially and conceptually. Its European critics point out that its definitions are fuzzy, that it may operate in different ways at different scales, and that it should not be embraced as a normative ideal in the absence of sufficient empirical evidence about its effects (Davoudi, 2003). In the United States, polycentrism has also emerged—in the guise of “the Regional City”—as a normative model for postwar planning (Stein, 1954) and now as a metropolitan variant on the New Urbanism (Calthorpe and Fulton, 2001). Most American studies about polycentrism have concentrated on its relevance for economic geography—that is, the existence and evolution of new nodes of employment (Anas et al., 1998; Giuliano et al., 2007)—rather than on its promise and threats for governance.

Observers have made many arguments both supporting and opposing the deconcentration of low-income households at the neighborhood scale (Goetz, 2003; Turner, 1998); these arguments are also sometimes applied to immigrants. The dispersal of housing may relieve some of the demand pressures that the concentration of jobs in services in the city center can create. It may also deconcentrate poverty, creating more opportunities for immigrants in mixed communities. For low-income immigrants, clusters are often viewed as impediments to the integration process because they often have less access to economic resources and tend to be more linguistically isolated. In addition, these areas often are characterized by poor-quality housing and overcrowding (Pamuk, 2004). Immigrant clustering is especially an issue for younger generations, because they often lack access to schools where they can encounter native-born children; they also feel the stigmatization more than do the older generations, who are more comfortable living within concentrated ethnic communities. Some research suggests that living in ethnic neighborhoods limits upward mobility of the next generations, especially where ethnic minority children concentrate in schools where they receive too little instruction in mastering the native language (Kruythoff, 2003). Other research, however, is much more optimistic about the fate of the second generation in big cities, at least as experienced in New York City (Kasinitz et al., 2008).

Whether and how to promote the deconcentration of immigrants or low-income residents among jurisdictions within metropolitan areas, however, can and should be considered independent of the debate over neighborhood-level concentration or dispersal. Immigrant incorporation is a dominant goal in current American and EU policy. How will metropolitan deconcentration (regardless of concentration at the neighborhood scale) help reach or threaten this goal and how, in turn, will polycentrism affect metropolitan deconcentration?

This article explores PURs in which a group of between 4 and 15 medium-size to large jurisdictions accounts for more than one-half the metropolitan population. Metropolitan areas in which fewer than 4 jurisdictions account for more than one-half the regional population are mono-, bi-, or tri-centric; those in which the top 15 jurisdictions account for less than one-half the metropolitan population are better characterized as weakly centered. In such regions, significant numbers of local jurisdictions have enough inhabitants to create internal demand for employment, variety in housing and neighborhood type, and government service (bureaucratic) complexity (that is, beyond “caretaker” functions, into the realm of housing, economic development, and welfare policy). With multiple such jurisdictions, immigrants arguably can choose among a larger number of packages of local public goods (Tiebout, 1956) than would be available to them in nonpolycentric regions.
PURs might assist in immigrant incorporation through the following process. With multiple municipal destinations for immigrants, multiple policy responses will emerge—both backlash and accommodating—and immigrant incorporation will become a metropolitan issue, not just a state issue. In early rounds, battle lines may be drawn not just on central city-suburbs lines but also among suburbs. Immigrant incorporation will depend on the balance and resolution of these responses, but a proimmigrant resolution is probably more likely when the average jurisdiction is more complex and diverse (that is, when the region is more polycentric). As immigrants disperse across such a polycentric region, immigrant representatives are likely to gain election or appointment to local decisionmaking bodies. Their participation in large numbers in local politics will familiarize them to native-born decisionmakers from other jurisdictions to the extent that regional institutions and intergovernmental exchanges are common.

In addition, PURs may also foster the development of a broad and dispersed array of civil society institutions that work both to change policy and to respond to immigrants’ needs. Community development corporations (CDCs) in the United States, for example, exist in sometimes uneasy tension with local government, carrying out policy by delivering housing, job training, and social services, but they also are dependent on local government for funding. CDCs also, however, respond to and organize neighborhood-based constituencies (including immigrant enclaves).

In all, then, the argument that PURs facilitate resilient responses to rapid immigration presupposes that PURs offer a larger number of governmental and civil-society arenas for experiments and experiences of immigrant settlement. Compared with a region with one large central city and many very small jurisdictions, a PUR can conceptually begin in early rounds by accommodating immigrants in several medium-size jurisdictions, each of which has a significant number of neighboring jurisdictions which, though smaller, may more closely resemble their larger neighbor than the small suburbs of a monocentric urban center. Emulation of the built environment and policies of such a medium-size neighbor is more likely than emulation of the built environment and policies of the largest city in the region.

The main goal of this article is to demonstrate in three examples of PURs that immigrants are dispersed among municipalities and that this dispersal relates, at least in part, to characteristics of the housing stock: multifamily and rental housing. At least in the United States, such housing is often excluded from small suburbs by deliberate local policy choices (Danielson, 1976; Pendall, 2000). Therefore, a large proportion of immigrants cannot live in substantial numbers of jurisdictions constituting a large share of metropolitan space. In addition, these medium-size and large jurisdictions—more than smaller centers—may tend to be generators and targets of housing policy initiatives that encourage the development of new immigrant neighborhoods.

The next section of the article introduces the three case-study regions by briefly summarizing the characteristics of immigrants in each region before turning to a discussion of their urban structures and immigrant settlement patterns. The following section outlines important policy initiatives that are poised to reinforce the “dispersed concentration” of immigrants in these metropolitan areas.
Population Concentrations in Three Polycentric Regions

The three polycentric regions compared in this article include the Randstad in The Netherlands, the San Francisco Bay Area in California, and the region of Emilia-Romagna in Italy. The Randstad (translated as “rim city”), probably the archetypal PUR, is a horseshoe-shaped region of The Netherlands containing the nation’s four largest cities: Amsterdam, The Hague, Rotterdam, and Utrecht (exhibit 2).² The Randstad’s total population in 2005 of 7.5 million constitutes 46 percent of The Netherlands’ total population (exhibit 3). The region also accounts for about one-half of the country’s jobs. The area’s center, the Green Heart, has been protected from development for more than 50 years; as a result, the predominant land use in the Randstad is rural, and only 26 percent of its total area is considered urban (Regio Randstad, 2001).

The establishment of The Netherlands’ national capital at The Hague in the 17th century and the convergence of the national railway network in Utrecht (OECD, 2007) underscore the fact that The Netherlands has long discouraged the development of a single, strong population center. The Randstad is both a consequence and a manifestation of this embrace of small centers. As a planning concept, the Randstad has existed for nearly 40 years, but despite sometimes-enthusiastic rhetoric,

² Opinions differ on what makes up the Randstad. For this article, we use the four provinces of Flevoland, North Holland, South Holland, and Utrecht.
it continues to function primarily as three separate subregional urban systems (OECD, 2007) organized around (1) Amsterdam (2007 population, 755,605), (2) The Hague (2007 population, 475,681) and Rotterdam (2007 population, 582,951), and (3) Utrecht (2007 population, 294,737) (Statistics Netherlands 2009). In recent years, local and national decisionmakers have staked the international competitiveness of The Netherlands on its ability to create at least the perception and, better, the reality of a metropolitan region with sufficient population and economic activity to claim “global city” status (Regio Randstad, 2001).

The Bay Area is also a clearly polycentric region (exhibit 4; see also Cervero and Wu, 1997; Lee, 2007), with three major cities—San Francisco (2006 population, 744,041), San Jose (2006 population, 929,936), and Oakland (2006 population, 397,067)—that account for less than one-third of the region’s total population of 7.2 million (ABAG, 2007; U.S. Census Bureau, 2006). Indeed, only when one adds the populations of the 14 largest cities and urban counties3 out of the region’s total of 110 jurisdictions (101 municipalities and 9 urban counties) does one account for more than one-half the metropolitan population as of 2000.

The Bay Area’s polycentricity reflects both geographic and economic transformations. The San Francisco Bay separates the historic central core city, San Francisco, from the rest of the region and, indeed, from the rest of the continent; Oakland, across the bay in Alameda County, first grew after becoming the terminus of the Central Pacific Railroad; and Berkeley, just to the north, was designated the first University of California campus. The great 1906 earthquake sent a wave of San Francisco residents to Berkeley and Oakland, where they moved into streetcar-oriented housing developments that grew rapidly between 1910 and 1930. World War II established new sites of defense production in areas outside San Francisco, and nearby cities (for example, Richmond, Oakland, Vallejo, and San Rafael) became magnets for immigration, including the region’s first large influx of African Americans. The third center of population concentration is in Santa Clara County, which grew up starting in the 1960s around the civilian and defense-related industries of Silicon Valley.

3 County governments in California are responsible for planning and development policy for areas outside municipal boundaries. These population figures are based on residents outside city limits.
Emilia-Romagna, situated in the northern half of Italy, covers an area totaling 22,124 square kilometers (exhibit 5). It is the fifth largest of the 20 regions in Italy, with a population of 4.2 million (Istat, 2008). Many of the most populous cities of Emilia-Romagna were first established more than 2,000 years ago as way stations along the Roman Via Aemilia (completed in 187 BCE). These cities include the regional capital, Bologna (2006 population, 373,026), and the cities of Parma (2006 population, 177,069), Reggio nell’Emilia (2006 population, 159,809), Modena (2006 population, 180,080), and Ravenna (2006 population, 151,055). Emilia-Romagna has one of the highest gross regional products in Italy and is well known as part of the “Third Italy,” with a thriving network of small and medium-size businesses (Becattini and Coltorti, 2006; Rinaldi, 2005) as well as prestigious automobile manufacturers Ferrari S.p.A. and Automobili Lamborghini Holding S.p.A.

The region’s polycentric development appears to be a result of several factors, beginning with the original Roman settlement. After World War II, Emilia-Romagna was one of the most devastated regions in Italy. To spur economic growth, the left-wing government implemented a strategy of promoting small business by encouraging employee ownership and consumer and agriculture cooperatives and encouraging the development of an institutional structure to support small businesses (Logue, 2006). More recent civic traditions within the region contributed to strong communities and likely helped the formation of strong economic networks. In past decades, strong planning visions and innovative dispersed local governments have helped to maintain the polycentric regional form.
**Exhibit 5**

Population Centers and Immigrants, Emilia-Romagna (Central Section), 2001

Immigrant Characteristics and Dispersal Patterns in the Regions

Among the three regions, the Bay Area—with 30 percent of its population consisting of foreign-born residents—has the highest share of immigrants (exhibit 3). The Randstad also has a significant percentage of foreign-born residents, at 14 percent. Italy, historically a country of emigration, has only relatively recently started to receive immigrants in large numbers. In Emilia-Romagna, 7.5 percent of the population consists of foreign-born noncitizens, but this number is expected to grow in the near future. In these each of these three regions, immigrants make up a larger proportion of the population than they do in each country’s national average.

The origin of immigrant populations often acts as a significant factor in immigrants’ settlement patterns within the region and ultimately the integration process. The table in exhibit 6 shows the

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*These numbers, especially for the Italian case, do not reflect the rapid influxes of immigrants in the past 5 years. Italy, as a whole, has experienced unprecedented spikes in immigration from the newly admitted Member States in the EU from Eastern Europe and from around the Mediterranean.*
significant variation in the origin of the regions’ foreign-born populations. The Randstad has the greatest continental diversity. One-third of its foreign-born residents are from Europe; of these residents, about one-half are from EU countries and one-half are from non-EU countries. One-fifth of the remainder of the Randstad’s foreign-born residents are from Africa, one-fifth are from Asia, and one-fourth are from the Americas. In Emilia-Romagna, most foreign-born residents are from Europe (42 percent) and Africa (35 percent), with most of the remainder coming from the Americas. In the Bay Area, most foreign-born residents come from Asia and Oceania (54 percent); the remaining foreign-born residents come from the Americas (35 percent) and Europe (10 percent). National policies, location on the globe, and existing ethnic communities all influence the origins from which immigrants arrive.

Naturalization rates also differ among the three regions. According to Census Bureau estimates, a little more than one-half of foreign-born residents living in the Bay Area in 2006 were citizens. Of the 1.1 million foreign-born residents living in the Randstad in 2005, 62 percent were citizens. In contrast, foreign-born residents living in Emilia-Romagna have not obtained citizenship in large numbers. In 2001, only about 270,000 of the region’s 1.45 million foreign-born residents had become citizens. Naturalizations are much less common in Italy than in The Netherlands; only about 8,000 foreign-born residents were naturalized annually in Italy in the 1990s, compared with as many as 86,000 foreign-born residents naturalized in The Netherlands in 1996. None of these statistics account entirely for the often-large numbers of undocumented (illegal) immigrants living in these regions, although most censuses do attempt to count illegal residents.

All three regions have been the focus of recent studies of immigrant clustering and dispersal. In her analysis of immigrant clusters in San Francisco, Pamuk (2004: 289) contended that “new and different forms of spatial clustering” are emerging; ethnic enclaves and communities have persisted in San Francisco, even among affluent and more acculturated immigrant groups (especially among Chinese residents). Buzar, Hall, and Ogden (2007), in their investigations of the social-spatial transformations occurring in Bologna, mirrored this sentiment by arguing that complex demographic

### Exhibit 6

**Origin of the Foreign-Born Population in the Three Regions: San Francisco Bay Area, the Randstad, and Emilia-Romagna, 2005–07**

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<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Percent</td>
<td>Total</td>
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<tr>
<td>Total</td>
<td>2,027,277</td>
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<td>1,093,909</td>
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<td>Europe</td>
<td>194,759</td>
<td>9.6</td>
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<td>187,518</td>
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<td>19,250</td>
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<td>Non-EU nations</td>
<td>167,480</td>
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<td>1,061,736</td>
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<tr>
<td>Oceania</td>
<td>24,192</td>
<td>1.2</td>
<td>8,776</td>
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*Foreign born is percent of total population; continental distribution is percent of foreign born.

Sources: U.S. Census Bureau, 2000 Census of Population and Housing, SF1: Table P1, SF3: Table P21; ISTAT Census, 2001, Variables P1, ST01-07; Centraal Bureau voor de Statistiek, Population: age, sex, and nationality, January 1, 2007
trends “are leading to the social diversification, residentialisation and fragmentation of the urban fabric” (Buzar, Hall, and Ogden, 2007: 64). Several kinds of residential clusters have also emerged in the Netherlands, including both low-income enclaves of immigrants from non-Western countries (predominantly from Morocco and Turkey) and affluent communities of foreign-born residents from Western countries (Musterd and Deurloo, 2002; Zorlu and Mulder, 2008).

The spatial concentrations of foreign-born residents vary widely across the regions despite some common threads. Emilia-Romagna has the lowest levels of immigrant concentration at the municipal scale; the Bay Area has levels just slightly higher (exhibit 7). The most significant clustering patterns are found in the Randstad. There, 30 percent of the population lives in municipalities that do not contain any immigrants at all; at the other end of the distribution scale, more than 75 percent of the foreign-born population lives in jurisdictions, accounting for only 30 percent of the jurisdictions’ total population. Meanwhile, in the Bay Area and Emilia-Romagna, distribution patterns are far more even. In these regions, about three-fourths of foreign-born residents live in municipalities, accounting for 60 percent of the cities’ population.

National variations in the spatial concentration of foreign-born residents are partly a consequence of immigrants’ socioeconomic status, years since arrival, employment niche, age, gender, and reason for immigration (including, for example, employment, refuge, and family reunification). Various kinds of immigrants are arriving in the United States, The Netherlands, and Italy, ranging from temporary, unskilled workers to people employed in high-tech industries. Immigrants to the

Exhibit 7


Sources: U.S. Census, 2000 Census of Population and Housing, SF1: Table P1, SF3: Table P21; ISTAT Census, 2001, Variables P1, ST07; Centraal Bureau voor de Statistiek
Bay Area and the Randstad are very diverse in socioeconomic status, employment, and reason for immigration. Immigrants to Emilia-Romagna, in contrast, tend to concentrate in service-sector jobs—especially in positions that involve caring for the elderly—and in the region’s manufacturing and agroindustrial operations.

Immigrants’ concentration also partially relates to concentrations of the native-born population (Leerkes, Engbersen, and Van San, 2007). Europe, in general, has less economic and racial segregation than the United States does; although the San Francisco region has less African-American–White and Latino-White segregation than many Midwest and Northeast metropolitan areas in the country have, racial segregation is still quite pronounced, as is the separation between high- and low-income households.

Exhibit 2 shows that the concentration of immigrants in the Randstad’s largest cities extends to their immediate suburbs, making Amsterdam, Rotterdam, and The Hague not only concentrations but nuclei of immigrant settlement. Most of the municipalities with few or no immigrants are small ones at some distance from the urban centers. The legacy of segregation in the cities of the Randstad was established during the late 1970s, when large influxes of immigrants from former Dutch colonies concentrated in massive housing blocks on the periphery of the urban center. Concentrations of immigrants also appear in other locations in the region; the nature of those concentrations requires further research.

Exhibit 4 shows a pattern of spatial concentration in the Bay Area that differs from the high centralization around the Randstad’s three largest cities; a strong concentration occurs in San Francisco and its two immediate suburbs of Daly City and South San Francisco. With 53 percent of the population consisting of immigrants, Daly City has the highest share of foreign-born residents of any of the three PURs. A more widespread swath of immigrants than that found in the other PURs lives in cities extending around the southern margin of San Francisco Bay. In many cities, foreign-born residents exceed one-third of the population. Asian immigrants tend to concentrate in Santa Clara County (Silicon Valley) and San Francisco and in its two immediate southern suburbs, Daly City and South San Francisco. Latino immigrants, in contrast, tend to live in the East Bay counties of Alameda and Contra Costa, with heavy concentrations in Oakland, Hayward, Richmond, Concord, and Pittsburg. Large numbers of foreign-born Latinos also live in the city of San Jose, however, which has historically served as the “bedroom city” of Silicon Valley and is the metropolitan area’s largest city.

Emilia-Romagna has a very low level of immigrant clustering (exhibit 5), with the highest shares of immigrants living in the region’s smallest comuni (municipalities). The larger population centers, in contrast, have comparatively low concentrations of immigrants. The tight housing market in several major cities, especially Bologna, has led immigrants to seek housing in comuni where they can find low-cost rentals, often within the housing stock that would otherwise sit vacant. In the Province of Bologna, such comuni are located in the Apennine Mountains at a distance of 30 to 40 kilometers from the city of Bologna. Buzar, Hall, and Ogden (2007) identified a tendency for immigrants in the city of Bologna to cluster in the historic center and in the former industrial districts in the northern part of the city. Despite these tendencies, they also argued that no strong segregation patterns exist anywhere in the city, and, where they do exist, the patterns are diffuse and at a scale below the neighborhood level.
A first hypothetical pathway from polycentricity to immigrant concentration occurs through the mechanism of city size. That is, immigrant concentrations are hypothetically a direct function of city size, and polycentric regions will have more dispersed populations because they have more medium-size and large cities than either monocentric or noncentered regions. The three PURs studied in this article provide limited support for such a supposition, with the strongest link in The Netherlands and practically no connection in Emilia-Romagna (exhibits 8, 9, and 10). Other factors must clearly be at work in the municipal dispersion of immigrants.

**Exhibit 8**

**City Size and Percent Immigrant, the Randstad, 2005**

![Graph showing the relationship between city size and percent foreign born in the Randstad, 2005. The equation is $y = 0.0403 \ln(x) - 0.3291$ with $R^2 = 0.5986$.]

**Exhibit 9**

**City Size and Percent Immigrant, San Francisco Bay Area, 2000**

![Graph showing the relationship between city size and percent foreign born in the San Francisco Bay Area, 2000. The equation is $y = 0.0368 \ln(x) - 0.1593$ with $R^2 = 0.1716$.]
Housing and Immigrants’ Residential Clustering

A first factor that correlates with immigrant settlement patterns is the type of housing units available. Immigrants tend to move into multiunit structures, while relatively low numbers of immigrants settle in areas with predominantly single-family housing. Multiunit structures tend to be built in higher density areas, where people can get around without their own cars and where a richer mix of economic activities can occur. This phenomenon is also likely closely tied to the issue of housing affordability and tenure, because single-family homes are usually more costly to purchase or rent than are condominiums or apartments and units in multiunit structures are more often rented than are single-family homes.

Exhibits 11, 12, and 13 show the negative correlation between the percentage of the population that is foreign born and the percentage of the housing units that are single-family detached homes. As shown previously, high concentrations of immigrants tend to cluster in the larger urban centers of the San Francisco Bay Area, especially San Francisco and San Jose, but immigrant concentration is not solely a function of jurisdictional population (exhibit 12). Daly City, which has the highest concentration of immigrants (just more than 50 percent), has only about 100,000 residents, but 45 percent of its housing stock consists largely of single-family attached homes and apartment structures. Indeed, none of the jurisdictions in which more than three-fourths of the housing stock consists of single-family detached homes has a concentration of immigrants as high as that of the regional average.

This inverse relationship also holds true for both the Randstad and Emilia-Romagna. In The Netherlands, the largest cities (Amsterdam, Rotterdam, and The Hague) appear more attractive
to immigrant families than their share of single-family homes alone would predict. Here, social housing policy and the timing of immigrant influxes explain part of the difference, while economic (employment) and social factors probably explain the remainder. In Emilia-Romagna, in contrast, the city of Bologna’s share of immigrants is lower than one might expect, given its large population and high share of multifamily dwellings. The presence of university students and the strong demand for inner-city housing by high-status Italians have crowded many immigrants out of that city (Bernadotti and Mottura, 1999).

A second factor that has been identified as having an effect on the distribution patterns of immigrants is the availability of rental housing. Immigrants, especially recent arrivals, do not always

**Exhibit 11**

Percent Single-Family Detached Housing and Percent Immigrant, The Netherlands and the Randstad (Largest Cities Only), 2005

![Graph 1](image1)

![Graph 2](image2)

*Note: Dot size indicates municipality population.*
Exhibit 12
Percent Single-Family Detached Housing and Percent Immigrant, San Francisco Bay Area, 2000

Note: Dot size represents city size.

Exhibit 13
Percent Single-Family Detached Housing and Percent Immigrant, Emilia-Romagna, 2001

Note: Dot size represents city size; represents only cities with 15,000 or more residents.
Immigrants in the Polycentric Metropolis: Centers, Housing, and Dispersion

Plan to settle in the country to which they immigrate. Those who do plan to stay often cannot obtain jobs that pay enough to afford mortgage payments and rarely have access to the necessary credit to buy a home. The table in exhibit 14 compares the housing mix across the regions, with owner-occupancy rates ranging from 70 percent in Emilia-Romagna to 57 percent in the Bay Area and 50 percent in the Randstad.

Exhibits 15, 16, and 17 show the positive correlation between the percentage of foreign-born residents and percentage of households renting their housing. The relationship is strongest in the Randstad, but rental housing and city size are also very strongly correlated, suggesting an interlocking relationship there between city size, city centrality, multifamily housing, and rental housing. In the Bay Area and Emilia-Romagna, in contrast, the relationship among city size,

### Exhibit 14

Housing Characteristics in the Three Regions: San Francisco Bay Area, Emilia-Romagna, and the Randstad, 2000–06

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total housing units</td>
<td>2,520,940</td>
<td>1,970,977</td>
<td>3,288,159</td>
</tr>
<tr>
<td>Occupied housing units</td>
<td>96.8%</td>
<td>84.6%</td>
<td>96.3%</td>
</tr>
<tr>
<td>Vacant housing units</td>
<td>3.2%</td>
<td>15.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Owner-occupied housing</td>
<td>57%</td>
<td>70%</td>
<td>50%</td>
</tr>
<tr>
<td>Renter-occupied housing</td>
<td>43%</td>
<td>19%</td>
<td>50%</td>
</tr>
<tr>
<td>Other occupied housing</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: Tenure percentages are as a share of occupied housing units and do not total to 100 percent because of rounding.
Sources: U.S. Census Bureau, 2000 Census of Population and Housing, SF1: Table P1, H1, H3; ISTAT Census, 2001, Variables P1, ST01, A1-5; Centraal Bureau voor de Statistiek, Housing Stock 2006

### Exhibit 15

Percent Rental Housing and Percent Immigrant, the Randstad, 2005

Note: Dot size indicates municipality population.
Exhibit 16
Percent Rental Housing and Percent Immigrant, San Francisco Bay Area, 2000

Note: Dot size represents city size.

Exhibit 17
Percent Rental Housing and Percent Immigrant, Emilia-Romagna, 2001

Note: Dot size represents city size; represents only cities with 15,000 or more residents.

Sources: U.S. Census, 2000 Census of Population and Housing, SF1: Tables P1, H1, H3, and SF3: Table P21; ISTAT Census, 2001, Variables P1, ST01, and A1-5; Centraal Bureau voor de Statistiek, Housing Stock 2006
location, structure types, and tenure do not interlock as strongly. In those two regions, rental housing also correlates with the percentage of foreign-born residents. The Randstad’s percentage of total households renting their housing is the highest of the three regions, at 43 percent. In Amsterdam and Rotterdam, homeownership hovers at around 20 percent, while social housing accounts for more than 50 percent of the housing stock (OECD, 2007). Italy has long been characterized by high rates of homeownership (71 percent in 2001 [Istat, n.d.]), and policies in that country have been largely aimed at further strengthening homeownership (Longo, 2006). Italy also has a large number of vacant housing units, partly a consequence of its now-abandoned rent control policy (van Hees, 1991). Recently, demographic shifts have resulted in a higher demand for rental housing by students, young professionals, and immigrants (Longo, 2006). This increased demand has occurred during a time when the available supply of low-cost rental housing is decreasing.

Perhaps the largest factor affecting immigrant dispersion across a region is the availability of affordable housing. Immigrants often occupy the lower price levels of housing markets because many lack language skills or education to find high-paying employment. Immigrant clusters can often be attributed to the location of affordable housing within the region. Data on housing costs (rents and home sale prices), available in nationally published sources for the Bay Area, are not available for The Netherlands or Italy. This topic remains an area requiring further research, but we can make tentative remarks about it now.

Housing affordability is the largest challenge that residents of the Bay Area face. The region ranks among the most expensive places to live in the United States, and prices continue to climb. Many people consequently cannot afford to live near where they work and must travel long distances from the job centers to the far reaches of the region to find affordable housing (ABAG, 2002). Despite concentrated efforts to plan and construct new housing in the region, supplies still fall short of the ever-increasing demand (ABAG, 2007).

Social policy and housing policy have played important roles in the dispersion of Emilia-Romagna’s immigrant population. In Emilia-Romagna, policymakers at the regional level began devoting resources to temporary housing centers as early as 1991, working with the comuni to identify locations for these group-housing structures. Between 1992 and 1995, 48 of these “first housing” centers were built in municipalities spread across the region; another 14 projects, with 350 dwellings, were built for medium-term occupancy in 7 of the region’s 9 provinces (Giardini, 2003). Deliberate policy, therefore, has played some role in the dispersal of certain migrant populations among multiple medium-size and large population centers, especially among single men who wish to maximize their savings and perhaps return to their countries of origin (Bernadotti and Mottura, 1999).

Private housing market characteristics have strongly influenced immigrant families’ dispersal in Emilia-Romagna. These families require affordable rental housing but often cannot find it in the larger and medium-size cities, partly because of competition with university students (in the comuni of Bologna and Modena). Furthermore, longstanding efforts to renew historic city centers have reduced the number of low-value central neighborhoods that might form nuclei for new

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5 Dutch social housing consists of both municipally owned and nonprofit-owned housing usually available for rent at below-market rates.
immigrant enclaves, as has occurred in Turin and Milan (Giardini, 2003). Consequently, immigrant families often seek housing farther away from the city center. In the Province of Bologna, their destinations have often been comuni in the Apennines, where the housing stock has stood unused and without modern services for many years (Bernadotti and Mottura, 1999).

In The Netherlands, because so much of the rental housing is government regulated, the small proportion of units available on the open market is extremely expensive. Many middle-income households live in social housing; although some observers see this situation as inequitable, others contend that it is an intentional and desirable effect of policies aimed at maintaining economically integrated neighborhoods (Boelhouwer, 2002). The lowest level of housing turnover has occurred in some of the more desirable parts of Amsterdam, especially, and immigrants have had fewer opportunities to choose housing in good neighborhoods.

**Integrating the Findings and Policy Implications**

Together, these findings suggest that sometimes, but not always, direct relationships occur between city size and the share of foreign-born residents and that generally independent relationships occur between rental housing and multifamily housing on one hand and the share of immigrants in a city on the other. Larger cities tend to have higher shares of multifamily housing than do medium-size and small cities, and multifamily housing tends to be rented more often than detached homes are. Therefore, based on these cases, we support the hypothesis that a part of the pathway from polycentricity to immigrant dispersion is a tautology. Polycentric regions, by definition, have more medium-size and large cities; such cities tend to accommodate more than their share of immigrants, simply because of their size. As a result, polycentric regions tend to have more dispersed immigrant settlement than monocentric or noncentric regions do.

The relationship is obviously more complex than that, however. In particular, we find a consistent moderate-to-strong relationship between housing type (multifamily) and tenure (rental) on one hand and the percentage of foreign-born residents on the other. In the Randstad, where immigrants are more highly concentrated than in the other two regions, city size, structure type, and tenure all correlate fairly strongly. The largest Dutch cities have the highest shares of multifamily and rental housing, and, along with their immediately adjacent municipalities, they have the highest concentrations of immigrants. Rental and attached housing also correlate with the concentration of foreign-born residents in the Bay Area, but cities’ populations have a weaker relationship with their share of rental and attached housing in the Bay Area than they do in the Randstad.

Further research on the dispersion of immigrants will require more comprehensive data than we have had available for this study. In particular, in the case of the Randstad, detailed information on the composition of the housing stock (structure type) for smaller municipalities would be helpful. In all the cases, the most satisfying model explaining immigrants’ location patterns would integrate data about individuals within their household context (for example, age, income, education, language proficiency, gender, marital status), neighborhoods (for example, share of immigrants, affordability), cities (for example, city-level policies on immigrants and housing), and labor market areas.
It is especially important to maintain the focus above that of individuals, households, and neighborhoods, because planners can use many important and accepted policymaking tools at these higher levels. In all these regions (and beyond), we find three main sets of policies that can contribute to the housing component of immigrant location decisions: (1) land use planning and policy, (2) assisted (subsidized) housing policy, and (3) area redevelopment (urban renewal) (Deldadetsima, 2003).

Land use planning—along with its regulatory and implementation arms—sets the rules for developing higher density housing; it also can promote, discourage, or ignore the rich mix of commercial and residential uses that often occur in immigrant neighborhoods. In all three regions, land use planning is quite strong. All municipalities in the Bay Area, in addition, must abide by strong housing plan rules that link land use planning to the need for housing for those of all income ranges (Lewis, 2003). This mandate has led many cities to accommodate at least some high-density (and, thus, “immigrant-friendly”) housing even when their residents would prefer to exclude it. We know of no similar mandates in either the Randstad or Emilia-Romagna.

Assisted housing policy also plays an important but underresearched role in the location of immigrants. Anecdotally, all three regions have strong histories of providing social housing. The legacy of these programs in the Randstad is arguably much stronger in the big cities than in medium-size and small ones, with such notable exceptions as the new town of Almere. Immigrants gained access to public housing in The Netherlands in the late 1970s, just as Almere’s construction was beginning; Dutch families found this housing less appealing than did new immigrants from former Dutch colonies, and, consequently, large concentrations of immigrants occurred in the new social housing projects. Although public housing in the Bay Area was at first provided mainly in the biggest cities, there were enough large cities to spread public housing to nuclei around the region, and defense housing in Richmond, Oakland, Vallejo, and Marin City reinforced this decentralized centrality. More important, however, are the recent housing plan requirement and the mandate that cities using tax increment financing to promote redevelopment dedicate at least 20 percent of the tax increment to affordable housing. Almost all cities use redevelopment; furthermore, most cities in the region have adopted inclusionary zoning that requires market-rate developers to provide affordable units before they can receive approval for development. Complementing the potentially decentralizing effects of the region’s affordable housing policies, federal government housing policy also encourages decentralization, especially as a result of the shift from public housing toward tenant-based assistance. The demolition of some of the region’s most troubled affordable housing projects and their replacement with mixed-income, lower density developments under the HOPE VI program have also played some role in the deconcentration of assisted households. In the Bologna PUR, affordable housing has been provided historically by cooperatives that are widely dispersed throughout the region. More recently, in direct response to the emergence of new immigrant populations—especially single men—Emilia-Romagna’s government has funded a series of short- and medium-term accommodations that have been constructed in many different cities (Bernadotti and Mottura, 1999). National policies in Italy have been much less helpful for renters or immigrants, however; the broader lack of investment and incentives for rental housing construction has led to problems not only for immigrants but for all households that cannot afford or do not wish to buy houses.
Area redevelopment policy also affects immigrants' ability to live in some central and older neighborhoods. The countries of all three regions have recently experienced the redevelopment and upgrading of central-city neighborhoods. It is unclear, however, whether these programs have had the massive displacement effects that urban renewal had on immigrants in the United States; one of the most infamous U.S. cases was the destruction of Boston's diverse, immigrant-rich West End neighborhood and its replacement with highrise public housing (Gans, 1962). Recent U.S. redevelopment projects have had more modest budgets, greater upfront private-sector involvement, and a stronger emphasis on upgrading existing housing and neighborhoods when compared with the publicly funded wholesale demolition of earlier urban renewal. Renewal of central Bologna, too, has been a project not of removal and replacement but of upgrading existing housing and neighborhoods. The effects on immigrants, therefore, may be less direct than in the past, as housing prices rise in the wake of upgrading. Recent upgrading programs in The Netherlands, in contrast, may involve more displacement of immigrants from low-rent areas (Kruythoff, 2003). This issue, too, deserves more general study and hypothesis formation within the context of research on gentrification.

Conclusions and Directions for Further Research

Polycentrism is emerging as an influential spatial planning model on both sides of the Atlantic Ocean. The comparative framework of this article intends to give some preliminary indications of future directions for research in the areas of housing strategies in polycentric urban regions and the particular situations of immigrants. This discussion of three case studies of PURs in the United States and Europe—the San Francisco Bay Area (United States), the Randstad (The Netherlands), and Emilia-Romagna (Italy)—shows how this spatial strategy has manifested in diverse settings.

PURs face unique challenges and opportunities when tackling such issues as housing for immigrants. Polycentrism may facilitate the "concentrated deconcentration" of immigrants away from only one or two central cities while still promoting minor clusters of immigrants in many small, medium-size, and large cities throughout a region. This scenario could enable traditional ethnic enclaves' informal support systems to exist to a certain extent without isolation and stigmatization. On the other hand, polycentrism might pose special challenges for immigrant settlement and incorporation in metropolitan regions. Immigrants have historically become gradually more politically powerful in the United States, thanks to their concentration in major "gateway cities" such as New York, Chicago, Miami, San Francisco, and Los Angeles. To the extent that immigrants disperse to smaller centers within metropolitan areas, their needs, voices, and problems may be obscured in general.

This article serves as a foundation for asking critical questions about policy strategies that aim to promote the mixing of immigrant populations. The mixed success of these controversial programs leaves significant room for further research. One important area for further research could include a deeper qualitative study of various immigrant groups' housing preferences and needs. Current immigrant groups are quite heterogeneous. Understanding the actual needs of immigrants would make policies for immigrants more effective than the status quo.

Another area for further research could include a more indepth examination of the effectiveness of current housing strategies aimed at addressing integration issues to identify best practice examples.
Especially in polycentric regions, it would be beneficial to understand at what level of government these issues are best dealt with and how local authorities are finding innovative ways to collaborate laterally and vertically.

Finally, some of the current strategies demand a more a critical review to assess their effectiveness. For example, place- or area-based programs have been criticized for not addressing the root causes of social and economic marginalization. These strategies can lead to gentrification and the displacement of immigrant populations. Case studies that critically examine specific policies and track the possible resulting displacement of vulnerable populations (such as immigrants) would help determine if these strategies are actually helping disadvantaged populations.

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References


Stein, Clarence. 1954. The Regional City. Draft manuscript on file at Cornell University Archives.


