

# What's up with Barcelona?

## Residential segregation, increasing population diversity and living conditions inequalities

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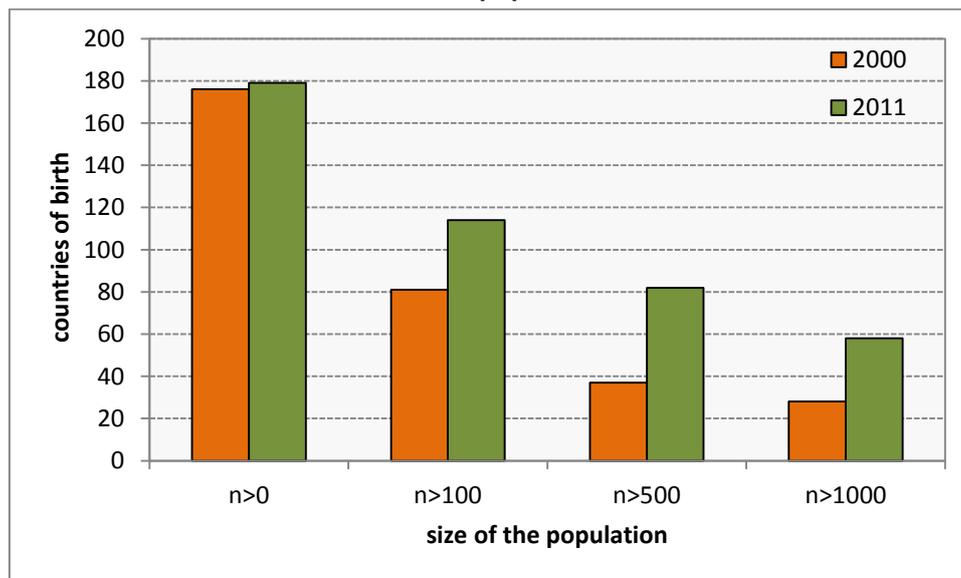
### **Abstract**

Introduction: After an intense migratory boom, foreign-born population of Barcelona's Metropolitan Region (BMR) increased up to 17 per cent of the total, experiencing also a dramatically change in its composition. Along with increasing population diversity, residential inequalities have gained prominence in both academic and political field. Aim: We examine the relation between residential segregation, population diversity and living conditions of households at two geographical levels: BMR and Barcelona's municipality. Method: We combine segregation measures (Dissimilarity & Isolation indexes), diversity measures (Richness and Simpson) and a set of indicators of residential inequality. Data: We use Municipal Register data from 2000-2011 and the Survey of Living Conditions for the year 2011. Results: While changes in population composition have been overwhelming, moderate residential segregation values are likely to be found for the major part of immigrant populations (with particular exceptions). We also expect to find different types of inequalities in living conditions of households according to the country of origin of immigrant populations.

## Background:

Throughout the first decade of the XXI century, a third of the new migratory inflows towards Europe were directed to Spain, thus making it the most important destination of international migration in Europe (Pellegrino, 2004) and the second largest worldwide, only lagging behind the USA (OECD, 2007). Catalonia was one of the Autonomous Communities that starred that period in terms of (im)migration, absorbing 22% of new entries from abroad between 2000 and 2010, which means, in absolute numbers, nearly one million people. Within this context Barcelona and its metropolitan Region (BMR) provides a unique scenario for the study of the processes of settlement of immigrant populations and the more general societal transformation that occurs in immigration societies. Besides the volume and intensity of the flow, wide diversification by countries of origin of new migrants was one of its major features. Figure 1 depicts the increase in the richness of population composition. While in 2000 there were 28 countries of birth with more than 1,000 residents in BMR, in 2011 there are 58 countries of birth with a population of over 1,000 people.

**Figure1: Number of countries of birth with presence in Barcelona's Metropolitan Region by size of its populations**



Source: own elaboration. Data: Municipal Registers, National Statistics Institute from Spain.

Barcelona's municipality played a major role as gateway city for new migrants. However, the widespread process of dispersion of the foreign-born population across the surrounding metropolitan region, spurred by the high rotation of dwellings by the Spanish-born population in a period of economic expansion fuelled by the construction sector and the housing boom (which resulted to be a housing bubble), had led some authors to refer a process of 'ethnic configuration of the metropolitan area' (Garcia-Almirall et al., 2008; p.731) or the 'metropolization of immigration' (Miret, 2009). Such factors combined with the decentralisation of activities and the emergence of urban sub-centres (Nel-lo, 1997) have played an important role in the geographical spread of immigrant groups across BMR, a process that might have taken many more years in the absence of abundant housing in the first place (Sabater et al, 2012). As we can see from table 1, population growth in BMR resulted

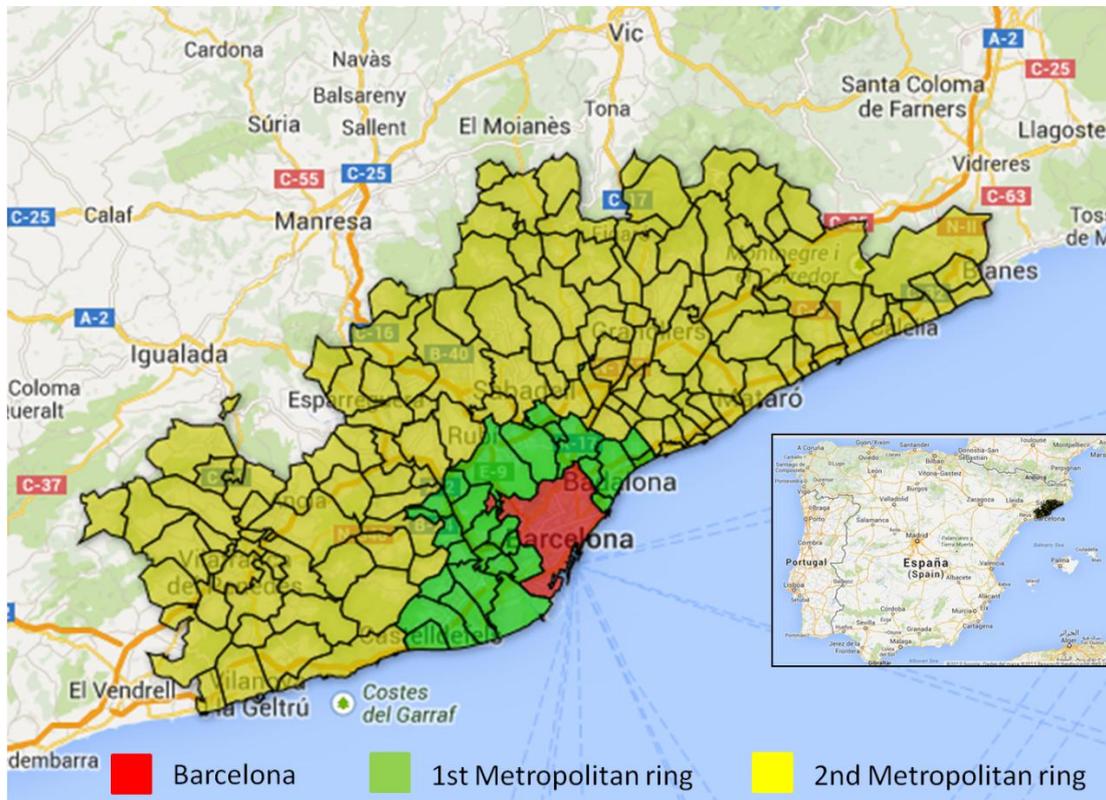
almost exclusively from the incorporation of the foreign-born population, whereas the contribution of the population born in Spain was not really significant (and affected in our count by the birth of children of immigrants in Spain).

**Table 1: Population composition of Barcelona’s Metropolitan Area, 2000-2011**

YEAR	Total Population	Spanish-born pop.	Foreign-born pop.	Foreign-born (%)
2000	4,327,151	4,151,567	175,584	4.1%
2001	4,390,413	4,156,587	233,826	5.3%
2002	4,482,623	4,160,620	322,003	7.2%
2003	4,618,257	4,178,928	439,329	9.5%
2004	4,673,648	4,166,949	506,699	10.8%
2005	4,770,180	4,171,065	599,115	12.6%
2006	4,841,365	4,167,663	673,702	13.9%
2007	4,856,579	4,154,256	702,323	14.5%
2008	4,928,852	4,150,013	778,839	15.8%
2009	4,992,193	4,152,758	839,435	16.8%
2010	5,012,961	4,161,997	850,964	17%
2011	5,029,181	4,171,651	857,530	17.1%
<b>2011-2000</b>	<b>702,030</b>	<b>20,084</b>	<b>681,946</b>	

Source: own elaboration. Data: Municipal Registers, National Statistics Institute from Spain.

**Map 1: Composition of Barcelona’s Metropolitan Region**



Source: own elaboration. Data: Municipal Registers, National Statistics Institute from Spain.

While a fair amount is known about the international migration turnaround in Southern Europe (King et al, 1997; 2000) and the main causes involved, such a strong demand for

labour-intensive and low skilled jobs in low-paid occupational sectors (Domingo and Gil-Alonso; 2007), research assessing the demography of settlement of international migrants is just starting to get under way. While our previous research [“Demographic Change and Municipal Management of Diversity”](#), funded by *La Caixa Bank Foundation*, allows us to state that, in general terms, residential segregation of immigrant in Spain is generally moderate and shows a trend to decrease over the last years, country specific analysis is necessary to unravel the heterogeneity contained in aggregate categories such as population born in Latin-America, or Africa.

Within this broad context, changing population composition of Barcelona’s Metropolitan Region has attracted considerable public policy attention with a special emphasis on the emergence of residential inequalities related, not only with class condition, but also with increasing population diversity.

#### **Aim:**

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The aim of this paper is to contribute to further understanding of societal changes experienced by places of immigration by looking at three simultaneous processes: residential segregation of foreign-born populations, increasing population diversity, and the emergence of special types of inequalities in the living conditions of households related with changing population composition. This paper builds on the demographic body of work in this area (Stillwell and van Ham, 2010; Maloutas and Fujita, 2012) and it is considered to be an important contribution to the segregation debate in Spain and elsewhere because it shed some light towards the patterns of residential incorporation of different immigrant populations not only in a gateway city like Barcelona, but also on its metropolitan region.

#### **Data:**

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This paper uses population data between 2000 and 2011 derived from Municipal Registers (and released annually by the National Statistics Institute) to analyze both, residential patterns of immigrants groups and the increase in population diversity derived from mass immigration. Since self-reporting of racial or ethnic background is not used in official statistics in Spain, analyses are focused on aggregate geographical origins and the largest immigrants groups by country of origin. Our smallest unit of analysis is the census tract, with an average of 1,500 inhabitants. We also use data from the Survey of Living Conditions for the year 2011. Methodologically, we implement the following steps:

- First, we analyze the degree of residential segregation of immigrant populations by looking at two different dimensions of the phenomena, evenness and exposure (Massey and Denton, 1988). We use the dissimilarity index to establish the extent in which immigrant populations have replicated the territorial distribution of the Spanish-born population. The isolation index is computed as a way to locate residential areas with higher predominance of different immigrant groups.
- Second, we measure increasing population diversity for municipalities of Barcelona’s Metropolitan Region, combining two different measures, richness and Simpson’s diversity index (Simpson, 1949).

- Third, we relate those previous outcomes with a set of indicators of inequality that allows us to assess the living conditions of households for different immigrant populations.

#### *Expected findings:*

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- While residential segregation of immigrants groups by region of origin (Latin-America, Western Europe, Eastern Europe, Africa and Asia) is generally moderate and a tendency towards de-segregation is found despite gains in their average local concentrations in Barcelona's Metropolitan Region, this could not necessarily be the case for each of the different groups by country of origin comprising the regional aggregations.
- While we expect to find a decrease in the diversity of the population as we move away from the municipality of Barcelona through the rings of its metropolitan region, it's also plausible that some particular municipalities of both, first and second rings of BMR, present high levels of population diversity related with the decentralisation of activities, the emergence of suburban centres and the configuration of this centres as new gateway cities for international migration.
- Finally, different types of inequalities in living conditions of households, according to the country of origin of the immigrant populations, are also expected to be found, and a reconfiguration of the hierarchy of municipalities in relation to the composition of its population.

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