



Centre d'Estudis Demogràfics

**COEXISTENCE OF PARADIGMS?  
RESIDENTIAL SEGREGATION IN SPAIN  
AFTER MASS MIGRATION (2000-2010)**

Albert SABATER  
Andreu DOMINGO  
Juan GALEANO

420

*PAPERS  
DE  
DEMOGRAFIA*

2013



**Centre d'Estudis Demogràfics**

**COEXISTENCE OF PARADIGMS?  
RESIDENTIAL SEGREGATION IN SPAIN  
AFTER MASS MIGRATION (2000-2010)**

Albert SABATER  
Andreu DOMINGO  
Juan GALEANO

**420**

L'article va ser presentat, en format pòster,  
a la *Population Association of America PAA, 2012 Annual Meeting*.  
San Francisco (EUA), 3-5 de maig de 2012.

**Centre d'Estudis Demogràfics**

**2013**

**Abstract.-** *Coexistence of Paradigms? Residential Segregation in Spain after Mass Migration (2000-2010)*

During the first decade of the 21<sup>st</sup> Century Spain experienced one of the most remarkable episodes of international migration worldwide. Following the numerical increase and diversification of the inflows, the study of settlement of immigrants has become fundamental to assess whether and how different immigrant groups experience the patterns and processes of spatial concentration and dispersal. The aim of this work is threefold; first, it describes the spatial pattern of international migration to both the main metropolitan destinations and new settlement areas; second, it analyses the level and direction of residential segregation of immigrant groups across the smallest geographies for provinces and municipalities in Spain; third, it examines whether internal migration of immigrants reinforces residential segregation or, contrarily, disperse them towards de-segregation. Empirical evidence suggests the presence of different spatial patterns and processes, which justifies the idea of coexistence of paradigms (assimilation, pluralism and heterolocalism) over time and space.

**Keywords.-** Residential segregation, Spain, Segregation indexes, Assimilationism, Pluralism, Heterolocalism, Internal migration.

## CONTENTS

1.- Introduction .....	1
2.- Literature review .....	5
3.- Data and methods .....	10
4.- Results .....	13
4.1.- Geographical distribution .....	13
4.2.- Residential Segregation by provinces .....	18
4.3.- Residential Segregation for five Municipalities .....	20
4.4.- Residential Segregation and Internal Migration .....	23
5.- Conclusion and discussion .....	26
Bibliography .....	29

## LIST OF FIGURES

1.- Migration Counts and Absolute Net Migration by region of birth (Spain, 2002-2010) .....	2
2.- Proportion of foreign-born population by provinces (Spain 2000 & 2010) .....	3
3.- Distribution of the foreign-born population by region of birth (Spain 2000 & 2010)	
3a.- Latin-America .....	14
3b.- Western-Europe .....	15
3c.- Eastern-Europe .....	16
3d.- Africa .....	17
3e.- Asia .....	18
4.- Dissimilarity and Isolation Indexes by provinces (Spain 2000 & 2010) .....	19
5.- Evolution of the dissimilarity and isolation indexes by region of birth for five municipalities (Barcelona, Madrid, Malaga, Valencia and Zaragoza 2000-2010) ....	22
6.- Movements of the Spanish-born population towards each group concentrations .....	24
7.- Movements of each immigrant group towards its own population towards Concentrations .....	25
8.- Movements of each immigrant group towards Spanish concentrations .....	25

## **COEXISTENCE OF PARADIGMS?**

### **RESIDENTIAL SEGREGATION IN SPAIN AFTER MASS MIGRATION (2000-2010)**

**Albert SABATER**

albert.sabater@st-andrews.ac.uk

**Andreu DOMINGO**

adomingo@ced.uab.es

**Juan GALEANO**

jgaleano@ced.uab.es

#### **1.- Introduction**

Since the end of the 1990s, immigration in Spain has been rising considerably, to the extent of leading the so-called migration turnaround in Southern Europe (King et al, 1997; 2000). After an unprecedented decade of immigration, Spain became one of the largest recipients of immigrants, only lagging behind the USA globally (OECD, 2007). In early 2000s the foreign-born population resident in Spain represented less than 4% of the total population (1.4 million people according to the National Statistics Institute). The makeup of Spain's immigration was composed, mainly, by Western European (43%)<sup>1</sup>, Latin American (26%), African (20%), Asian (5%) and Eastern European (3%)<sup>2</sup>. The evolution of international migration in Spain is clearly divided into two stages (Figure 1): the first stage is marked by the (im)migratory boom period, which lasted up to the year 2007 (with more than 500,000 new entries per year and a peak of almost 1,000,000 of new arrivals in

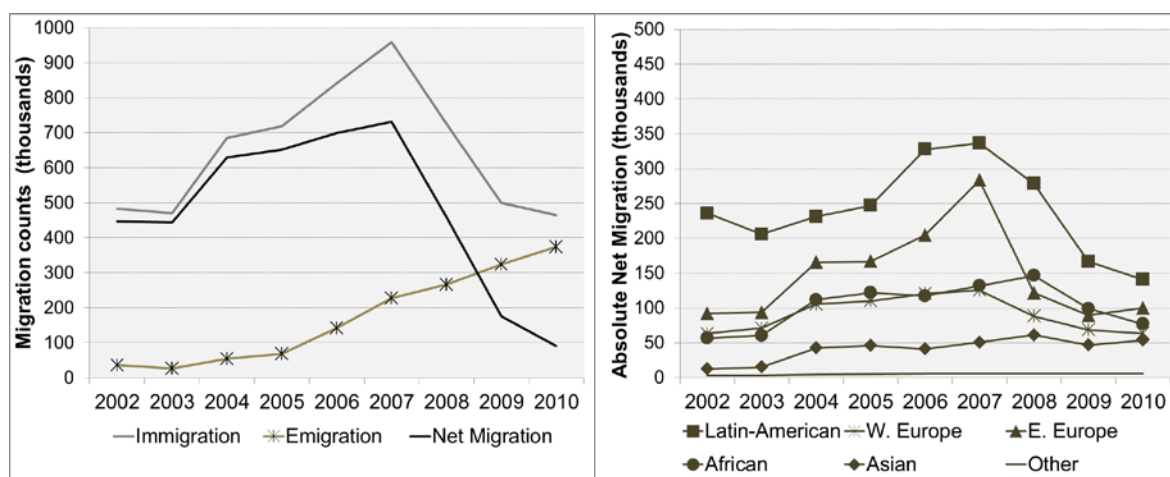
---

<sup>1</sup> According to the classification of the Statistic Division from the United Nations (2011), Western Europe includes: Germany, Andorra, Austria, Belgium, Denmark, Finland, France, Ireland, Island, Italy, Liechtenstein, Malta, Monaco, Norway, Netherland, Portugal United Kingdom, San Marino, Sweden, Switzerland and the Vatican city.

<sup>2</sup> According to the classification of the Statistic Division from the United Nations (2011), Eastern Europe includes: Albania, Bulgaria, Chipre, Hungry, Poland, Romania, Ukraine, Latvia, Moldova, Belarus, Georgia, Estonia, Lithuania, Czech Republic, Slovak Republic, Bosnia and Herzegovina, Croatia, Slovenia, Armenia, Russia, Serbia and Montenegro and Macedonia.

2007). During this period inflows from Latin-America and Eastern Europe were the major responsible of the Spanish immigration boom. The second stage began in 2008, when the ongoing economic recession hit Spain and initiated a reverse process of the immigration turnaround of the 1990s, with a sharp decrease in the number of new entries and the growth of emigration.

**Figure 1.- Migration Counts and Absolute Net Migration by region of birth (Spain, 2002-2010)**



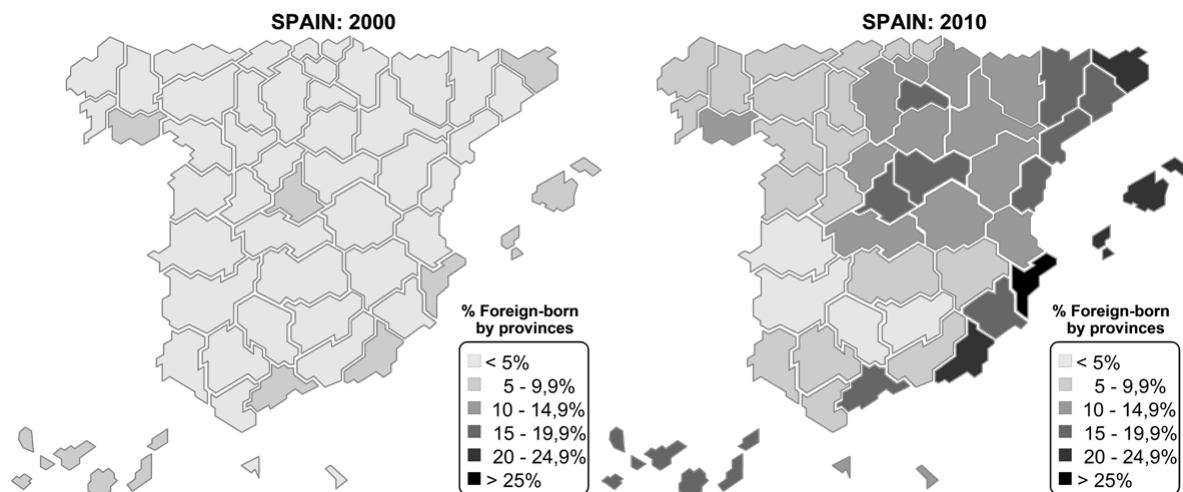
Source.- Own elaboration with data from the Statistics of Residential Variation (National Statistics Institute).

As expected and following the location decisions that shape chain migration processes, international migration in Spain has also focused in some territories more than others. The territorial transformation has been resounding; for example, in 2000 there were only nine out of 52 provinces in which immigrants represented more the 5% of the total population (Orense, Madrid, Balearic Islands, Canary Islands, Gerona, Alicante, Almeria and Malaga) whereas in 2010, after a geographical spread, there were only four provinces in which immigrants accounted for less than 5% of the population (Caceres, Badajoz, Cordoba, Jaen). The numerical increase and dispersal has also been accompanied by a growing diversification of inflows over time, although it has become apparent that some origins are a lot more prevalent than others, as demonstrated by the significance of immigration from Latin America (Izquierdo et al., 2003) and Eastern Europe during the 2000s (Viruela



Martinez, 2008). Hence, the share of the Latin American population reached the 37% in 2010, with Western Europeans accounting for 21%, Eastern Europeans for 19%, Africans for 16% and the Asians for 5% of the foreign-born population. It should be noted that the results presented throughout this work have been calculated using country of birth data, not nationality. Thus, the picture we obtain of both the volume and spatial distribution of the Latin American population is likely to include the Spanish heritage of previous migration waves, during the 20<sup>th</sup> century, from Latin-American continent (e.g. Argentina, Venezuela, etc). Within this context, the new geodemographic realities, as a consequence of international migration in Spain, have given momentum to the contemporary debate of rethinking the settlement patterns of the immigrant groups.

**Figure 2.- Proportion of foreign-born population by provinces (Spain 2000 & 2010)**



Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

Although the main objective of this study is not to carry out a thorough examination of the causes that led Spain becoming a significant recipient of international migration worldwide, it is evident that various contextual factors changed at the end of 20<sup>th</sup> Century and the beginning of 21<sup>st</sup> Century. One of the key dates is undoubtedly Spain's entry into the European Union (EU) in 1986. After joining the EU, Spain not only attracted significant amounts of foreign capital from all over the world but it was also able to

capitalize important EU structural funds (López-Hernández & Rodríguez-López, 2010) and make heavy public investments in infrastructure which in turn help the extraordinary development of the construction sector. During that period, Spain enjoyed a remarkable period of continued economic growth which increased further confidence of international and domestic investors and included the joining of the European Monetary Union (EEAG, 2011). The latter is particularly significant because it resulted in unprecedented low interest rates, deregulation in the mortgage market, rising income and even irrational exuberance. Whilst these factors are common across other EU member states and the US, they still provide little insight on why Spain experienced a relatively larger boom in the housing market compared to other countries, with suggestions that the role of immigration was key to understand the boost in housing demand and the impact on prices and quantities (González & Ortega, 2009). In the meantime, a high segmentation between permanent and temporary workers in Spain expanded, with a persisting high rate of temporary contracts (twice as much as the European average level) which tends to be concentrated on disadvantaged groups such youth, women and immigrants (OECD, 2011). The strong demand for labour-intensive and low-skilled jobs in low-paid occupational sectors such as construction, agriculture, domestic services and cleaning amongst others (Baldwin-Edwards & Arango, 1999; Izquierdo, 2003; Sandell, 2005) is generally seen as one of the most powerful pull factors of international migration to Spain (Arango, 2000), which was also accompanied by the role of irregular migration as a structural factor and implied the regular implementation of regularizations of immigrants as a policy tool by the state to re-establish a formal regularity in the labour market (González-Enríquez, 2009; Sabater & Domingo, 2012). In addition, migration into Spain has been sociologically understood as an element that complemented the native labour force, in a period in which the Spanish working class was experiencing upward mobility; particularly relevant to this experience is the role of immigrant women in a setting that affected native South European women both in the labour market and in the home and family contexts (King & Zontini, 2000; Domingo & Gil-Alonso, 2007). In addition, because immigrants have been attracted by regions and cities with a more dynamic labour market (Cuadrado et al, 2006), immigrants have been more concentrated in urban areas, although their impact in some rural areas has also been particularly significant to avoid depopulation (Collantes et al, 2010). Thus, Spanish



migratory boom was a consequence of the strong demand of low-skilled labour force during a period of unprecedented economic growth with conditions likely to affect the spatial distribution of natives and immigrant groups over the past decade. If these two elements -economic growth and immigration- were interrelated in a positive feeding relationship throughout the entire 'Golden Decade' (EEAG, 2011) of the Spanish economy, the situation has reversed in the recent period due to the global financial turmoil which has hit Spain hard mostly due to the collapse of the property bubble, making immigrant hiper-cyclical unemployment rates skyrocket (Pajares, 2010).

The rapidity of migration inflows coupled with its sheer size coincided in time with the more general population dynamics of suburbanization and re-centralisation, prompting a general pattern of dispersion and re-distribution from traditionally receiving areas (i.e. gateway areas) to places with little or limited exposure to immigration. In the Spanish case, it is important to highlight that the process of recent and rapid settlement of the immigrant population in Spain's metropolitan areas was clearly exacerbated by the exponential rise of new housing over the past decade (García-Montalvo, 2008; Bielsa & Duarte, 2010). This is seen as pivotal to explain the speed of dispersal of immigrant groups to what some scholars call as an 'institutionally generated migration' (Brama, 2006: 29). In other words, Spain met an ideal scenario to spur internal migration: high rotation of homes by Spanish nationals and the significant housing demand derived from immigration within a context of broad restructurings of the nation's economy where the construction sector was the main engine of economic growth. Such factors combined with the decentralisation of activities and the emergence of urban subcentres (Nel-lo, 1997) have played an important role in the geographical spread of immigrant groups across localities, a process that might have taken many more years in the absence of abundant housing in the first place (Sabater et al, 2012).

## **2.- Literature review**

In this study, these basic insights are applied specifically to deal with the issue of residential segregation of immigrant groups, which is generated through the interplay of two opposing spatial forces: concentration and dispersion. First, concentration, is rooted in

the spatial differentiation of the urban economy (Hirschman, 1983) and is reinforced by processes of chain migration, in that relatives and friends follow, and the urban location of jobs and transportation infrastructure. Second, dispersion, becomes a reality when both employment and residence are decentralised, thus lessening the structural pressure for ethnic segregation (Massey, 1985). In Spain, after a decade of mass migration we can expect major changes in the sociospatial distance between ethnic groups; residential segregation may become a more general feature of the Spanish human geography which, for instance, could formerly be detected with respect to the Gipsy-Spanish population (Checa Olmos & Arjona Garrido, 2009). However, the study of levels and patterns of immigrant residential segregation are still partial amongst other things because the 2000s has represented a decade of urban, economic and demographic upheaval.

Residential segregation is a multidimensional concept although it may be defined in a general way as 'the degree to which two or more groups live separately from one another, in different parts of the urban environment' (Massey & Denton, 1988; p.282). The reasons for such segregation may stem from the free will or preferences of a population subgroup in what is known as 'peer group' or 'neighbourhood' effect, as well as from an imposition of the dominant group or the so-called host society (Duncan & Duncan, 1955; Taeuber & Taeuber, 1965; Farley, 1977; Peach, 1996). The perdurable example of imposed segregation is the residential situation of black people in the United States, where the degree of residential segregation, between white and black people, remains high regardless their socio-economic status (Massey, 1990). In the case of some major cities, extreme residential segregation has only shown a mild decrease over the last 20 years of the past century, despite the increasing ethnic diversity of major cities (Jhonston et al, 2003). When segregation is imposed, generally goes along with other unfavorable circumstances for the well-being of those who suffer it. It has been studied in its relation with the geographical concentration of poverty (Massey, Gross, & Shibuya, 1994); in its pervasive consequences over health inequalities (Williams & Collins, 2001) and weight status (Chang, 2006); or in its inextricable relatedness with school segregation (Denton, 1996), to name a few examples.

Studies on residential segregation have a long history within the Academia; they began with the popular rise of the ecological model of the Chicago School of urban sociology,

where scholars such as Robert Park (1864-1944), Ernest Burgess (1886-1966) and Louis Wirth (1897-1952) developed their work during the second and third decades of the 20<sup>th</sup> Century. Whilst their idea of successive residential development based on the concentric zone model still remains, it has been convincingly argued that metropolitan areas in Southern Europe have also developed through an inverse-Burgess spatial pattern, with an over-representation of the working class in the urban periphery (Leontidou, 1990; Malheiros, 2002, Arbaci, 2008), a rationale that has been used to explain the lower levels of residential segregation throughout the Mediterranean Europe.

After the theoretical elaborations of the Chicago School two major models have been developed: the Assimilationist and the Pluralist. The former predicts a “melting process” into the host society in three generations (Peach, 2001), whereby immigrant groups experience an up-warm spiral of social capital and mobility. The assimilationist model results, in residential terms, in a three step movement from spatial concentration to dispersion. From a first generation with high values of segregation, to a second generation that moves from the gateways and increases its interaction with the host society, and finally, a third generation which becomes fully assimilated, and who tends to move to more suburban areas. Different authors have pointed out that the assimilationist model reflects the experience of European populations in the USA, as well as the influence that it has had on subsequent research on residential segregation in Western societies (Peach, 1996; Johnston et al., 2002; Malheiro, 2002; Arbaci, 2008; Finney & Simpson, 2009). Although the durability of assimilationism is generally manifested in the way it has explained much of the changing metropolitan scene of the USA, it has also been under recent scrutiny for its incapacity to explain the settlement of particular immigrant groups such as the Latin American (Telles & Ortiz, 2011) or the Chinese (Li, 1993, 1998). In Spain and elsewhere in Europe, residential patterns of immigrant groups have reflected a discontinuity between past and present ways of spatial incorporation (Musterd, 2005; Finney and Simpson, 2009). One prominent theory that has emerged from this debate is segmented assimilation theory, originally proposed by Portes and Zhou (1993). This theory is based on the idea that different groups are available to which the new immigrants may assimilate, thus taking divergent assimilation paths which include conventional upward assimilation, downward assimilation and selective acculturation (Portes & Rumbaut, 2001) .

Pluralism, by contrast, claims for the construction of a society in which differences between ethnic groups can be maintained and considered as a national wealth. The two principal characteristics of the pluralist view are the sustenance of ethnic distinctiveness and the sharing of common institutions and attitudes as well as a certain degree of accommodation to the host society (Boal, 1999). The residential manifestation of the pluralist model is the permanence of a high degree of residential segregation between groups and the creation of the ethnic mosaic, which takes the form of a patchwork of ethnic enclaves that persist over time. This model also envisages the economic integration of ethnic groups to the mainstream economy, but without implying a high degree of residential or social mixture. Therefore, upward class mobility runs with upward residential mobility, but within the frontiers of ethnicity (Peach, 1999) to the extent that pluralism at metropolitan level leads to a population that is both highly diverse and highly segregated ethnically (Klaff, 1980).

In the late 1990s and prompted 'by the inability (of the assimilationist and pluralist model) to fully explain the spatial and social behavior of recent immigrants or of previously established groups', Wilbur Zelinsky and Barret A. Lee (1998 p.293) proposed a third model: Heterolocalism. A heterolocal community is defined by: 1) an immediate or rapid process of dispersion into the host territory, 2) by significant special separation between place of residence and workplace, 3) by the maintenance, despite the territorial dispersion, of close ties of social contact within its members, 4) where social propinquity is facilitated by the development of informational technologies and transports. As noted by Zelinsky and Lee, the aim of the model is not to replace but supplement the two previous ones. Perhaps the more general point, as suggested by Denton and Massey (1991), is that we have already embarked on a new golden age of multi-ethnic neighbourhoods where the growing degree of residential intermixing will become a prevailing feature of cities worldwide.

In Spain ethnic residential studies are very recent, appearing as a consequence of the latest immigration wave received by this country. The great majority of these studies highlight how residential segregation is generally low-moderate. The cases in which the city of Barcelona and its metropolitan area are under scrutiny also reveal general low levels of residential segregation (with the exception of the values for the Moroccan community) and

decrease in time (Martori & Apparicio, 2011, Sabater et al, 2012) which is attributed to a dynamic of dispersion across the surrounding metropolitan area. This has led some authors to refer a possible process of 'ethnic configuration of the metropolitan area' (Garcia-Almirall et al., 2008; p.731) or the 'metropolization of immigration' (Miret, 2009). It has been also pointed out the existence of differential patterns of settlement depending on the nationality analyzed (Bayona i Carrasco & Lopez-Gay, 2011) which in the case of the city of Barcelona draw a picture of 'segmented segregation' (Bayona i Carrasco, 2007). In some cases (Martínez del Olmo & Leal Maldonado, 2008), scholars highlight the lack of a direct relation between the values of the indexes by which they measure residential segregation and housing conditions, arguing that sometimes is possible to detect an intensive process of residential exclusion in terms of housing conditions which is not necessarily visible through the use of segregation measures.

Another factor that plays a key role in the concentration and dispersion of immigrants after their arrival to a new country is internal migration. It is generally acknowledged that immigrant populations are more mobile than natives (Nogle, 1994; Rogers & Hennings, 1999; Finney & Simpson, 2008). For example, in Spain the number of inter-municipal movements made by the foreign-born population has tripled that from Spanish natives (Recaño & Domingo, 2006) to the extent that, in 2007, 30% of the total internal movements were performed by immigrants (Viruela Martinez, 2010). The causes of this relative higher mobility are linked to certain socio-demographic characteristics of immigrants, such as their younger age structure, the length of residence, their educational attainment and their more fragile situation in the labour and housing markets (Pumares et al., 2006). It has also been pointed out that the higher mobility of immigrants tends to decrease during the first years after arrival as a result of a process of residential adjustment (Nogle, 1994; Recaño & Domingo, 2006; Finney & Simpson, 2008; Viruela Martinez, 2010). Nonetheless, it is also important to highlight that the level of internal migration of international migrants is not even across Spain. Hence, there have been identified low-mobility provinces (those located in the northwestern part of the peninsula) and high-mobility provinces (located across the Mediterranean axis, the axis of the Ebro and Madrid) (Recaño & Domingo, 2006). However, despite the recognition of the impact that internal mobility can have on the processes of residential segregation, there are only a few

and recent studies in which this important relationship has been examined explicitly (e.g: Bayona i Carrasco & Lopez-Gay, 2011; Sabater et al, 2012).

While a fair amount is known about the causes and consequences that produce persistent patterns of concentration of ethnic/immigrant groups, there are only a few investigations that contribute decisively to a further understanding of the spatial behavior of recent immigrants by taking into consideration the demographic view to the problem. This study builds on the previous work in this area (Peach, 1997; Stillwell & Van Ham, 2010; Sabater et al, 2012) and it is considered to be an important contribution to the segregation debate in Spain and elsewhere because it considers the roles of internal migration in the analysis of clustering of immigrant groups over time and space.

More specifically, the aims of this paper are:

1. Describe the spatial settlement pattern of international migration across localities in Spain, including metropolitan destinations and new settlement areas outside the gateway cities.
2. Analyze the level and direction of residential segregation of immigrant groups across the smallest geographical areas for provinces and municipalities in Spain.
3. Examine whether internal migration of the foreign populations reinforce residential segregation or, contrarily, it contributes to de-segregation.
4. Provide empirical evidence of the coexistence of the three paradigms of immigrant settlement (assimilationism, pluralism and heterolocalism) during and after the migration boom of the 2000s.

### **3.- Data and methods**

For our analyses of settlement and internal migration we use stock data from the Municipal Population Register between 2000 and 2010 and flow data from the Statistics of Residential Variation for the same years released annually by the National Statistical Institute.



The Municipal Register is the administrative record which counts the residents of each municipality. The socio-demographic variables included in this record are: place of residence, sex, age, nationality and place of birth, thus allowing analyses at four levels of geographic aggregation (national, provincial, municipal and Census Output Area –COA-level, the latter with 1.500 residents on average).

The Statistics of Residential Variation contain information about the internal movements due to changes of residence, registered by the Municipal Registers. This record gives the total annual internal residential variations (i.e. internal migration) as well as the external variations (i.e. international migration). The variables included are: origin and destination of the movement and the relation between them, size of the municipalities of origin and destination, sex, age, nationality and place of birth, allowing analysis at two levels of geographic aggregation (provincial, and municipal).

Methodologically, various efforts have been undertaken to measure residential segregation. Perhaps, the most evident is given by the groundbreaking article written by Douglas Massey and Nancy Denton in 1988, in relation to its multidimensionality. The five dimensions (evenness, exposure, concentration, centralization and clustering) conceived by Massey and Denton are related with a number of indexes developed during the 20<sup>th</sup> Century. For the purpose of this work we focus on the two first dimensions, ‘evenness’ and ‘exposure’. On the one hand, evenness refers to the equalitarian distribution of two social groups over the total of the spatial sub-areas that make up the reference one. The most used index for measuring the evenness of a residential distribution by ethnicity is the dissimilarity index, both for the little extra-information contained in other similar measures (Duncan & Duncan, 1955), for its easy interpretation, and due to a process of cumulative production within Social Sciences (Lieberman & Carter, 1982; White, 1986; Massey & Denton, 1988). On the other hand, exposure concerns the potential contact between different groups within a geographical unit. It can be measured in terms of ‘interaction with’ or ‘isolation from’ another group. The exposition of one group to another is computed as the proportion of the host population represented by a minority group, ‘averaged across all members of that group wherever they live’ (Lieberman, 1981). And it can be easily interpreted as the probability that a member of an x-group would live in the same geographical unit of a member of a y-group, in the case of the interaction index, and as the probability that two

members of the same group would share a geographical unit, in the case of the isolation index. These two indexes take into account the relative size of each population.

In order to fulfill our objectives we follow a two-step analysis approach:

- First we carry out a residential segregation analysis at two geographical levels, provinces (52 areas) and municipalities ( $\pm 8,010$  areas) using the Dissimilarity ( $D$ ) and Isolation ( $P^*_X$ ) indexes. The formulas used for calculating the indexes are:

$$D = \frac{1}{2} \sum_{i=1}^n \left| \frac{x_i}{X} - \frac{y_i}{Y} \right| \qquad P^* = \sum_{i=1}^n \frac{x_i}{X} * \frac{x_i}{t_i}$$

Where  $x_i$  is the population of a  $X$  type within the  $i$  area, e.g. census tracts, municipalities;  $y_i$  is the population of a  $Y$  type within the  $i$  area,  $X$  is the total  $X$  population of the large geographic entity for which the index is being calculated,  $Y$  is the total  $Y$  population of the large geographic entity for which the index is being calculated and  $t_i$  is the total population of the  $i$  area. We multiplied both indexes by 100 to facilitate the interpretation of the results<sup>3</sup>.

Despite the popularity enjoyed by these indexes within the scientific community, there have been identified a number of weaknesses that must be taken into account for interpreting its results. In both cases extreme values give a consistent idea of social distance (Peach C. 2001), but it has been recognized that the interpretation of the middle scores is not so clear (Johnston et al., 2004). In the case of the dissimilarity index, it does not take into account the spatial relationship of the parcels themselves where calculations are based on parcels as discrete and independent units, ignoring the composition of surrounding areas (White, 1983). It can be only applied to dichotomies, and its values do not change if a re-distribution of population within areas that are above the mean occurs (White, 1986). The index is unrelated with the size of the populations that are being

---

<sup>3</sup> The number of municipalities grew from 7,996 in 2000 to 8,114 in 2010, that increase cause the lack of the calculation of the indexes of dissimilarity and isolation for the complete period (2000-2010) for 118 municipalities.

compared (Simpson, 2004), if the sample of one of the populations is very small, the randomness of its distribution gets jeopardized (Voas & Williamson, 2000). In the case of the indexes of exposure (interaction and/or isolation) the value of both indexes is strongly related to the overall population composition, and it tends to increase, in the case of the isolation index, and to decrease in the case of the interaction index, the more recent is the arrival of the group for which are being calculated (Simpson, 2007).

- Second, we analyze internal migration by employing in-migration rates, in addition to the basic computation of absolute net migration of in- and out-migration. Measures of internal migration are combined with measures of segregation in order to elucidate the extent to which population movement increases or decreases the sharing of residential space with the host society.

## **4.- Results**

### **4.1.- Geographical distribution**

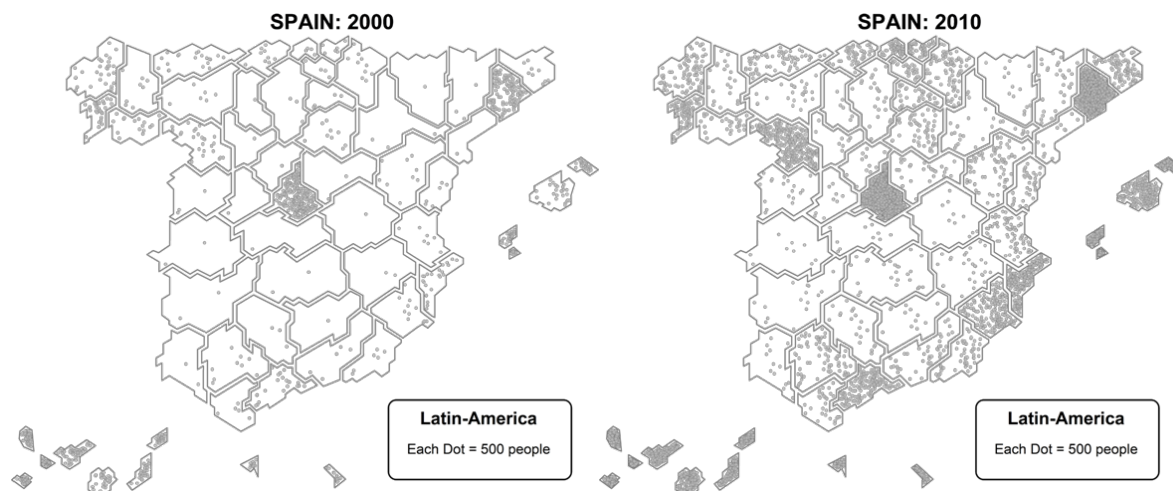
As expected, the large increase in the number of new arrivals, the territorial dispersion imposed by sectors (agriculture, services, and construction) that attracted most of the immigrant working class, and the large number of dwellings that were built during the housing bubble resulted in a greater visibility of all immigrant groups throughout the Spanish geography as depicted in figure 3 (figure 3a to figure 3e). However the casuistry of settlement of each group is marked by multiple factors such as type of migration, historical ties (migratory systems), political agreements or even discrimination.

Latin American population (Figure 3a), the second largest group in 2000 with a population of 390.000 people, was already spread across the country. As noted above, the geographical distribution found for this group in year 2000 follows previous Spanish migratory waves to and from Latin American countries during the twentieth century, which could be acting as a selection factor for some provinces (Recaño & Domingo, 2006). That would explain the significant presence of this group in provinces like Orense at the beginning of the 21<sup>st</sup> century, as well as the increase in the Latin American-born

population in the Galician and Canarias provinces during its first decade; where population growth results from both political and economic crises in the region of origin and the arrival to the retirement age of Spanish migrants mostly living in Argentina and Venezuela (Vono & Domingo, 2007). The prompt dispersion of this group throughout the territory, although the volume of this flow during 2000s, points in the direction of and heterolocal behaviour, at least in its spatial manifestation, and is consistent with the spatial behaviour shown by this group in recent time in the United States (Massey, 2008).

**Figure 3a.- Distribution of the foreign-born population by region of birth (Spain 2000 & 2010), Latin-America**

---



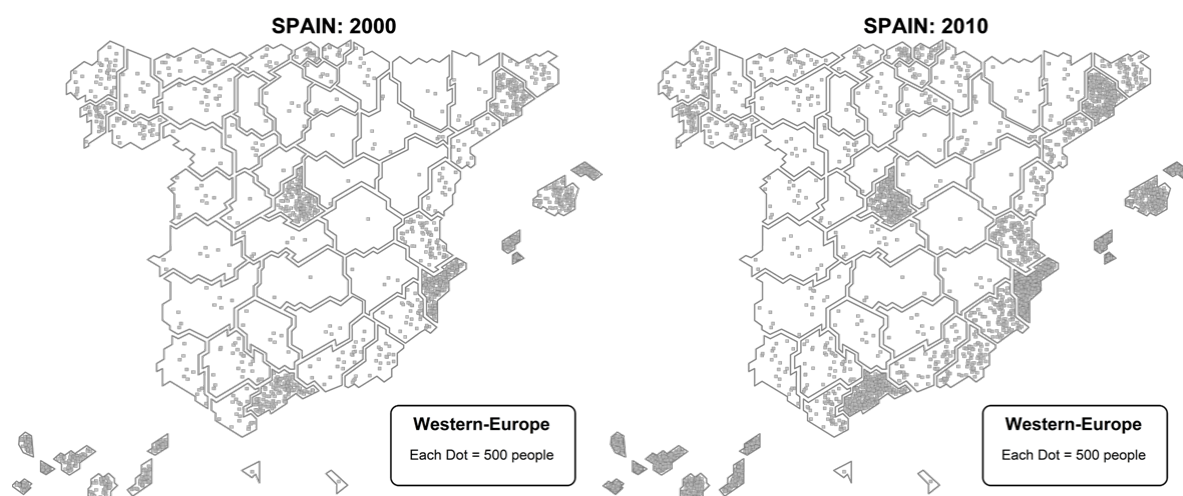

---

Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

Western Europeans (Figure 3b) were the largest immigrant population in 2000 accounting for 634,000 people (43% of the total foreign-born population). This group was concentrated in touristic provinces, with almost two thirds of this population living in eight provinces (Madrid, Barcelona, Alicante, Malaga, Balearic Islands, Valencia, S.C. de Tenerife and Las Palmas de Gran Canaria). This geographical distribution, which last through the decade, clearly responds to the pattern of settlement of the so-called international retirement migration. Retirement migrants, mostly from the UK, Germany and Nordic countries, began to settle in Spain from 1990 onwards, attracted not only by the

mild climate but by the lower costs of housing and living, as well as by the access to health services. (Salvà-Tomàs, 2002; Casado-Díaz, 2006). During the 2000s this population has experienced a significant increase, to reach 1.3 million people in 2010. However, due to the primacy of Latin American and Eastern European flows during the same decade, the share in the total composition of the foreign born population of this group was reduced to one fifth.

**Figure 3b.- Distribution of the foreign-born population by region of birth (Spain, 2000 & 2010), Western-Europe**



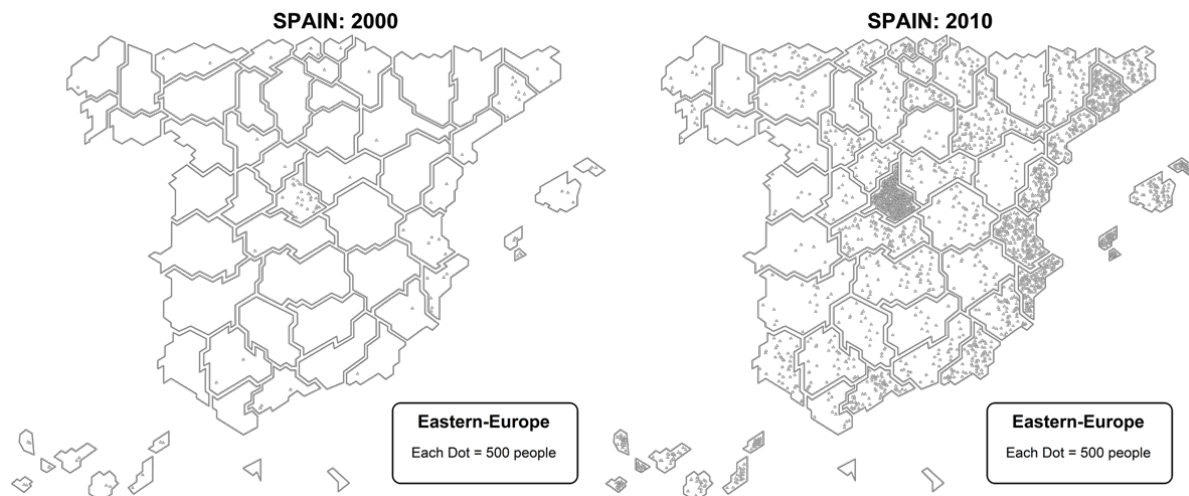
Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

Eastern Europeans (Figure 3c) had a scarce presence in Spain at the beginning of the century; they accounted for little more than 2.5% of the foreign population with 40,000 people. They began to arrive in large numbers (more than 150,000 new entries per year) from 2004 onwards, in part as a consequence of the bilateral agreements signed by Spain with countries in the region (Viruela, 2008). By 2010 their share in the composition of the immigrant population had grown up to 19% with 1.27 million people. Thus, this group shows a dual tendency: towards concentration along the Mediterranean Arc and Madrid as stated in previous works (Viruela Martinez, 2010), as well as to a rapid dispersion across the rest of the territory. This paradoxical trend may be due to the internal heterogeneity of

the group, composed mainly by Romanians and Bulgarians, and allows to especulate about a dual pattern of settlement in which the heterolocal and pluralist models are present.

**Figure 3c.- Distribution of the foreign-born population by region of birth (Spain 2000 & 2010), Eastern-Europe**

---




---

Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

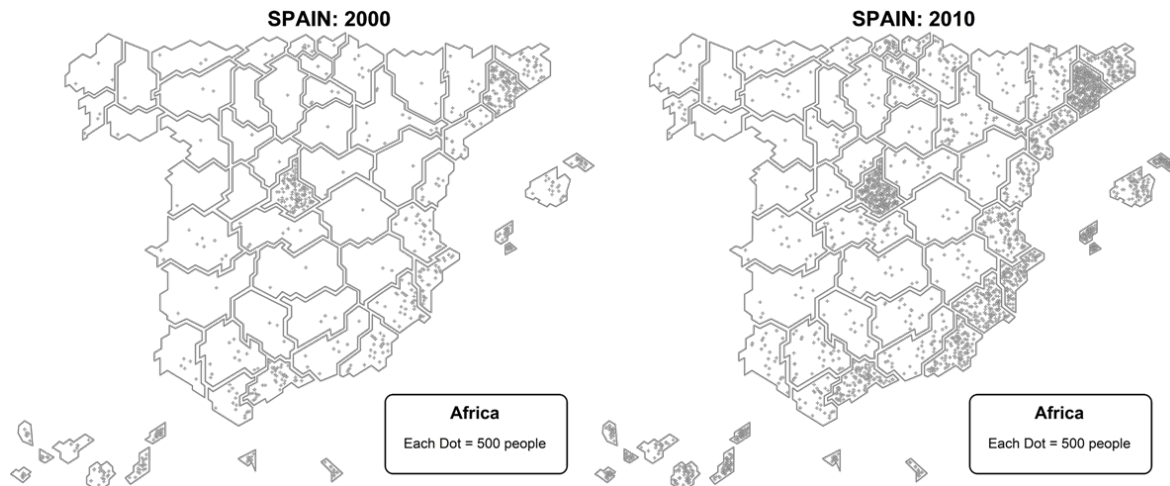
African population (Figure 3d) has also settled traditionally throughout the Mediterranean coast and Madrid. In 2000 with 308,000 people they accounted for something more than 20% of the foreign-born population. The diversification of flows, which has been understood by some researchers (Izquierdo, 2003) as a political strategy of diversification after the outbreak of racial conflicts in El Ejido (Almeria) in 2000, reduced their share among the total foreign-born population (by 2010, their total share was of 16%, while its population grew from 0.3 to 1 million people).

Finally, the Asian-born population (Figure 3e) increase five times its initial population between 2000 (69,000 people) and 2010 (345,000 people), thus retaining during the decade a share of around 5% of the foreign-born population. In general terms, what has not changed over this period is the tendency of this group towards concentration in the main Spanish cities, following the pattern described by the pluralism model. In the early 2000s, Madrid and Barcelona hosted almost half (47%) of this group of population, whereas ten



year later 53% of Asian were living in those provinces. It is worth noting, however, that in 2010 other provinces such as Alicante and Valencia also appear to be new provinces of settlement for this group, concentrating 10% of this population.

**Figure 3d.- Distribution of the foreign-born population by region of birth (Spain 2000 & 2010), Africa**

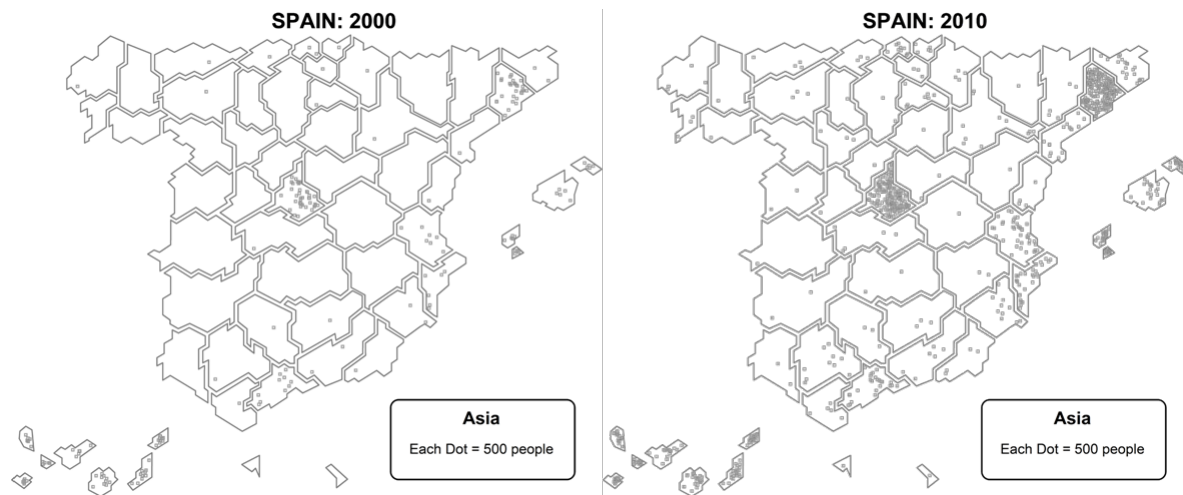


Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

Although some general trends of settlement could somewhat be predicted in 2000 as a result of the location of specific economic activities (agriculture, tourism and industry-related) across Spain, the absolute increase (as the increase in the share of the total population), the compositional change of the foreign-born population as well as its internal mobility, clearly surpassed many forecasts as demonstrated by the subsequent events by year 2010. After a decade of mass migration the human geography of Spanish towns changed substantially.

**Figure 3e.- Distribution of the foreign-born population by region of birth (Spain 2000 & 2010), Asia**

---



---

Source: Own elaboration with data from the Municipal Register (National Statistics Institute).

The next section deals with the micro-geography of immigrant settlement by taking into consideration analyses of residential segregation across Census Output Areas (COAs) for provinces and five municipalities.

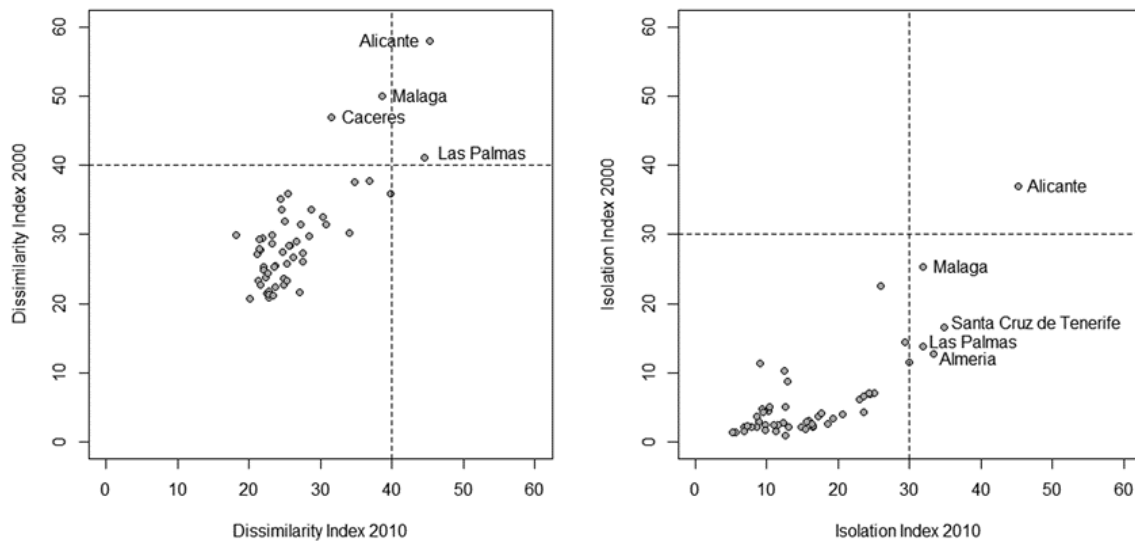
#### **4.2.- Residential Segregation by provinces**

The general picture of residential segregation by province for Spain during the years 2000-2010 shows a dual and somehow paradoxical, tendency: while the value of dissimilarity index decreased in 71% of the 52 provinces between 2000 and 2010, the isolation index values increased in almost all provinces. This means: while in 37 out of 52 provinces the foreign-born population become more evenly distributed with respect to the Spanish population (as shown by the D values), their average local concentration has generally increased (as shown by the P\* values).

For the year 2000 it is also important to highlight that only those provinces (Alicante, Malaga and Palmas de Gran Canarias) where Western Europeans represented a significant

share of the total foreign-born population scored medium values in the dissimilarity index ( $D=40-60$ )<sup>4</sup>, for all the rest of the provinces the degree of residential segregation was low-to-moderate ( $D=20-40$ ). Along the decade, the stated reduction of the scores in the dissimilarity index, occurred within this low-to-moderate scores.

**Figure 4.- Dissimilarity and Isolation Indexes by provinces (Spain 2000 & 2010)**



Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).

As mentioned above, the foreign-born population always tend to be concentrated in certain localities known as settlement areas. The isolation index values reflect this tendency of immigrants to live in areas where they represent a higher proportion than the provincial average. For example, in 2010 in the province of Alicante 25% of the total population were foreign-born, but they lived in areas (COAs) where their average local concentration was about 45% of the population. After Alicante, the largest differences are found in Las Palmas (16%-31%), Santa Cruz de Tenerife (20%-34%), Malaga (19%-31%) and Almeria

<sup>4</sup> Also Caceres scored medium values in 2,000 and 2,005 but in this case one can speculate that it may be the combination of the small number of foreign born population, the overrepresentation of Africans and Western Europeans in the overall foreign-born composition and the highest rurality of this province, the cause of the medium values of the dissimilarity index.

(22%-33%). In almost all of these cases, it is possible to argue that the degree of concentration results from self-segregation of Western Europeans who arrive to Spain as retiree migrants. Contrarily, in the case of Almeria, where African-born population represents the largest immigrant group, housing and social discrimination is usually seen as the main driver of residential segregation (Checa Olmos, 2006).

#### **4.3.- Residential Segregation for five Municipalities**

After this first snapshot at provincial level, analyses of residential segregation using the dissimilarity and isolation indexes are shown across COAs for municipalities by region of origin of the foreign-born population. Although computations have been undertaken for all municipalities in Spain, here we only focus on the results obtained for five municipalities (those that in 2010 had more than 500,000 inhabitants where at least 10% were foreign-born). Thus, we work with the gateway municipalities of Madrid (3 million people, and 21% of foreign-born population) and Barcelona (1.6 million, and 21% of foreign-born population) as well as the municipalities of Malaga (0.56 million, and 10.6%), Valencia (0.8 million, and 17%) and Zaragoza (0.7 million, and 14%).

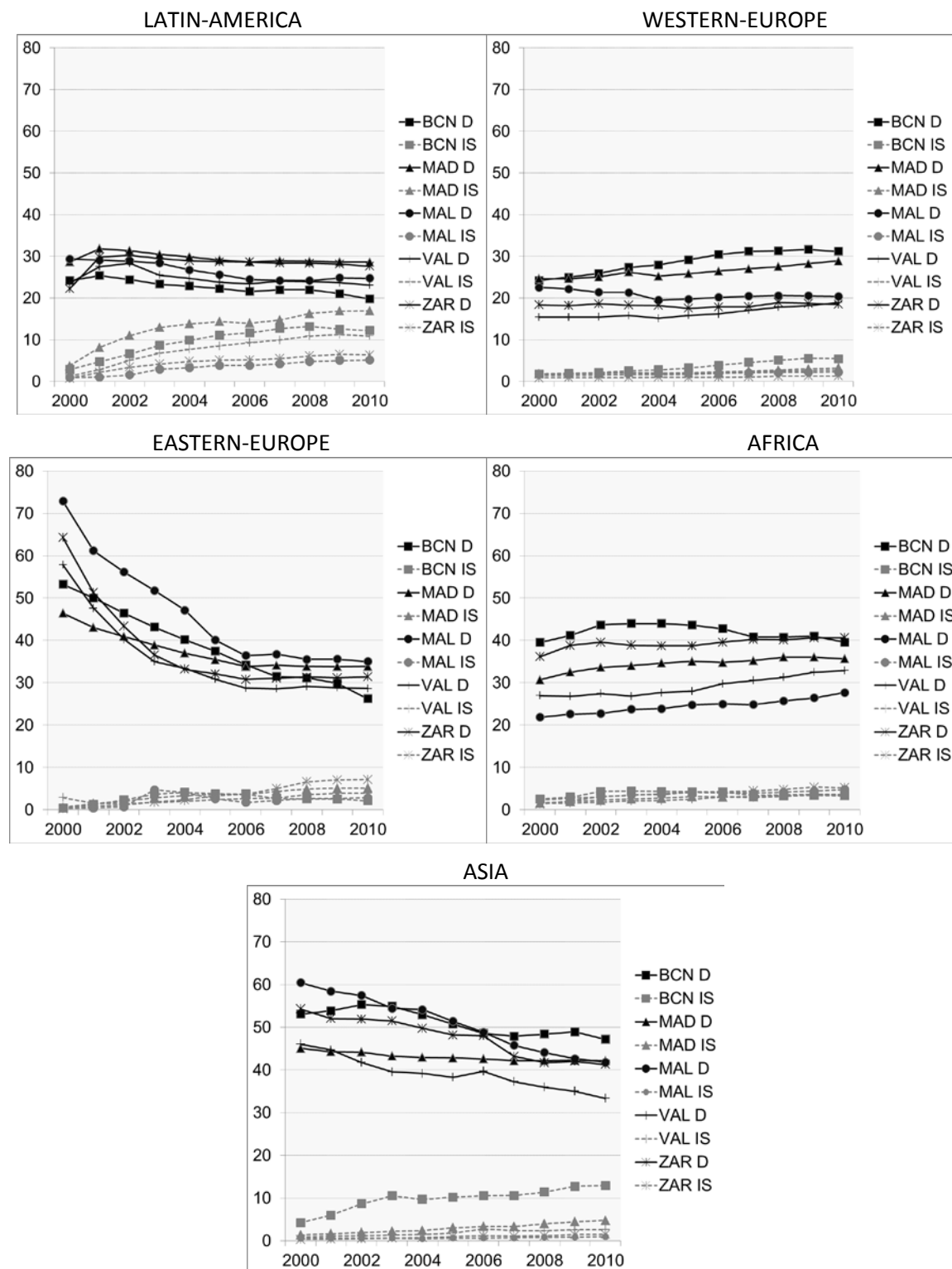
The trend of the indexes of segregation during the decade shows a similar pattern of spatial behaviour by region of birth between municipalities, which regarding the Latin-American population is consistent with previous works (Vono & Bayona i Carrasco, 2011). As expected the analysis of exposure indicates that all foreign-born groups have increased their average local concentration in the five municipalities over the period 2000-2010, but always within the boundaries of the lowest scores ( $P^*=0-20$ ). The Latin-American group has become remarkably more concentrated in Madrid and Barcelona's municipalities. While in 2010 this population accounted for 12.7% of the population (418,000 people) in Madrid, they lived in areas where they averaged 17%. In the case of Barcelona this group represented 10.5% of the population (170,000 people) in 2010, but they were residing on areas where they averaged 12.2%. It is also worth highlighting that the Asian-born population has also become more concentrated in Barcelona, where 57,000 people (3.5% of the total population in 2010) were living in COAs where they averaged about 13%,

being the Pakistani and Chinese populations the two main nationalities that make up this continental aggregation.

The Latin American, Eastern European and Asian populations show a tendency to de-cluster from the original areas of settlement, thus becoming more evenly distributed with respect to the Spanish-born population across localities in Spain. In the Latin American case, the decrease during the period 2000-2010 occurs within the boundaries of the low-to-moderate scores of the index ( $D=20-40$ ). The medium ( $D=40-60$ ) or even high ( $D=60-80$ ) scores of Eastern Europeans in the first years of the 21<sup>st</sup> Century respond to their scarce presence by that time. This rapid increase in the level of evenness at the municipal level points in the direction of a fast process of dispersion, reinforcing the idea about a heterolocal pattern of settlement. Although the Asian population also shows a decrease in the values of the dissimilarity index, the reduction took place within the boundaries of the medium levels ( $D=40-60$ ), thus suggesting a different spatial re-distribution across the areas of study, with the highest scores.

Contrary to this decreasing tendency, Western Europeans and Africans increased the level of unevenness with respect to the Spanish population. While the increase for the Western European-born population occurred in the five municipalities within the low-to-moderate scores during the whole period ( $D=20-40$ ), for the African-born population the values of the dissimilarity index tend to be higher in Barcelona's municipality, where the Moroccan population represent a majority of the African group, as previous works have also found (Bayona i Carrasco, 2007; García-Almirall et al, 2008; Musterd & Fullaondo, 2008; Bayona i Carrasco & Lopez-Gay, 2011; Sabater et al, 2012). While in the case of Western Europe the age structure of its population difficults the interpretation of the settlement pattern in terms of paradigms, in the African case, it seem quite clear that the simultaneous increase of the values of both the dissimilarity and isolation indexes during the decade, corresponds with the assimilationist pattern.

**Figure 5.- Evolution of the dissimilarity and isolation indexes by region of birth for five municipalities (Barcelona, Madrid, Malaga, Valencia and Zaragoza 2000-2010)**



Source.- Own elaboration with data from the Municipal Register (National Statistics Institute).



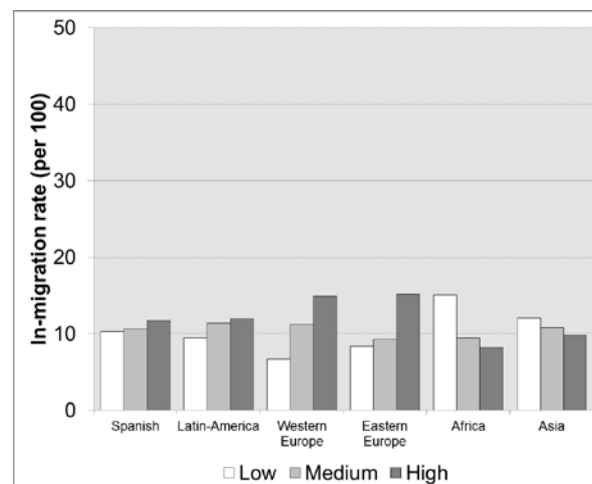
#### **4.4.- Residential Segregation and Internal Migration**

Finally, we have carried out analyses of residential segregation in the gateway cities of Madrid and Barcelona in conjunction with measures of internal migration in order to elucidate whether foreign-born populations are moving toward their own concentration within these two main provinces or, contrarily, are engaged in a process of de-segregation. For this purpose, first we have classified the municipalities of the provinces of Madrid and Barcelona using the overall distribution of values of the index of isolation into tertiles (from low to high concentration). We have then computed in-migration rates (as % of 2010 population) from the municipalities of Madrid and Barcelona separately to the other municipalities within their provinces. In sum, our numerator is given by the number of in-migrants received between 2005 and 2010 whereas the denominator refers to the population who lived in those municipalities in year 2010.

Figures 6, 7 and 8 attempt to capture the spatial behavior of both native and foreign-born populations. Generally, the spatial behavior of the host group is especially relevant for two reasons: first, it follows trends of suburbanisation but also of re-centralisation, the latter only in those cases where gentrification processes take place after urban renewals. Second, the residential re-location of natives might be constrained by preferences that are intrinsically related to ethnicity or race such as demonstrated by the so-called ‘white flight’ (i.e. departures of nationals from areas of high concentration of immigrants) and ‘white avoidance’ (i.e. settlement of nationals in areas where there is a low concentration of immigrants). Throughout both mechanisms the settlement pattern of natives conditions that of the immigrant population. As such, the process of suburbanization of the Spanish group allows us to identify whether some settlement areas are more preferred. For example, the Spanish-born population tends to re-locate to diverse areas with high concentrations of Latin-Americans and Eastern Europeans, whereas their residential movement to diverse areas of Africans and Asians is generally where these two groups present low concentrations. Although this pattern might signal some residential preferences related to the ethnic composition of localities, it could also indicate the existing socioeconomic disparities across space and the residential location of immigrant groups in original areas of settlement in the first place. In that sense, the dynamics of suburbanisation (and re-centralisation) appear as important drivers for explaining these differences, which in turn

are related to the chain of vacancies caused by the movement of Spanish nationals as well as by the settlement preferences of each group. The latter might be exemplified by the Asians who tend to settle in core urban areas that had lost attractive for natives.

**Figure 6.- Movements of the Spanish-born population towards each group concentrations**



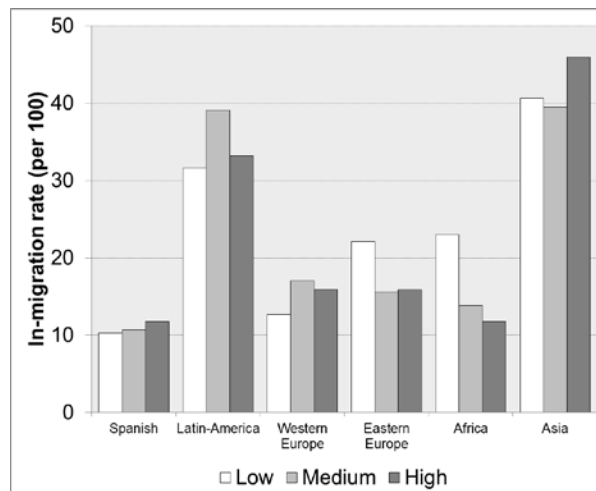
Source.- Own elaboration with data from the Municipal Register and the Statistics of Residential Variation (National Statistics Institute).

If we observe the movements made by each group towards their own concentration we see how Latin-Americans, Eastern Europeans and Africans are generally going towards municipalities where their concentration tends to be lower. The movements of the two major groups in 2010 (Latin-Americans and Western Europeans) are following the spatial pattern predicted by the heterolocalist model, in the African case the interpretation is not so straightforward and requires further analysis. By contrast, Western Europeans and Asians, move toward areas of higher concentrations of each group, a tendency that is also found for the native group. In the Asian case those movements that increase the spatial concentration reinforce the idea that this group is following a pluralist pattern of settlement.

The general picture of dispersal of all groups across the territory is illustrated with a pattern of dispersal throughout the surrounding municipalities of the gateway cities of Madrid and Barcelona, a trend that is shown by the primacy of those movements to municipalities where the scores of the isolation indexes, for the Spanish population, are

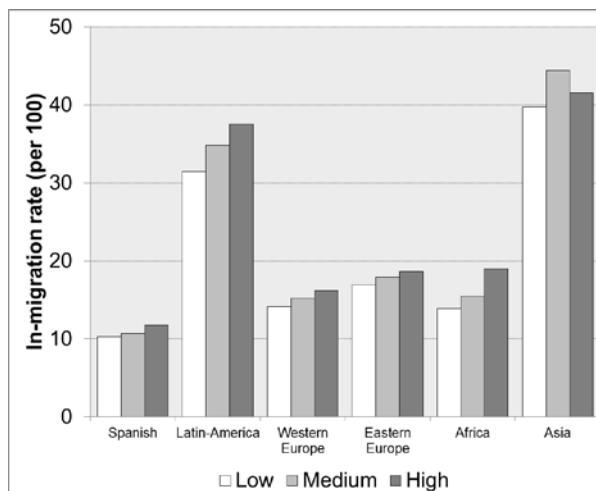
highest. This image gives us an insight of the intense transformation of the Spanish human geography as result of a decade of mass migration, where the immigrant settlement has become a reality not only for the gateway cities and central urban cores but also for the majority of localities across the Spanish territory.

**Figure 7.- Movements of each immigrant group towards its own population towards concentrations**



Source.- Own elaboration with data from the Municipal Register and the Statistics of Residential Variation (National Statistics Institute).

**Figure 8.- Movements of each immigrant group towards Spanish concentrations**



Source.- Own elaboration with data from the Municipal Register and the Statistics of Residential Variation (National Statistics Institute).

## **5.- Conclusion and discussion**

The purpose of this investigation was not so much to establish an association between the outcomes of residential segregation and the levels of social integration of different immigrant groups, but simply identify levels and trends of residential segregation over time and space in Spain.

The evidence presented here allow us to recognize the coexistence of different spatial behaviours in Spain across time and space during and after the migration boom in the 2000s, which results from the overlap of migratory waves from different places and with different arrival schedules. Whilst Latin Americans, and to a less extent Eastern Europeans, have dispersed immediately after arrival, thus illustrating a closer tendency towards heterolocalism, other groups, such as African show a slower pace in their dispersal movement, hence more in line with the segmented assimilationist theory. The slight increase in the dissimilarity index values over the decade under study for the african group, may well be pointing not only the higher encapsulation after settlement, but also the consequences of a hierarchies of preferences with Latin-Americans on top and Africans (especially north Africans) at the bottom. Meanwhile, the spatial (and economic) clustering displayed by the Asian group would suggest a pluralist interpretation, following very closely the ethnic enclave hypothesis. Although the aggregate analysis by continental origin, does not allow us to see whether there are differences between countries of origin or even regions within the country, the results provide sufficient evidence to propose the idea of coexistence of paradigms in Spain.

The research presented here has managed to achieve its initial objectives, as follows: 1) We have described the geographical distribution of the foreign-born population after a decade of mass migration into Spain, giving more visibility of the patterns of settlement throughout the Spanish geography and with specific detail for the main receiveing areas and immigrant; 2) The empirical results obtained from our analysis on residential segregation show have showed how for the foreign-born population as a whole, the degree of residential segregation is low or moderate, with dissimilarity index values below 40 (except for those provinces where the Western European population represents a majority of the foreign-born population, where it reach medium levels). In the vast majority of

Spanish provinces the foreign-born population tends to become more evenly distributed with respect to Spanish group over the decade, although it increased their level of exposure due to the population growth of immigrant groups. At the municipal level the dynamics of settlement are equivalent, with all foreign-born groups becoming slightly more concentrated (as shown by the  $P^*$  values) but displaying an increase in the level of evenness (as shown by the  $D$  values), with the exception of Western European and African groups. To explain the trends we observe in residential segregation, it is important to consider the following three key factors: territorial dispersion of economic activity, the growth of new dwellings built during the years of the housing boom (García-Montalvo, 2008), and the previous configuration of the urban periphery, similar to other Southern European cities (Leontidou, 1990; Malheiros, 2002; Arbaci 2008). The role played by internal migration of international migrants as well as Spanish nationals is also significant; 3) Latin Americans, Eastern Europeans and Africans tend to move towards de-concentration areas whereas Western Europeans and Asians tend to reinforce their concentrations.

The low and declining residential segregation found in this paper points out future lines of investigation too. First, the general movement of de-segregation has taken place mostly during the years of the so-called 'Golden Decade' of the Spanish Economy (EEAG, 2011) and, therefore, it is likely that it contributed greatly to the dispersal of the population as a whole. Although we know the impact of the economic crisis has caused a steep fall in the number of new entries as well as in the internal movements started by the foreign-born population (Domingo & Recaño, 2009) and an increase in the number of emigrations, we believe that our data, which covers up to year 2010, does not fully capture some of the ongoing impacts of the economic recession. This is of course important and requires further research to see future trends, including the inversion of some of the observed trends. Second, since there is no direct relationship between the values of the indexes by which we measure residential segregation and housing conditions, we cannot state that the current economic situation might be pushing the foreign population toward a process of 'precarization' of their residential conditions despite the greater geographical evenness overtime, which constitutes another reason to investigate in that particular area too. Last but not least, it is important to highlight the growing importance of natural change in the demography of immigration in Spain. It is subsequent in any migratory cycle and depends

on the excess of births over deaths of each immigrant group 'in situ'. Hence, if the importance of international migration and internal migration are pivotal in explaining the processes of concentration and dispersal to and from original settlement areas in the initial phase, natural growth becomes increasingly relevant in later phases for those immigrant groups that settle in the host country. Although international and internal migration can become less significant in some localities, they are still important either as part of 'chain migration' processes or in terms of selective in and out migration. It is expected, then, that the population dynamics of both natives and immigrant populations will have important consequences on the trends of concentration and dispersion, with relevant implications for public policy design related with immigrant integration and housing.



## Bibliography:

- ARANGO, J. (2000). "Becoming a Country of Immigration at the End of the Twentieth Century: the Case of Spain". King, R.; Lazaridis, G.; Tsardanidis, C (Ed.). *El Dorado or Fortress? Migration in Southern Europe*. Hampshire: Palgrave Macmillan, pp. 253-276.
- ARBACI, S. (2008). "(Re)Viewing Ethnic Residential Segregation in Southern European Cities: Housing and Urban Regimes as Mechanisms of Marginalisation". *Housing Studies*, 23: 589-613.
- BALDWIN-EDWARDS, M.; ARANGO, J. (1999). *Immigrants and the Informal Economy in Southern Europe*. London: Frank Cass.
- BAYONA, J. (2007). "La Segregación Residencial de la Población Extranjera en Barcelona. ¿Una Segregación Fragmentada?" *ScriptNova: Revista Electrónica de Geografía y Ciencias Sociales*, 11.
- BAYONA, J.; LÓPEZ-GAY, A. (2011). "Concentración, Segregación y Movilidad Residencial de los extranjeros en Barcelona". *Documents d'Anàlisi Geogràfica*, 57: 381-412.
- BIELSA, J.; DUARTE, R. (2010). "Size and linkages of the Spanish construction industry key sector or deformation of the economy?". *Cambridge Journal of Economics*, 35: 317-334.
- BOAL, F. (1999). "From Undivided Cities to Undivided Cities: Assimilation to Ethnic cleansing". *Housing Studies*, 14: 585-600.
- BRAMA, A. (2006). "Studies on the Dynamics of Residential Segregation". *Geografiska regionstudier*, 67.
- CASADO-DÍAZ, M. (2006). "Retiring to Spain: An Analysis of Differences among North European Nationals". *Journal of Ethnic and Migration Studies*, 32: 1321-1339.
- CHANG, V. (2006). "Racial Residential Segregation and Weight Status among US Adults". *Social Science and Medicine*, 63: 1289-1303.
- CHECA OLMOS, J. (2006). "Segregación y Condiciones Residenciales de los inmigrantes africanos en Almería (España)". *Migraciones Internacionales*, 3: 81-106.
- CHECA OLMOS, J.; ARJONA GARRIDO, A. (2009). "Procesos de segregación residencial en la población gitana. El caso Almeriense". *Revista de Estudios Regionales*, 85: 173-196.
- COLLANTES, F.; PINILLA, V.; SÁEZ, L.; SILVESTRE, J. (2010). *El impacto demográfico de la inmigración en la España rural despoblada*. Retrieved June 15<sup>th</sup> 2012, from [link](#).
- CUADRADO-ROURA, J.; IGLESIAS-FERNÁNDEZ, C.; LLORENTE-HERAS, R. (2006). "Does Immigration Contribute to Convergence among Regional Labour Markets in Spain?". *ERSA conference papers ersa06p444*, 1-22. Viena.

- DENTON, N. (1996). "The Persistence of Segregation: Links Between Residential Segregation and School Segregation". *80 MINN. L. REV.*, 795.
- DENTON, N.; MASSEY, D. (1991). "Patterns of Neighborhood Transition in a Multiethnic World: U.S. Metropolitan Areas, 1970-1980". *Demography*, 28: 41-63.
- DOMINGO, A.; GIL-ALONSO, F. (2007). "Immigration and Changing Labour Force Structure in the Southern European Union". *Population (english edition)*, 62: 709-727.
- DOMINGO, A.; RECAÑO, J. (2009). "La Inflexión en el Ciclo Migratorio Internacional en España. Impacto y Consecuencias Demográficas". AJA, E.; ARANJO, J.; OLIVER ALONSO, J. (Ed.). *La Inmigración en Tiempo de Crisis*. Barcelona: CIDOB, pp. 182-207.
- DUNCAN, D.; DUNCAN, B. (1955). "A Methodological Analysis of Segregation Indexes". *American Sociological Review*, 20: 210-217.
- EEAG. (2011). *The EEAG Report on the European Economy*. Munich: CESifo. Retrieved May 1<sup>st</sup> 2011. [Link](#).
- FARLEY, R. (1977). "Residential Segregation in Urbanized Areas of the United States in 1970: An Analysis of Social Class and Racial Differences". *Demography*, 14: 497-518.
- FINNEY, N.; SIMPSON, L. (2008). "Internal Migration and Ethnic Groups: Evidence for Britain from the 2001 Census". *Population, Space and Place*, 14: 63-83.
- FINNEY, N.; SIMPSON, L. (2009). *Sleepwalking to Segregation*. Bristol: Policy Press.
- GARCÍA-ALMIRALL, P.; FULLAONDO, A.; FRIZZERA, A. (2008). "Inmigración y Espacio Socio-Residencial en la Región Metropolitana de Barcelona". *CIUDAD Y TERRITORIO, Estudios Territoriales*, 40: 727-741.
- GARCÍA-MONTALVO, J. (2008). "El sector inmobiliario español a principios del siglo XXI: entre la demografía y las expectativas". *clm.economía*, 11: 57-79.
- GONZÁLEZ, L.; ORTEGA, F. (2009). *Immigration and Housing Booms: Evidence from Spain*. Bonn: Institute for the Study of Labor (IZA).
- GONZÁLEZ-ENRÍQUEZ, C. (2009). "Spain, the Cheap Model. Irregularity and Regularization as Immigration Management Policies". *European Journal of Migration and Law*, 11: 139-157.
- HIRSCHMAN, C. (1983). "America's Melting Pot Reconsidered". *Annual Review of Sociology*, 9: 397-423.
- IZQUIERDO, A. (2003). *Inmigración, mercado de trabajo y protección social*. Madrid: Consejo Económico y Social.
- IZQUIERDO, A.; LÓPEZ DE LERA, D.; MARTINEZ BUJÁN, R. (2003). "The Favorites of the Twenty-First Century: Latin American Immigration in Spain". *International Journal of Migration Studies*, 149: 98-125.
- JOHNSTON, R.; FORREST, J.; POULSEN, M. (2002). "Are there Ethnic Enclaves/Ghettos in English Cities?" *Urban Studies*, 39: 591-618.

- JOHNSTON, R.; POULSEN, M.; FORREST, J. (2003). "And Did the Walls Come Tumbling Down? Ethnic Residential Segregation in Four U.S. Metropolitan Areas 1980-2000". *Urban Geography*, 24: 560-581.
- JOHNSTON, R.; POULSEN, M.; FORREST, J. (2004). "The Comparative Study of Ethnic Residential Segregation in the USA 1980-2000". *Tijdschrift voor Economische En Sociale Geografie*, 95: 550-569.
- KING, R.; ZONTINI, E. (2000). "The Role of Gender in the South European immigration model". *Papers*, 60: 35-52.
- KING, R.; FIELDING, A.; BLACK, R. (1997). "The International Migration Turnaround in Southern Europe". King, R.; Black, R. editors, *Southern Europe and the New Immigrants*. Portland: Sussex Academic Press, 1-25.
- KING, R.; LAZARIDIS, G.; TSARDANIDIS, C. (Ed.) (2000). *El Dorado or Fortress? Migration in Southern Europe*. Houndmills: Palgrave Macmillan.
- KLAFF, V. (1980). "Pluralism an an Alternative Model for the Human Ecologist". *Ethnicity*, 7: 102-118.
- LEONTIDOU, L. (1997). "On Linkages Between Urbanism and Urban Restructuring in Mediterranean Europe". KEYDER, C. (Ed.). *ISA Regional Conferences: Tradition in Modernity. Southern Europe in Question*. Istanbul, pp. 85-99.
- LI, W. (1993). "Geographical Study of Ethnicity: Comparison between Downtown and Suburban Chinese in Metropolitan Los Angeles". *Geojournal*, 30: 317-322.
- LI, W. (1998). "Los Angeles' Chinese Ethnoburb: From Ethnic Service Centre to Global Economy Outpost". *Urban Geography*, 19: 502-517.
- LIEBERSON, S. (1981). "An asymmetrical approach to segregation". PEACH, C.; ROBINSON, V.; SMITH, S. (Ed.). *Ethnic Segregation in the Cities*. London: Croom Helm, pp. 61-82.
- LIERBERSON, S.; CARTER, D. (1982). "Changes and Urban Differences in Residential Segregation: A Reconsideration". *American Journal of Sociology*, 88: 296-310.
- LÓPEZ-HERNÁNDEZ, I.; RODRÍGUEZ-LÓPEZ, E. (2010). "Los años del boom (1995-2007)". LÓPEZ-HERNÁNDEZ, I.; RODRÍGUEZ-LÓPEZ, E. (Ed.). *Fin de Ciclo. Financiarización, territorio y sociedad de propietarios en la onda larga del capitalismo hispano (1959-2010)*. Madrid: Traficante de Sueños, pp. 179-210.
- MALHEIROS, J. (2002). "Ethni-cities: Residential Patterns in the Northern European and Mediterranean Metropolises. Implications for Policy Design". *International Journal of Population Geography*, 8: 107-134.
- MARTÍNEZ DEL OLMO, A.; LEAL MALDONADO, J. (2008). "La Segregación Residencial, un Indicador Espacial Confuso en la Representación de la Problemática Residencial de los Inmigrantes Económicos: El Caso de la Comunidad de Madrid". *Architecture, City and Enviroment*, 3: 39-52.

- MARTORI, J.; APPARICIO, P. (2011). "Changes in Spatial Patterns of the Immigrant Population of a Southern European Metropolis: the Case of the Barcelona Metropolitan Area (2001-2008)". *Tijdschrift voor Economische en Sociale Geografie*, 102: 562-581.
- MASSEY, D. (1985). "Ethnic Residential Segregation: A Theoretical Synthesis and Empirical Review". *Sociology and Social Research*, 69: 315-350.
- MASSEY, D. (1990). "American Apartheid: Segregation and the Making of the Underclass". *The American Journal of Sociology*, 96: 329-357.
- MASSEY, D. (2008). *New Faces in New Places. The Changing Geography of American Immigration*. 1<sup>st</sup> edition. New York: Russell Sage Fundation.
- MASSEY, D.; DENTON, N. (1988). "The Dimensions of Residential Segregation". *Social Forces*, 67: 281-315.
- MASSEY, D.; GROSS, A.; SHIBUYA, K. (1994). "Migration, Segregation, and the Geographic Concentration of Poverty". *American Sociological Review*, 59: 425-445.
- MIRET, N. (2009). "Inmigración y Metropolización en Barcelona". *AREAS. Revista internacional de Ciencias Sociales*, 28: 103-116.
- MUSTERD, S. (2005). "Social and Ethnic Segregation in Europe: Levels, Causes, and Effects". *Journal of Urban Affairs*, 27: 331-348.
- MUSTERD, S.; FULLAONDO, A. (2008). "Ethnic Segregation and the Housing Market in Two Cities in Northern and Southern Europe: The Cases of Amsterdam and Barcelona". *Architecture, City and Environment*, 3: 93-115.
- NEL-LO, O. (1997). "Las Grandes Ciudades Españolas: Dinámicas Urbanas e Incidencia de las Políticas Estatales". *Papers. Regió Metropolitana de Barcelona*, 27: 9-70.
- NOGLE, J. (1994). "Internal Migration for Recent Immigrants to Canada". *International Migration Review*, 28: 31-48.
- OECD (2007). *International Migration Outlook. 2007 edition*. Paris: SOPEMI, OECD.
- OECD (2011). *How does Spain Compares?* Retrieved July 17<sup>th</sup> 2012, [link](#).
- PAJARES, M. (2010). *Inmigración y mercado de trabajo. Informe 2012*. Madrid: OPI (Observatorio Permanente de la Inmigración).
- PEACH, C. (1996). "The meaning of Segregation". *Planning Practice and Research*, 11: 137-150.
- PEACH, C. (1997). "Pluralist and Assimilationist Models of Ethnic Settlement in London 1991". *Tijdschrift voor Economische en Sociale Geografie*, 88: 120-134.
- PEACH, C. (1999). "London and New York: Contrasts in British and American Models of Segregation". *International Journal of Population Geography*, 5: 319-351.
- PEACH, C. (2001). "The Ghetto and the ethnic enclave". *International Seminar on Segregation in the City*. Cambridge, pp. 1-21.
- PORTES, A.; RUMBAUT, R. (2001). *The story of the immigrant second generation*. Berkeley: University of California Press.

- PORTES, A.; ZHOU, M. (1993). "The New Second Generation: Segmentd Assimilation and Its Variants". *Annals of the American Academy of Political and Social Science*, 530: 74-96.
- PUMARES, P.; GARCÍA COLL, A.; ASENSIO, A. (2006). *La Movilidad Laboral y Geográfica de la Población Extranjera en España*. Madrid: OPI (Observatorio Permanente de la Inmigración).
- RECAÑO, J.; DOMINGO, A. (2006). "Evolución de la Distribución Territorial y la Movilidad Geográfica de la Población Extranjera en España". AJA, E.; ARANGO, J. (Ed.). *Veinte años de Inmigración en España. Perspectiva Jurídica y Sociológica*. Barcelona: Ediciones Bellaterra, pp. 303-338.
- ROGERS, A.; HENNING, S. (1999). "The internal Migration Patterns of the Foreign-Born and Native-born population in the United States: 1975-1980 and 1985-1990". *International Migration Review*, 33: 403-429.
- SABATER, A.; DOMINGO, A. (2012). "A New Immigration Regularization Policy: The Settlement Programme in Spain". *International Migration Review*, 46: 191-220.
- SABATER, A.; BAYONA I CARRASCO, J.; DOMINGO, A. (2012). "Internal Migration and Residential Patterns across Spain After Unprecedented International Migration". FINNEY, N.; CATNEY, G. (Ed.). *Minority Internal Migration in Europe*. Surrey: Ashgate Publishing, International Population Studies Series.
- SALVÀ-TOMÁS, P. (2002). "Tourist development and foreign immigration in Balearic Islands". *Revue européenne des migrations internationales*, 18: 87-101.
- SANDELL, R. (2005). *Spain's Quest for Regular Immigration*. Madrid: Real Instituto Elcano de Estudios Internacionales y Estratégicos, 64.
- SIMPSON, L. (2004). "Statistics of Racial Segregation: Measures, Evidence an Policy". *Urban Studies*, 41: 661-681.
- SIMPSON, L. (2007). "Ghettos of the mind: the empirical behaviour of indices of segregation and diversity". *Journal of the Royal Statistical Society*, 170: 405-424.
- STILLWELL, J.; VAN HAM, M. (2010). *Ethnicity and Integration. Understanding Population Trends and Processes*. London/New York: Springer.
- TAEUBER, K.; TAEUBER, A. (1965). *Negroes in Cities: Residential Segregation and Neighborhood Change*. Chicago: Aldine Publishing Company.
- TELLES, E.; ORTIZ, V. (2011). *Generaciones Excluidas: mexicano-estadounidenses, asimilación y raza*. Madrid: CIS (Centro de Investigaciones Sociológicas). Translators: CASADO, T.; PRANGER, C.
- VIRUELA MARTÍNEZ, R. (2008). "Población Rumana y Búlgara en España: Evolución, Distribución Geográfica y Flujos Migratorios". *Cuadernos de Geografía*, 84: 169-194.
- VIRUELA MARTÍNEZ, R. (2010). "Movilidad Geográfica de los Rumanos (Estructura Territorial de las Migraciones Interiores en España)". *EMPIRIA. Revista de Metodología de las Ciencias Sociales*, 19:157-181.

- VOAS, D.; WILLIAMSON, P. (2000). "The Scale of Dissimilarity: Concepts, Measurement and an Application to Socio-Economic variation across England and Wales". *Transactions of the Institute of British Geographers, New Series*, 25: 465-481.
- VONO, D.; BAYONA I CARRASCO, J. (2011). "El asentamiento residencial de los latinoamericanos en las principales ciudades españolas (2001-2009)". *Notas de población*, 91: 129-159.
- VONO, D.; DOMINGO, A. (2007). "El retorno de españoles desde América Latina: características demográficas y distribución espacial de los flujos entre 1988 y 2006". *Cuadernos Geográficos*, 41: 7-31.
- WHITE, M. J. (1983). "The Measurement of Spatial Segregation". *American Journal of Sociology*, 88: 1008-1018.
- WHITE, M. J. (1986). "Segregation and Diversity Measures in Population Distribution". *Population Index*, 52: 198-221.
- WILLIAMS, D.; COLLINS, C. (2001). "Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health". *Public Health Reports*, 116: 404-416.
- ZELINSKY, W.; LEE, B. (1998). "Heterolocalim: An Alternative Model of the Sociospatial Behaviour of Immigrant Ethnic Communities". *International Journal of Population Geography*, 4: 281-298.