

# **The Transformation of the Spatial Social Structure**

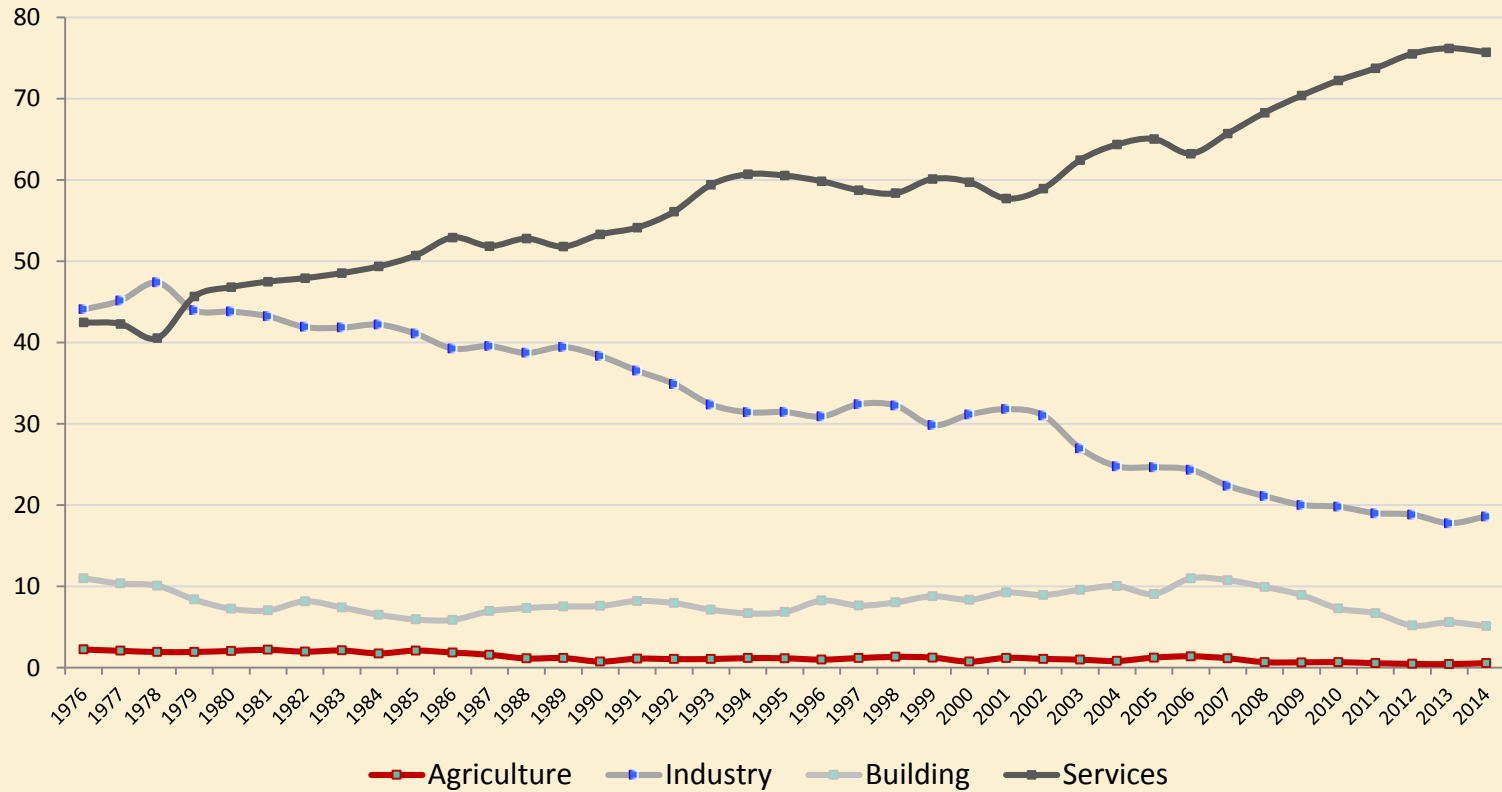
**The Barcelona Metropolitan Area, from 1991 to 2011**

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# Theories to be contrasted

- **Dual city:** post-industrialization and globalization triggered occupational and social polarization whereby metropolis become fragmented and dual (Sassen, 1991; Mollenkopf & Castells, 1991).
- **There is not one model of post-industrial city:** urban morphology is path-dependent and contingent on many factors (Hamnet, 1994; Marcuse & Van Kempen, 2001)

# Occupational distribution by activity sectors. Province of Barcelona from 1976 to 2014

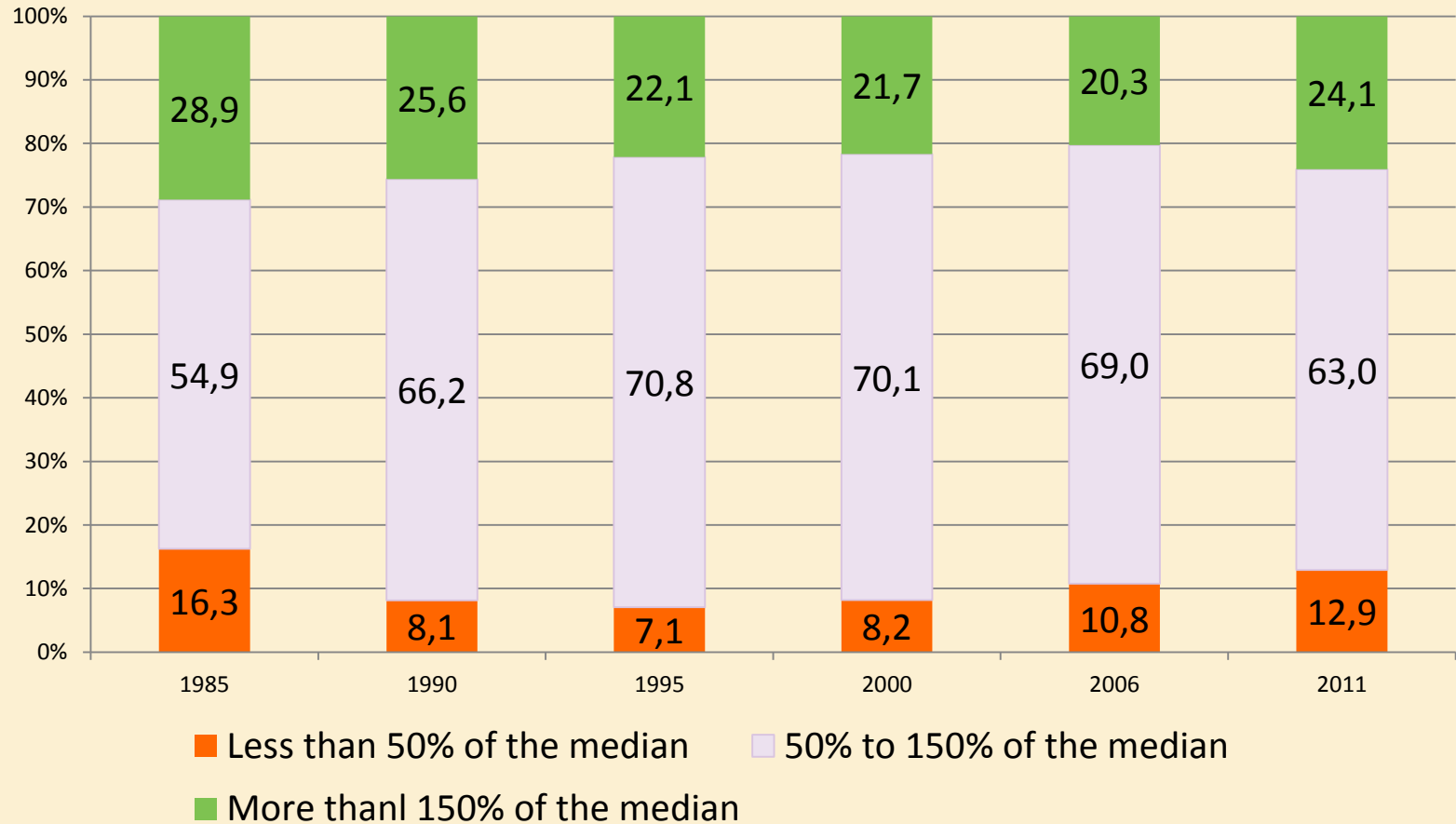


# Occupational Structure 1985-2011

## BMA

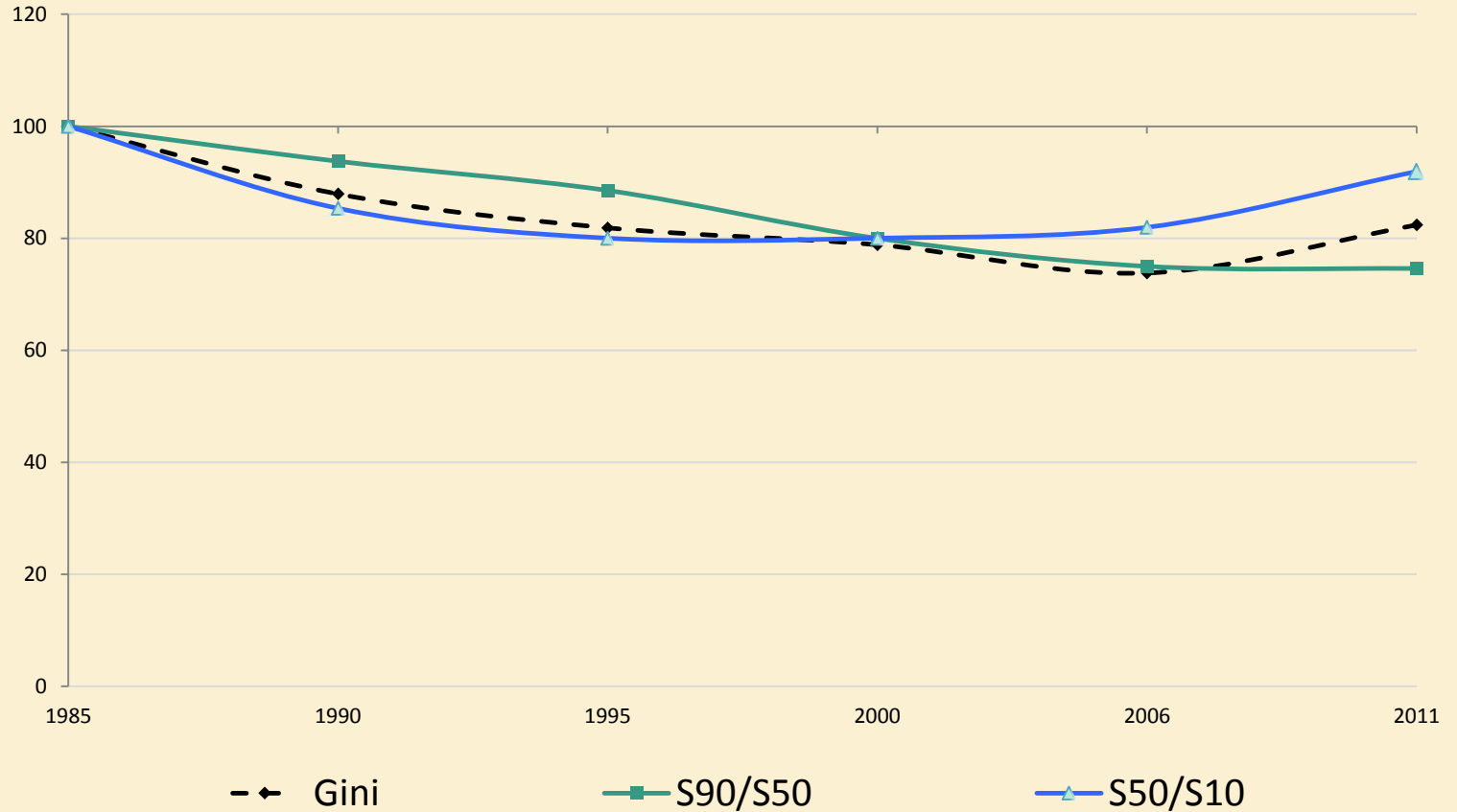


# Share of population 18+ by income classes (BMA)

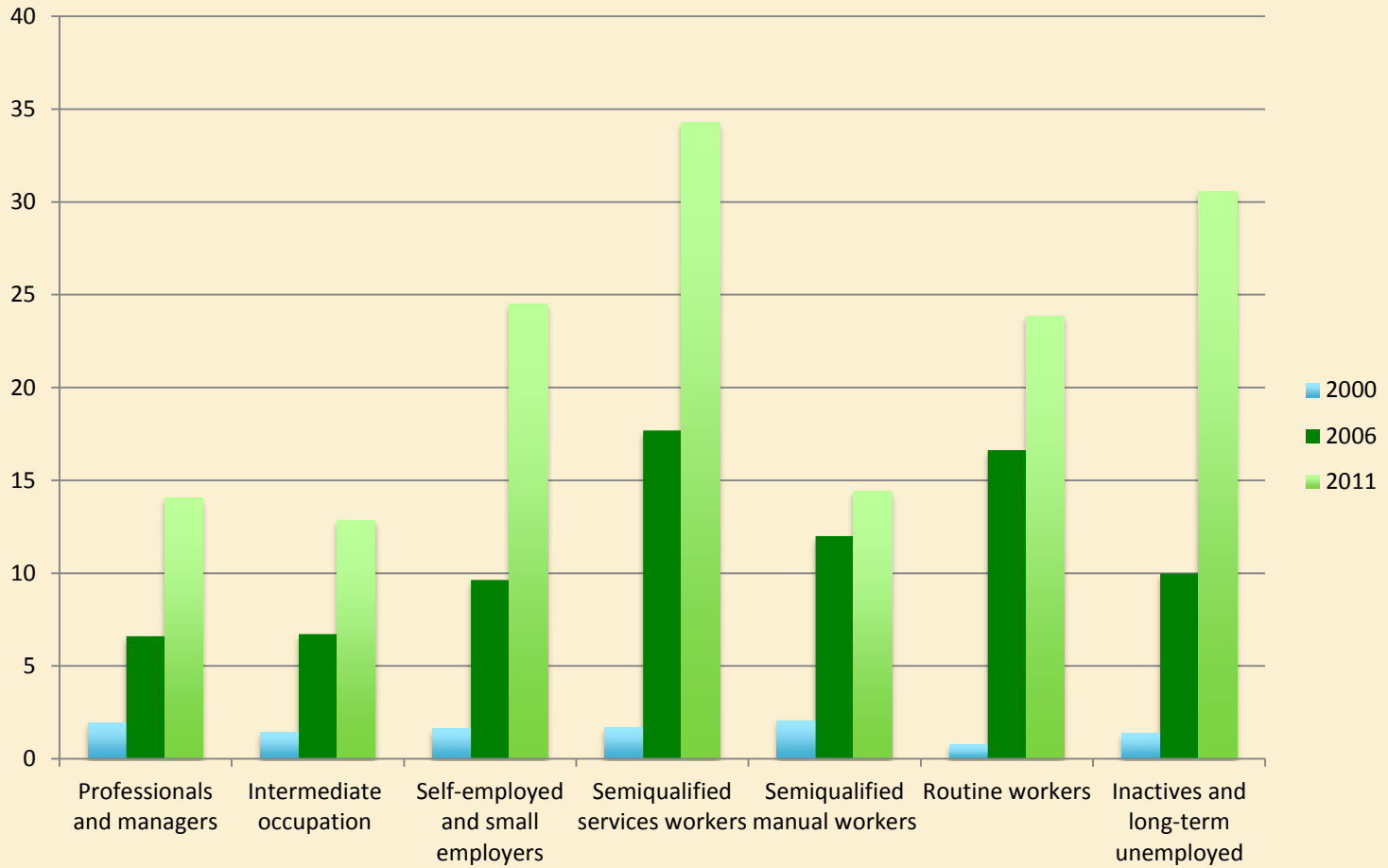


# Evolution of BMA inequality coefficients from 1985 to 2011

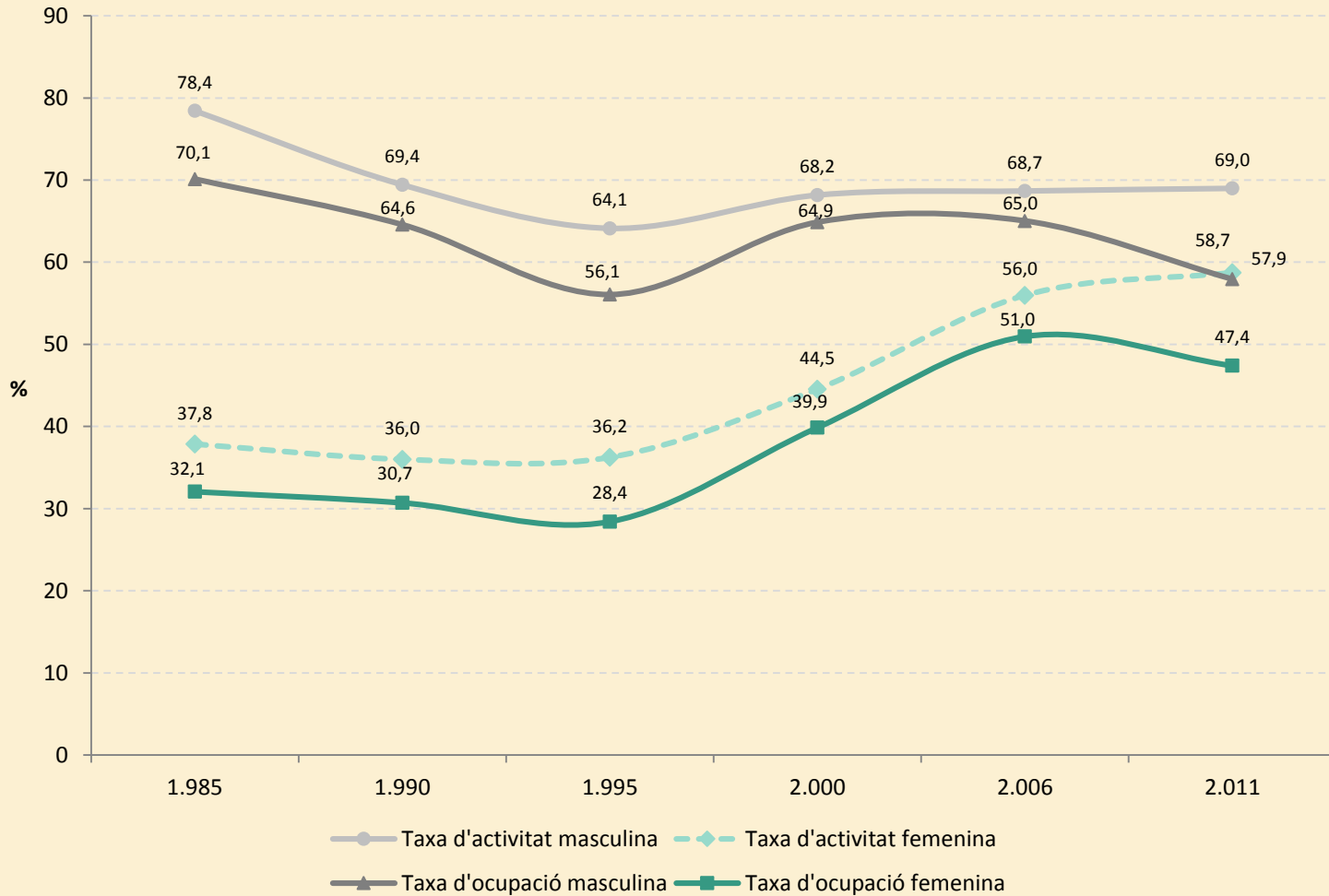
1985=100



# Share of immigrants by social class BMA 2000 - 2011



## Declining mens activity is substituted by women's activity





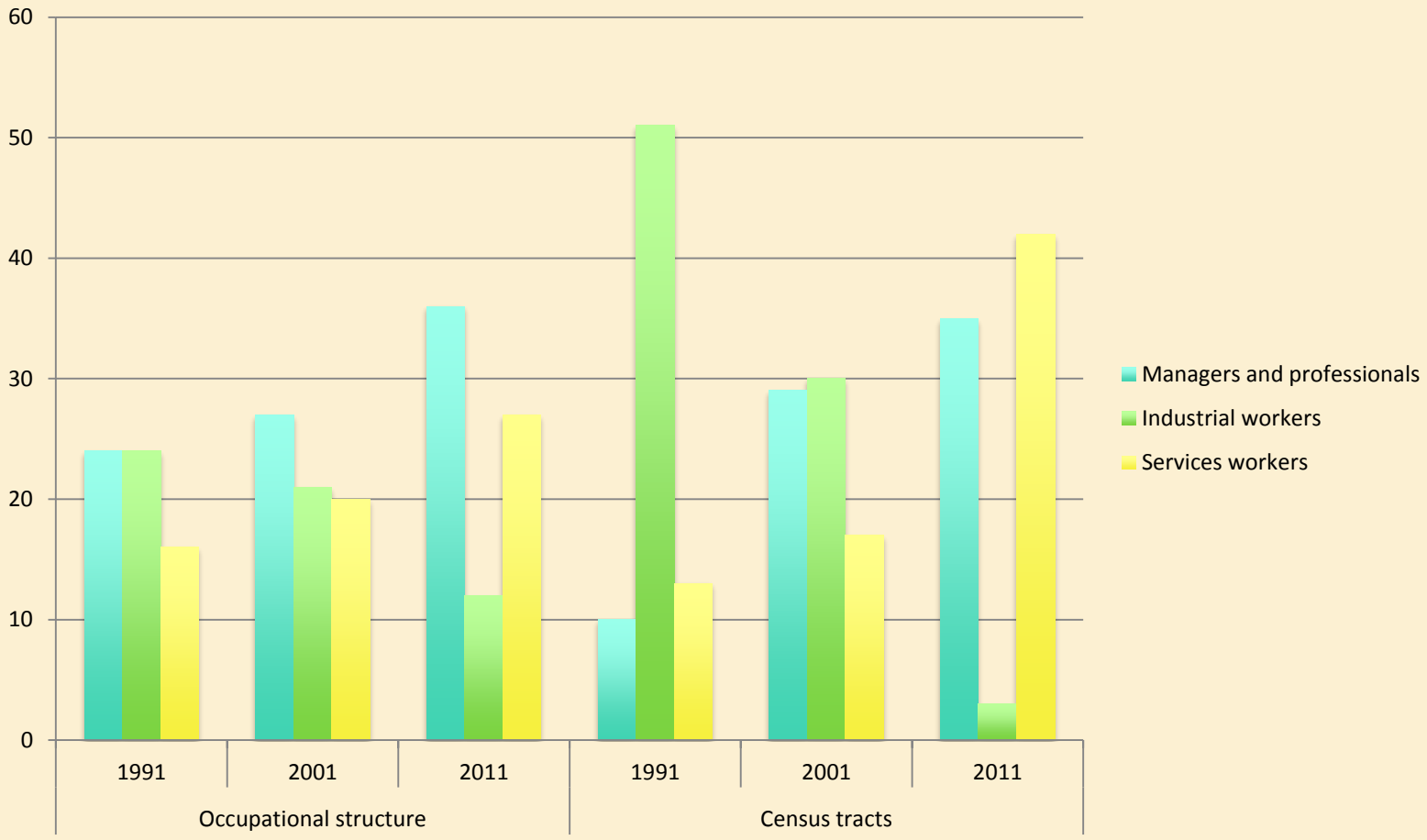
# Spatial Segregation

Percentages of total census tracts

Larger social class in the tract	1991	2001	2011
Managers and professionals	9,8	29,4	35,4
Intermediate occupations	23,1	17,5	16,8
Semiqualfified services workers	13,5	17,5	42,0
Semiqualfified manual workers	51,5	30,9	2,9
Routine workers	1,5	2,9	2,9
Mixed areas	0,7	1,8	0,0
Total	100,0	100,0	100,0

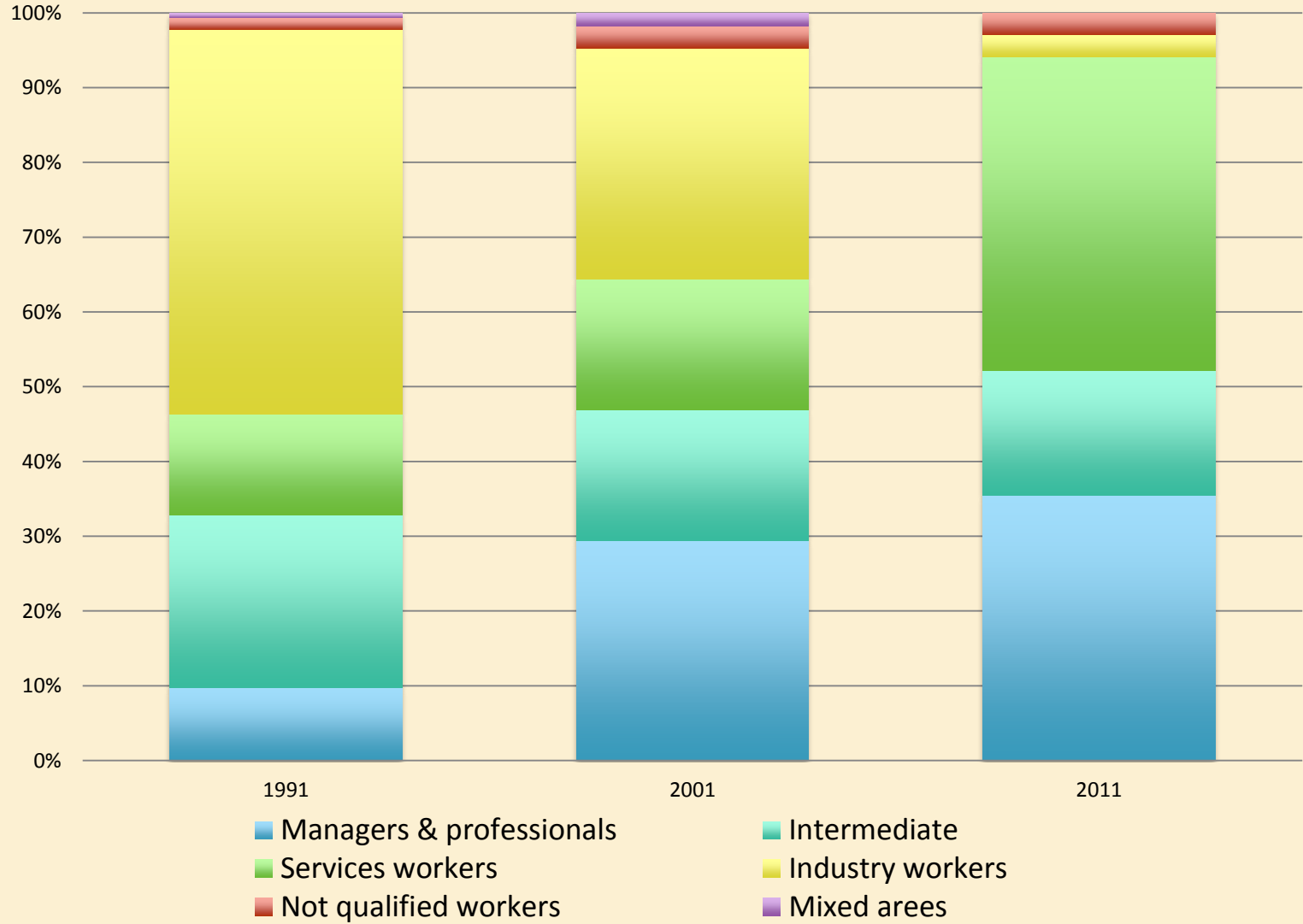
Percentages of total population

Larger social class in the tract	1991	2001	2011
Managers and professionals	8,4	27,1	36,5
Intermediate occupations	21,5	17,7	17,9
Semiqualfified services workers	10,4	15,9	39,5
Semiqualfified manual workers	57,6	35,3	2,9
Routine workers	1,6	2,5	3,2
Mixed areas	0,5	1,5	0,0
Total population	100,0	100,0	100,0



# Larger social class by census tracts

Percentages of census tracts

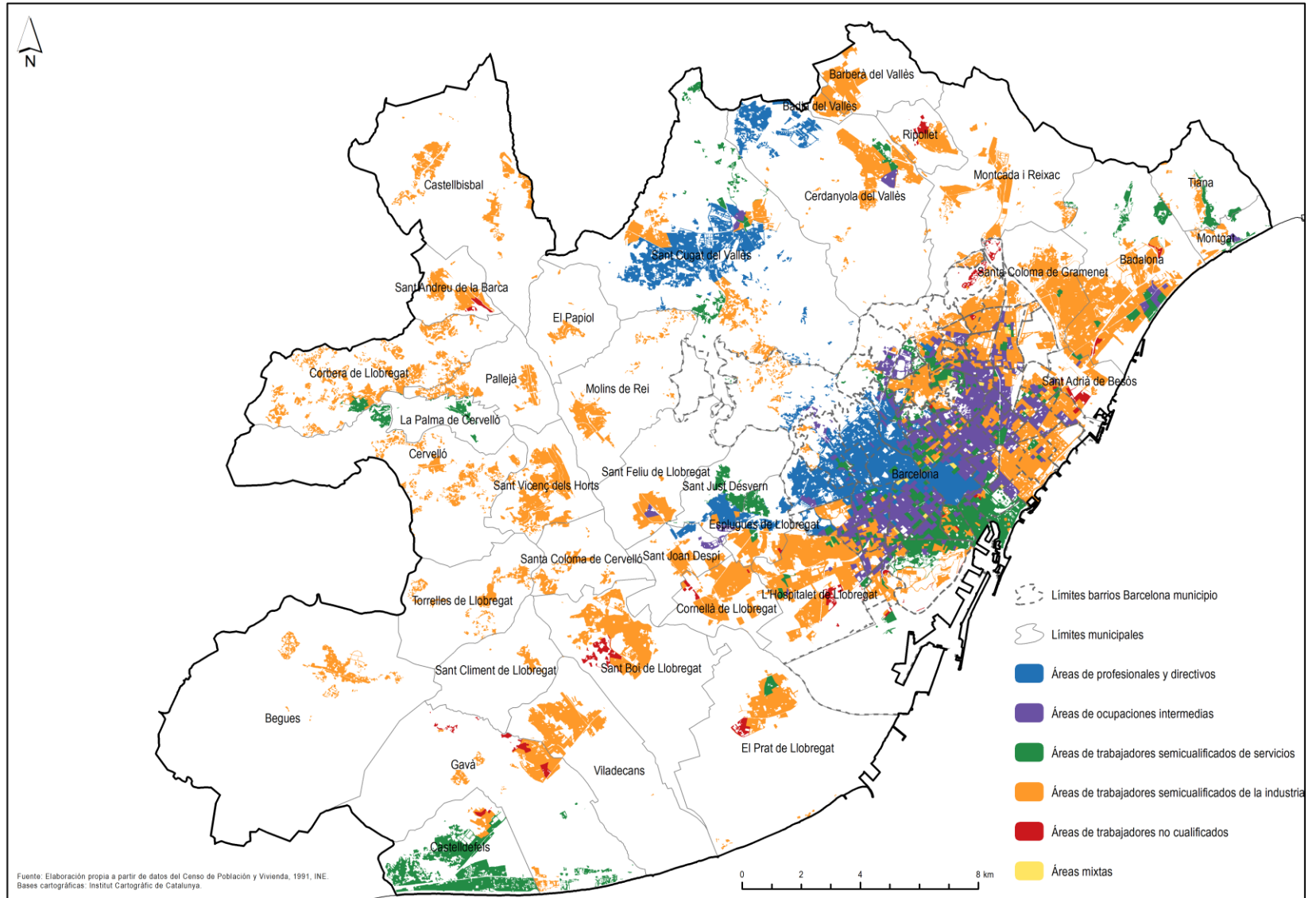


# Some Facts

- The building bubble triggered the suburbanization of the 'service class' first and the working classes later (mortgages availability and immigrants looking for housing in working class areas).
- Urban waterfront regeneration begun with the 1992 Olympic Games and attracted the 'service class'.
- Old town and old industrial areas (Poble Nou) have been subjected to planned gentrification.

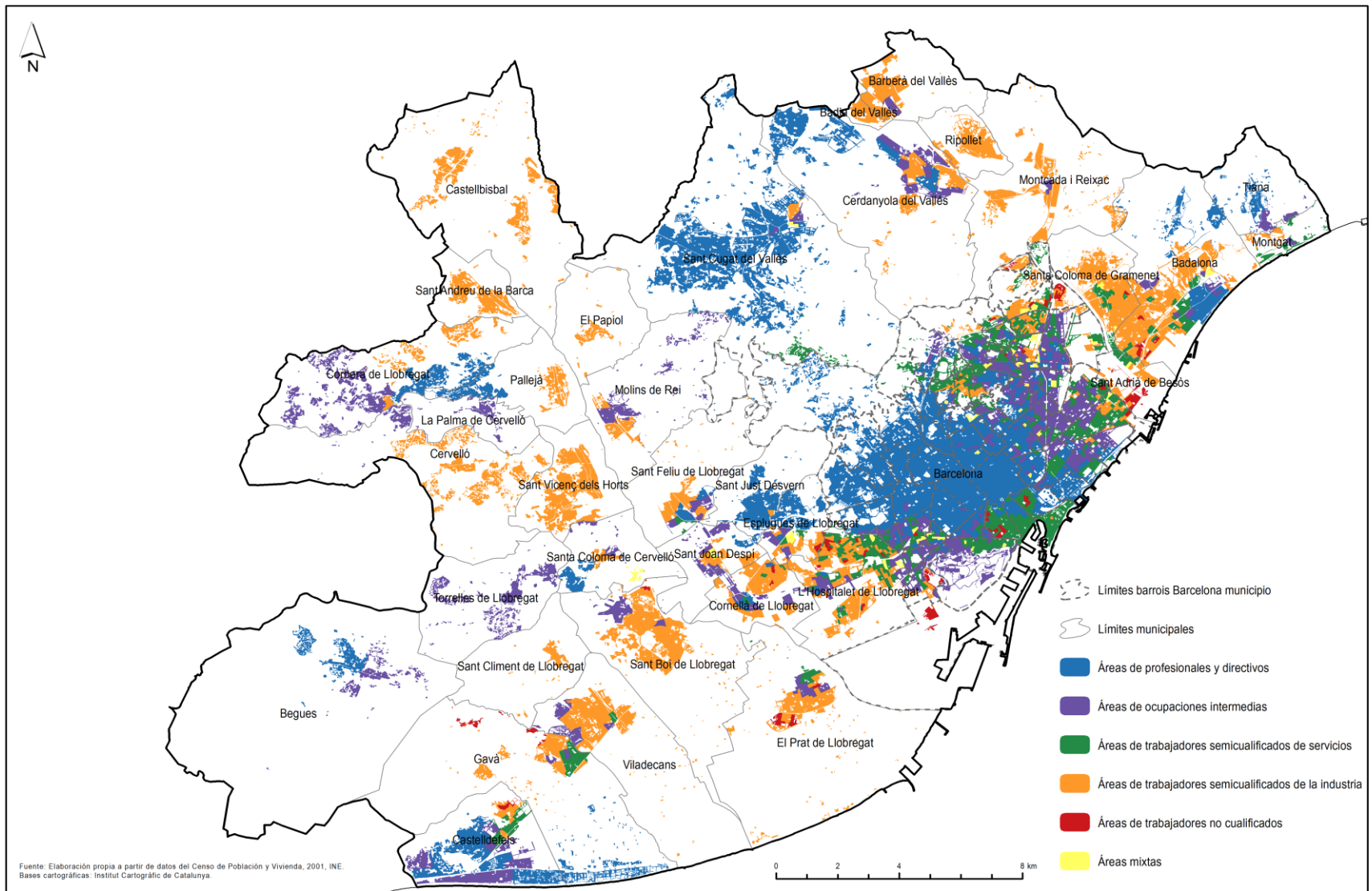
# 1991

## Larger social classes by census tracts



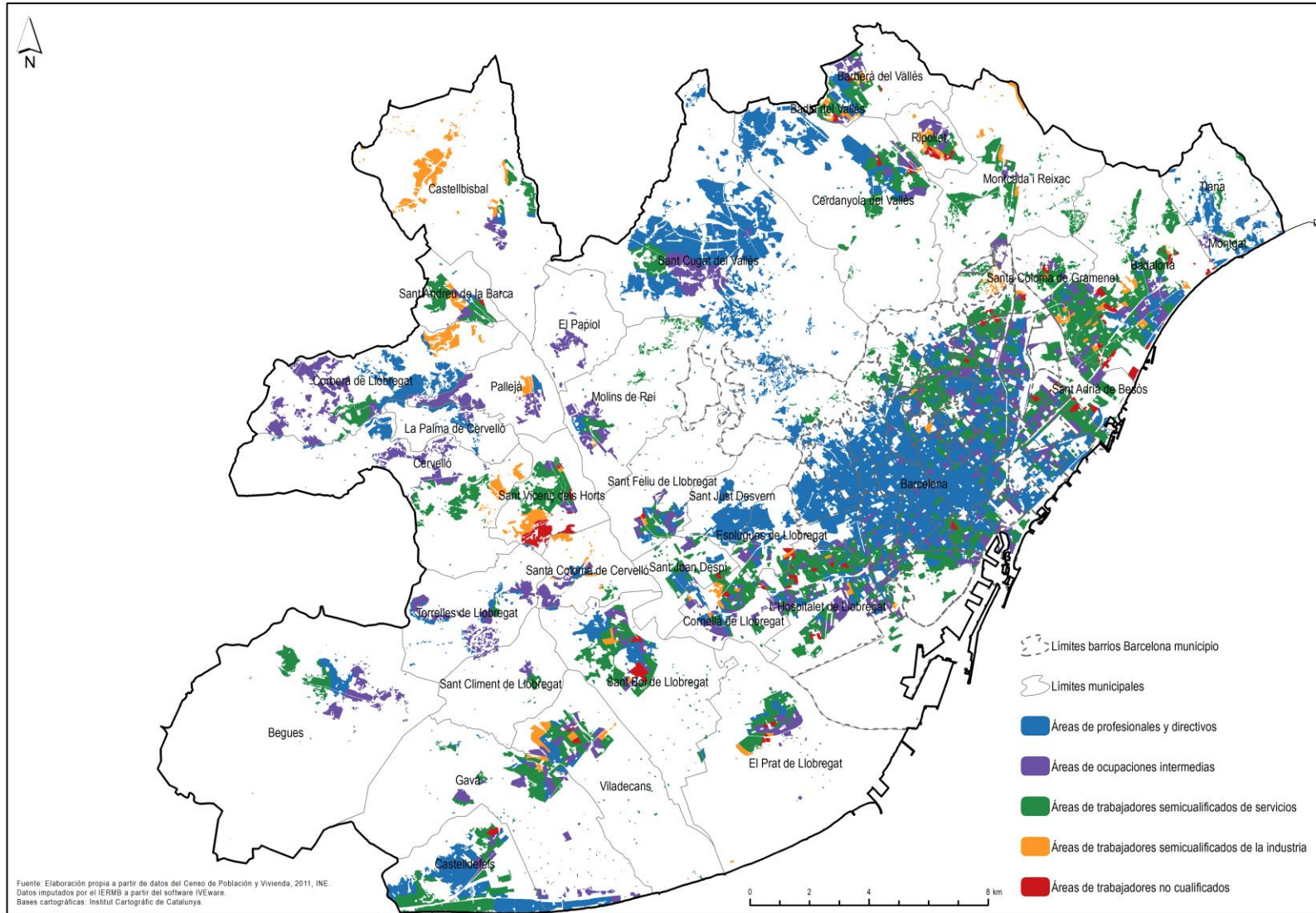
# 2001

## Larger social classes by census tracts



# 2011

## Larger social classes by census tracts





# Managers and Professionals

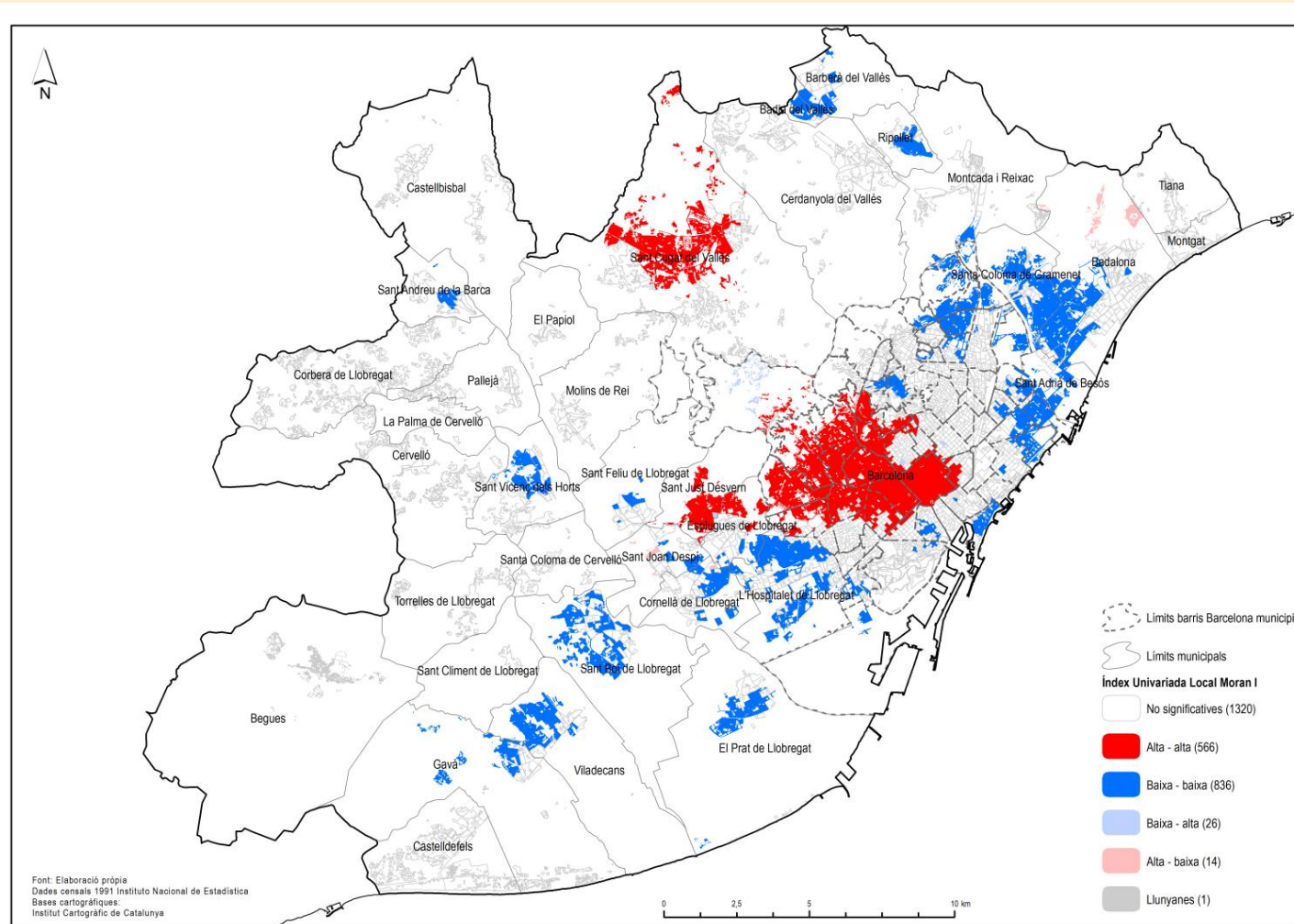
Clusters of census tracts

Moran's Local Index

## 1991

In Red= high-high

In Blue= low-low



# Managers and Professionals

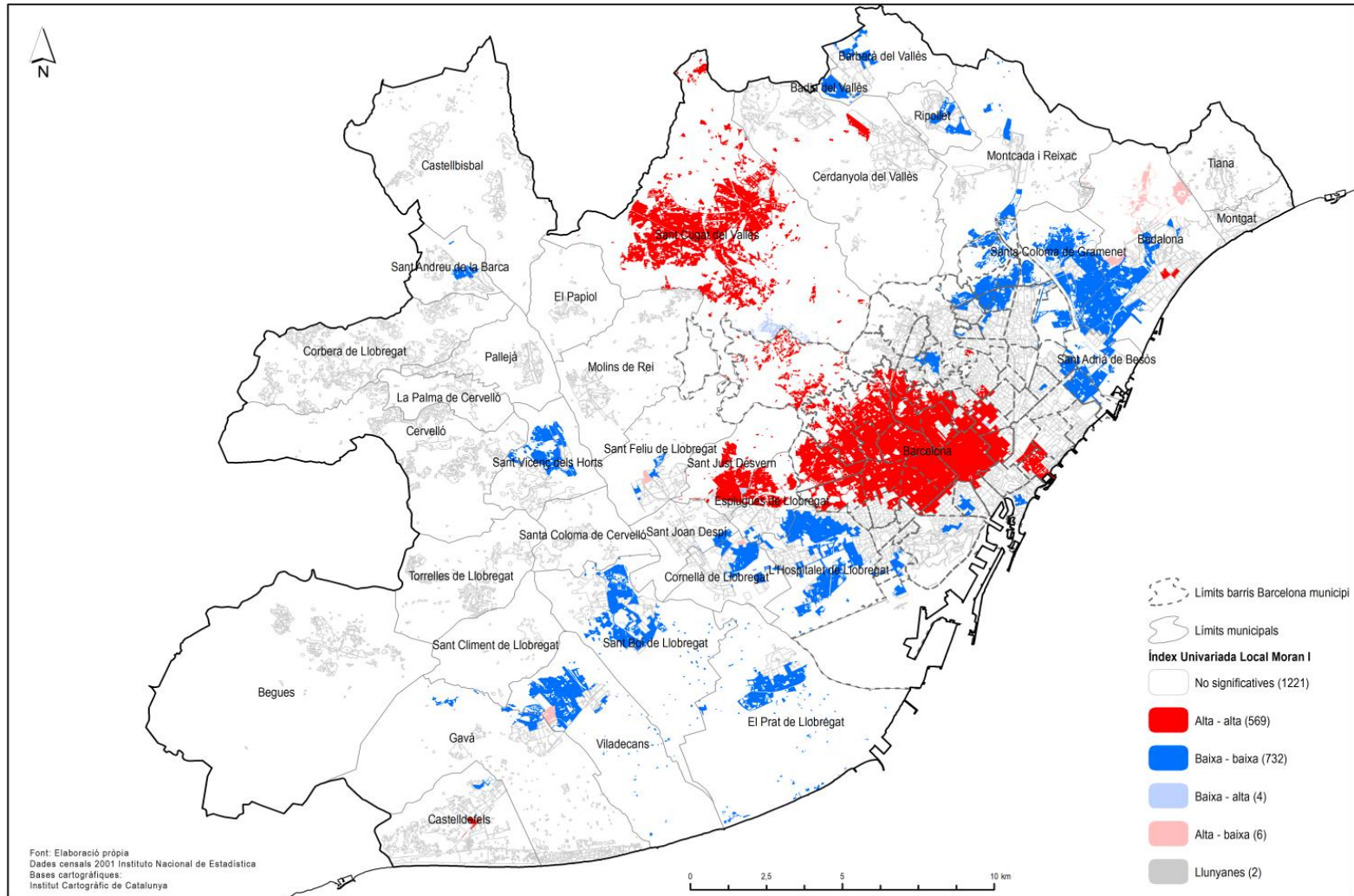
Clusters of census tracts

Moran's Local Index

2001

In Red= high-high

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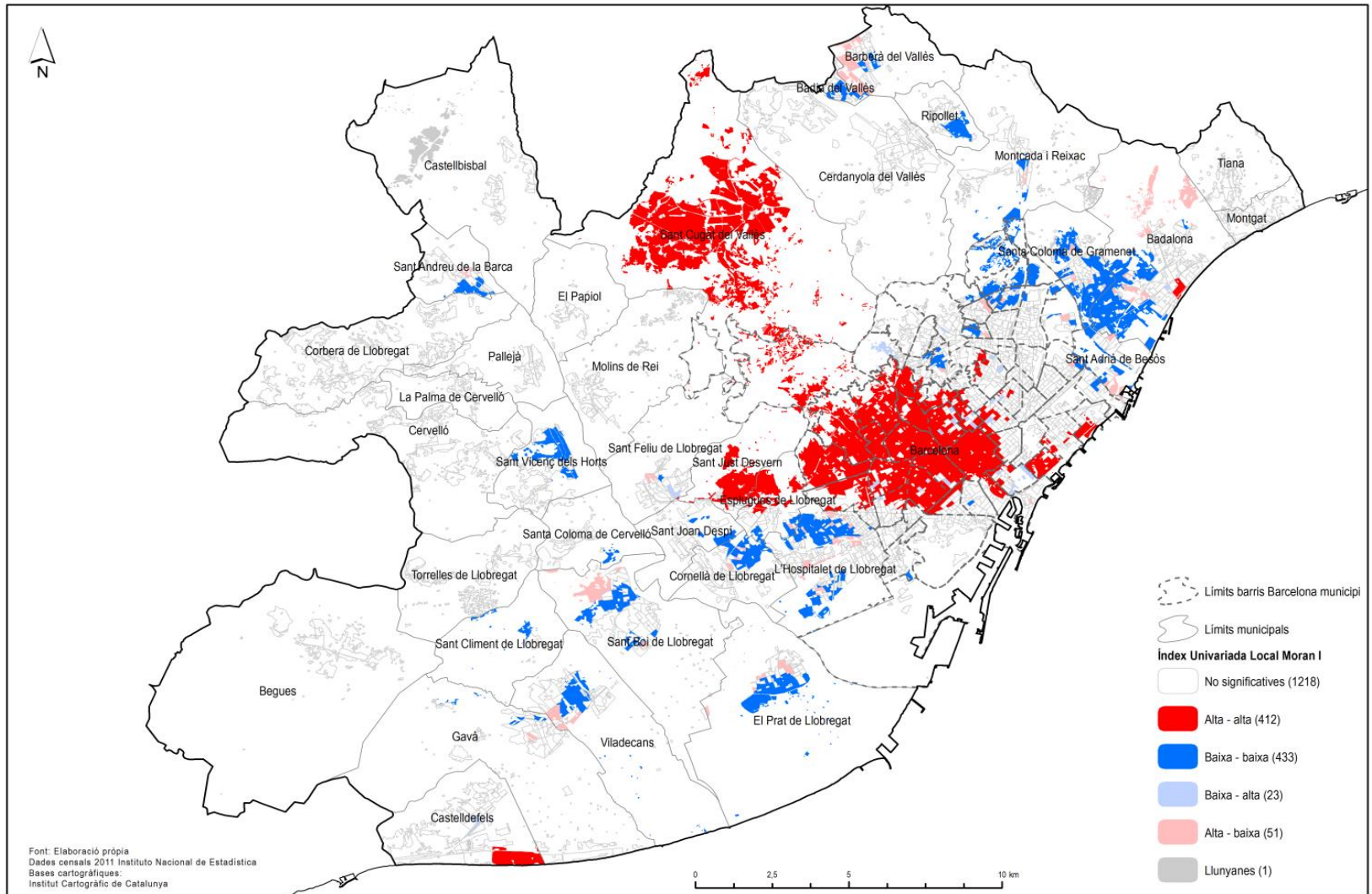
# Managers and Professionals

Moran's Local Index

2011

In Red= high-high

In Blue= low-low



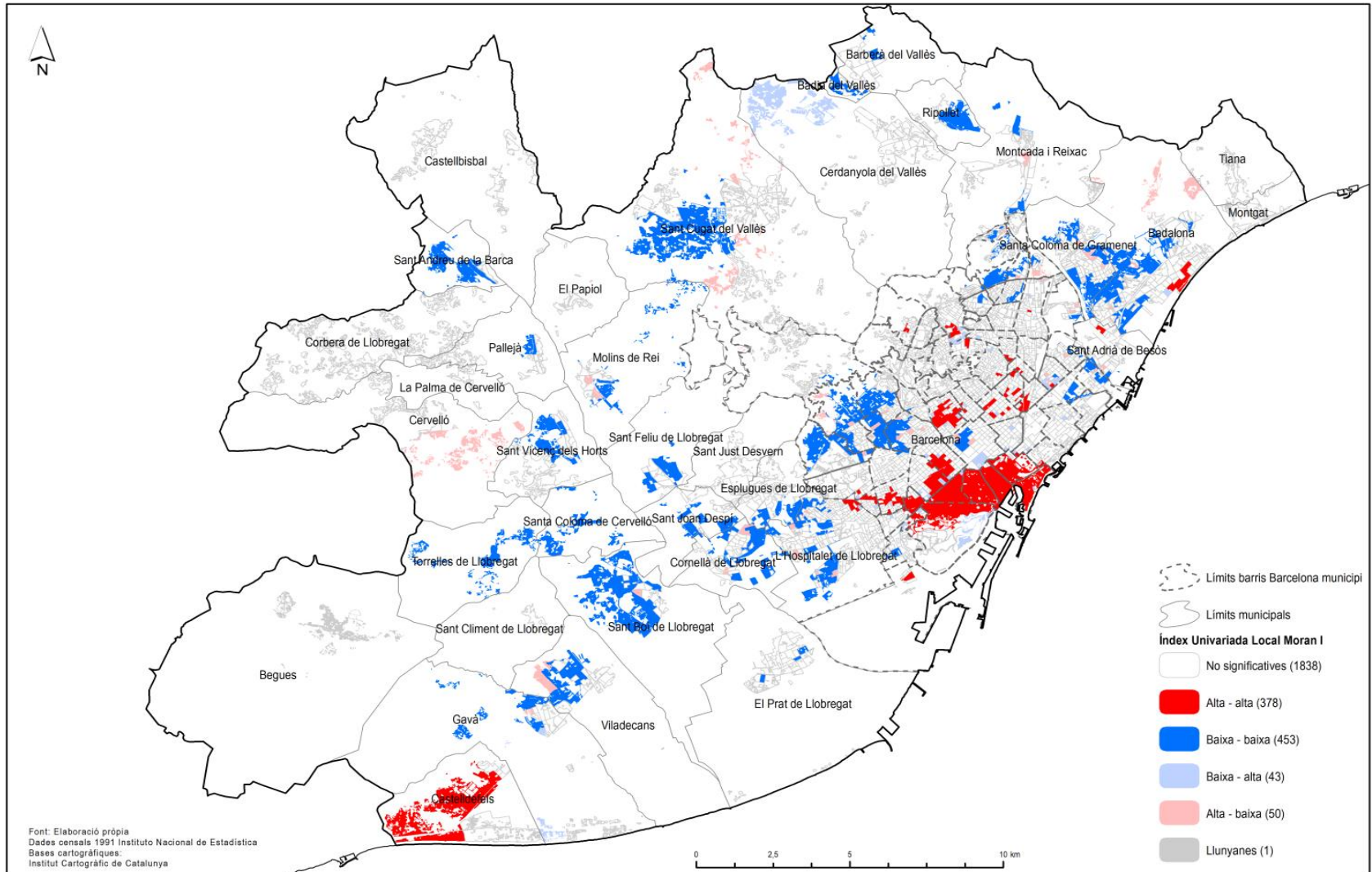
# Semiqualfied services workers

Moran's Local Index

1991

In Red= high-high

In Blue= low-low



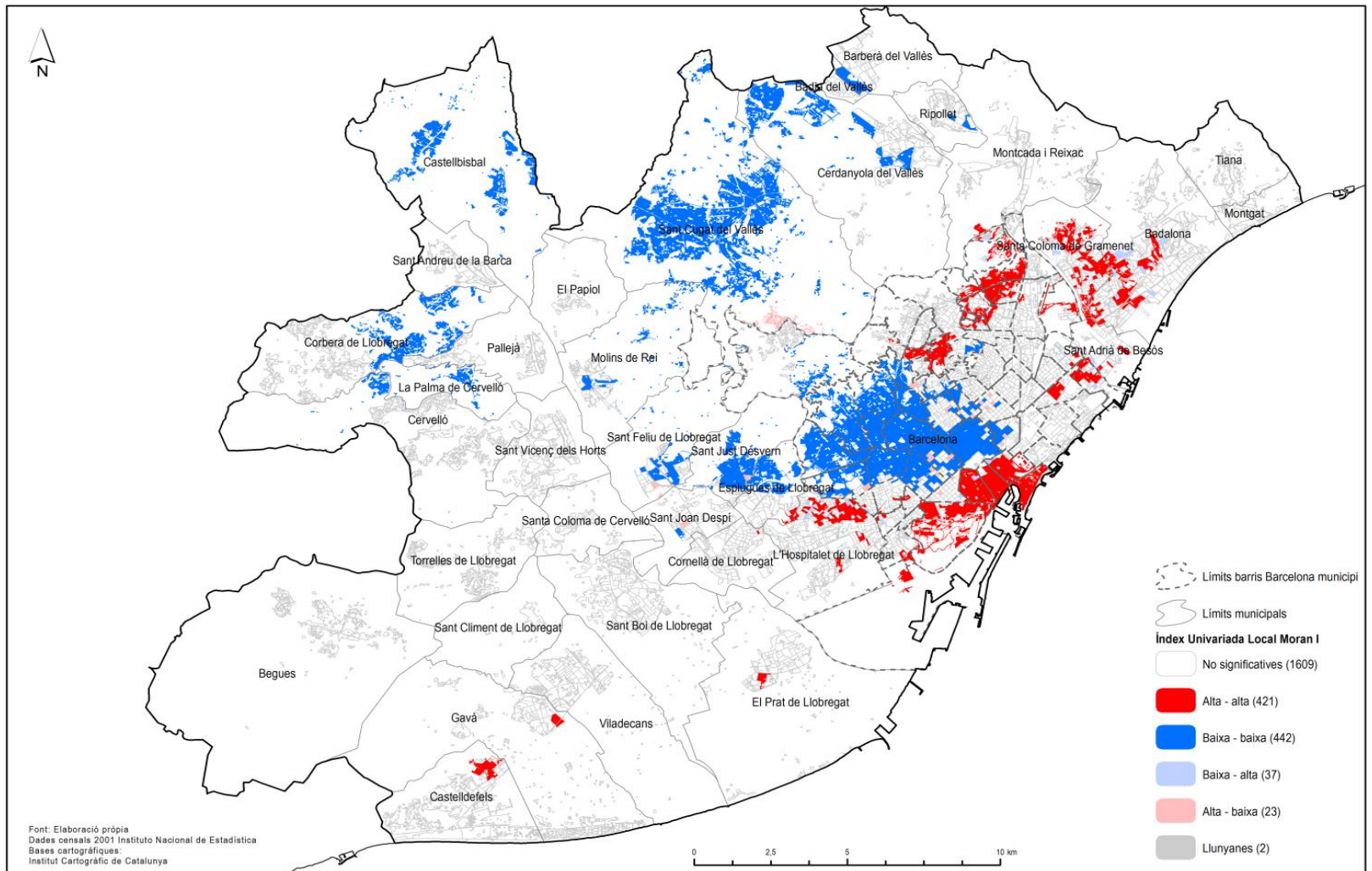
# Semiqualfied services workers

Moran's Local Index

2001

In Red= high-high

In Blue= low-low



# Semiqualfied services workers

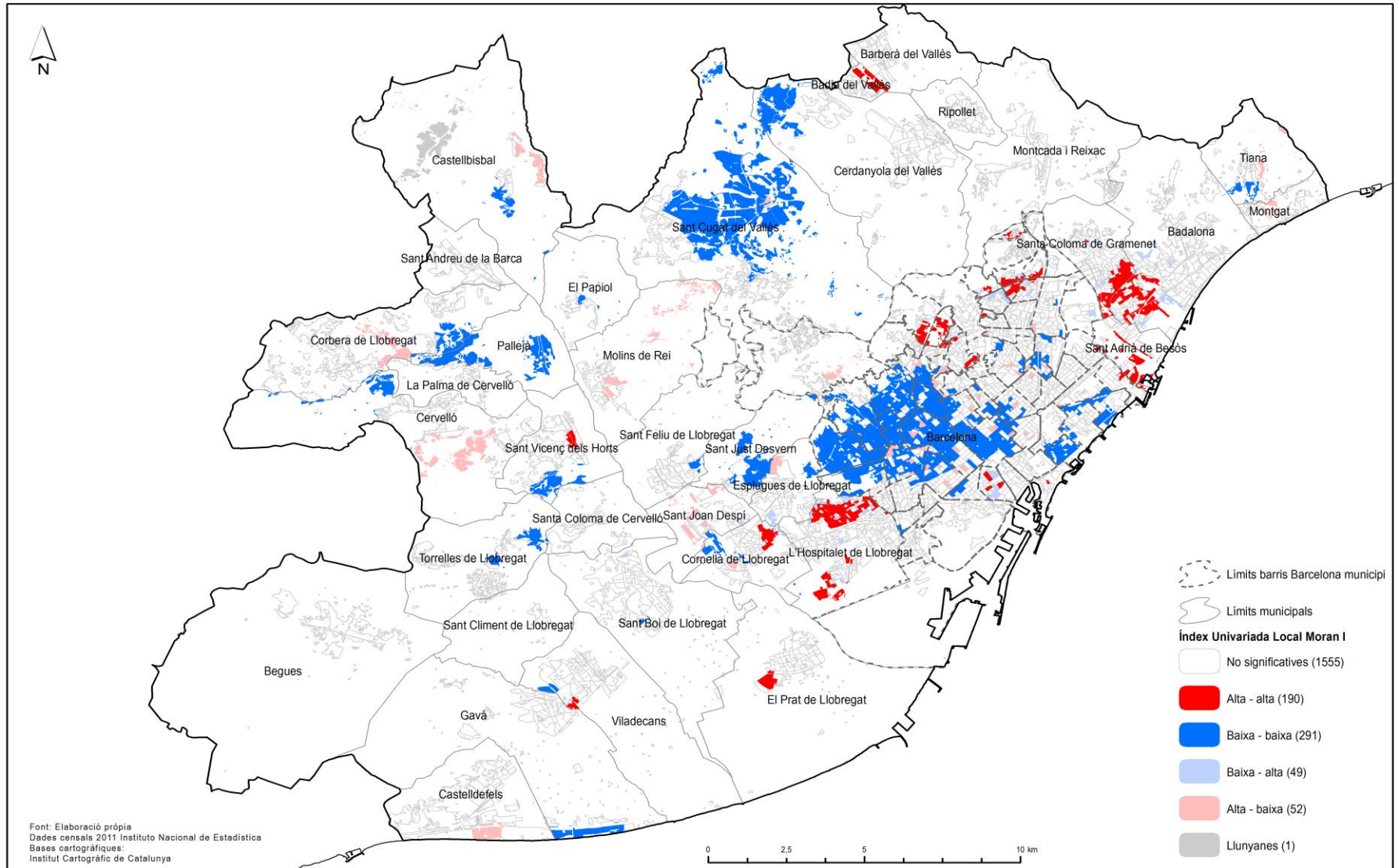
Clusters of census tracts

Moran's Local Index

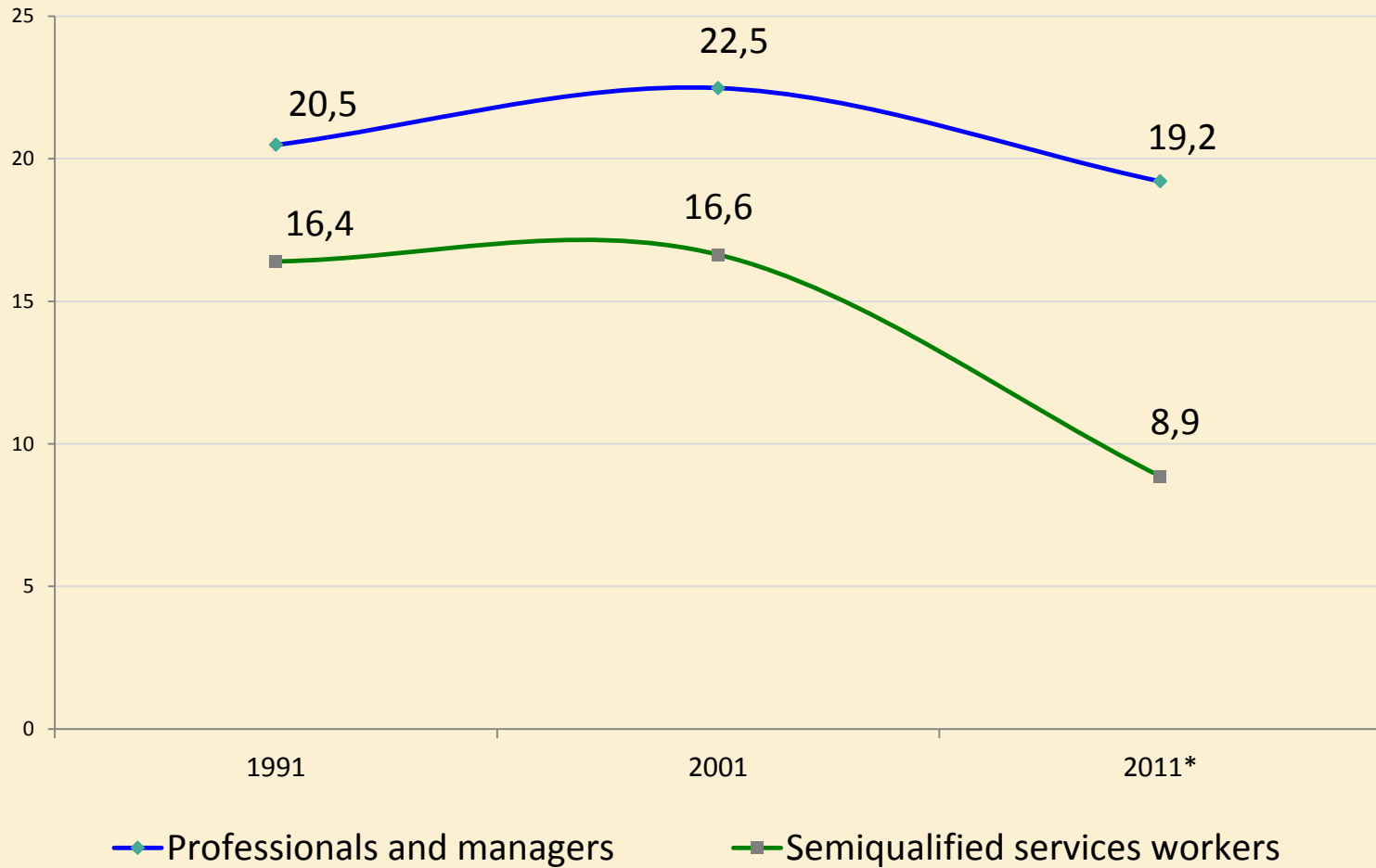
## 2011

In Red= high-high

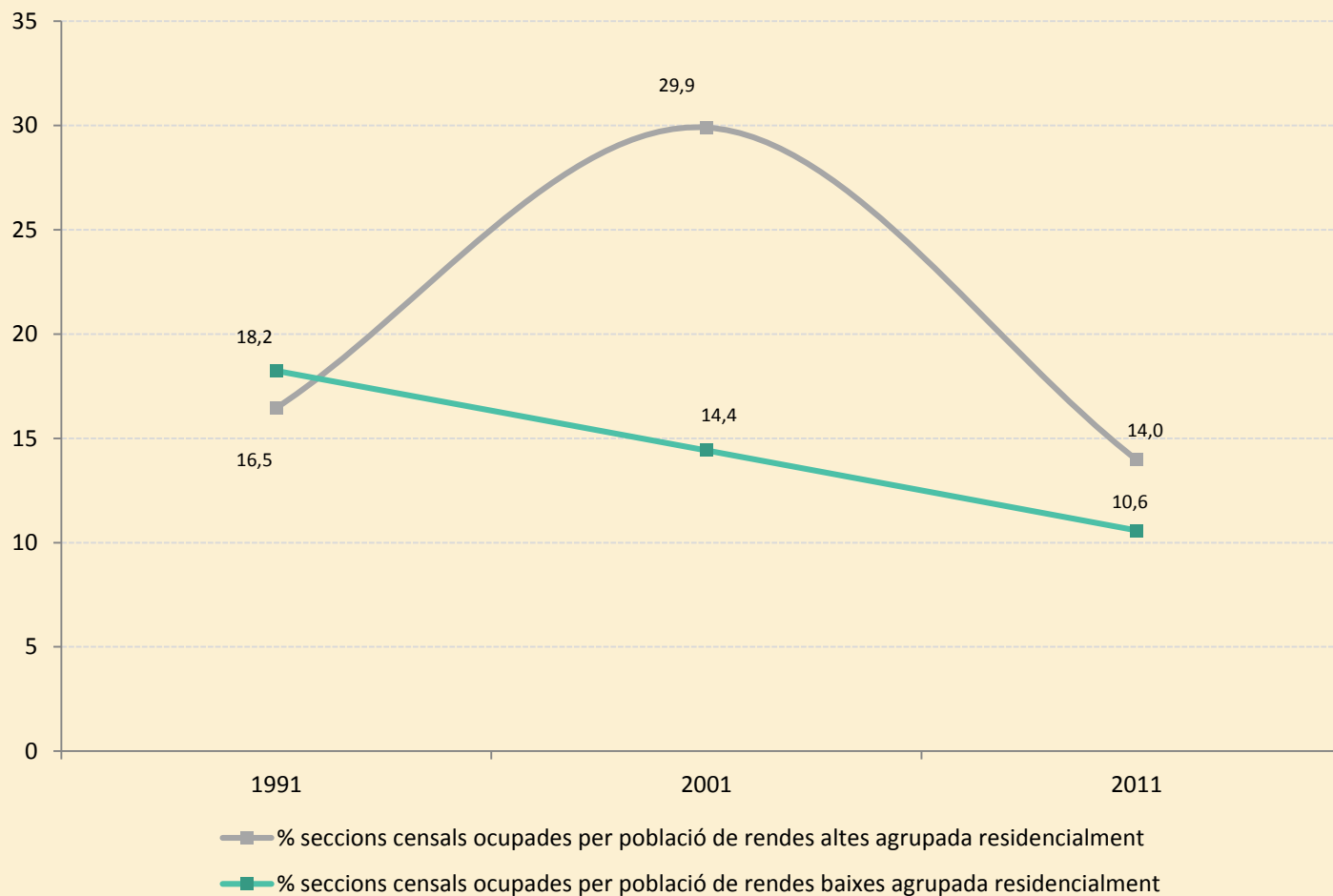
In Blue= low-low



## Share of census tracts identified as high-high by social classes



# Share of aggregated census tracts (High-high) by Income Strata: 1991-2011

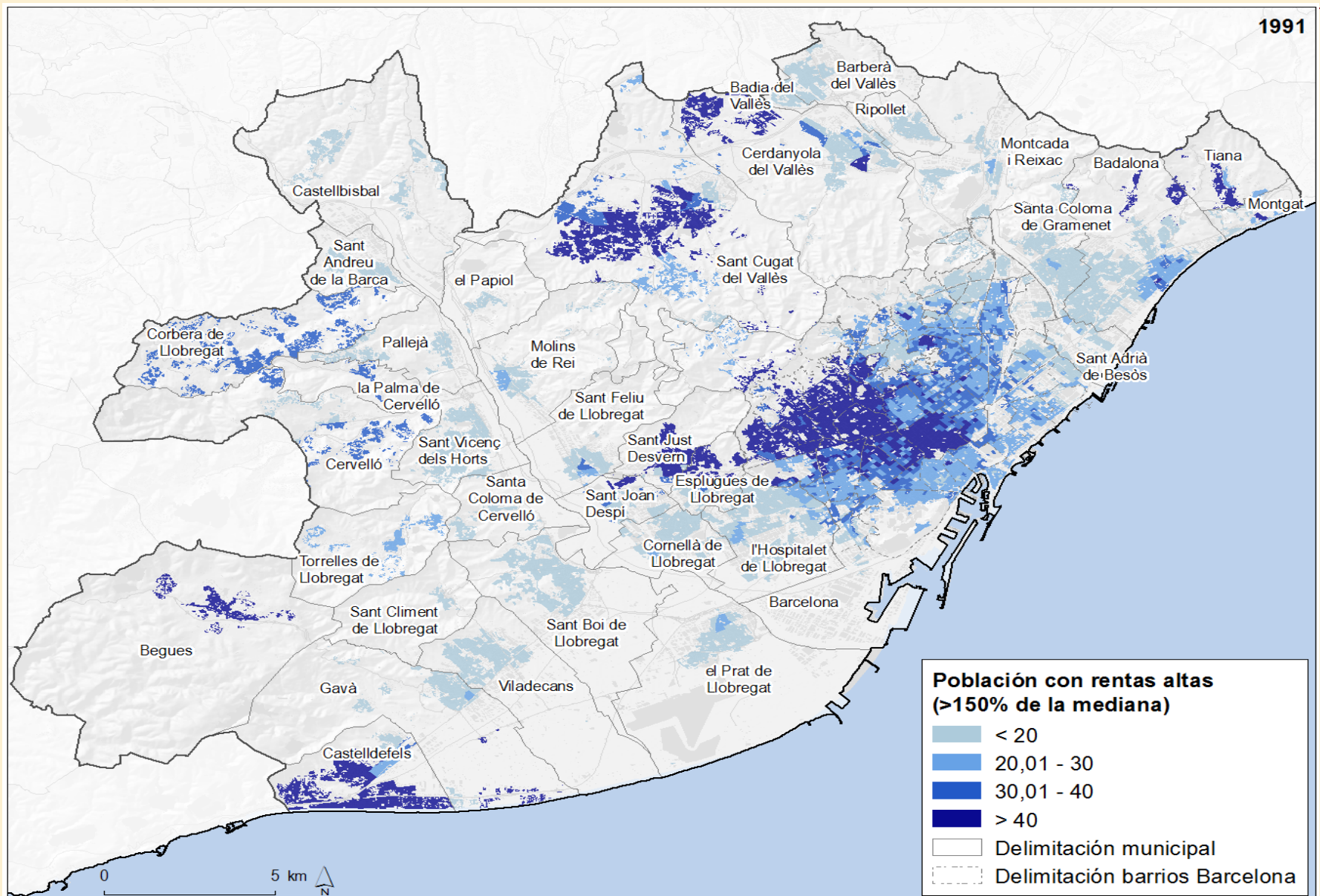


Font: IERMB i CRM-UAB. Renda estimada a escala de secció censal a partir dels Censos de Població i Habitatge 1991, 2001 i 2011 (INE) i Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) i 2011 (Idescat i IERMB).



# Higher Income population by census tracts

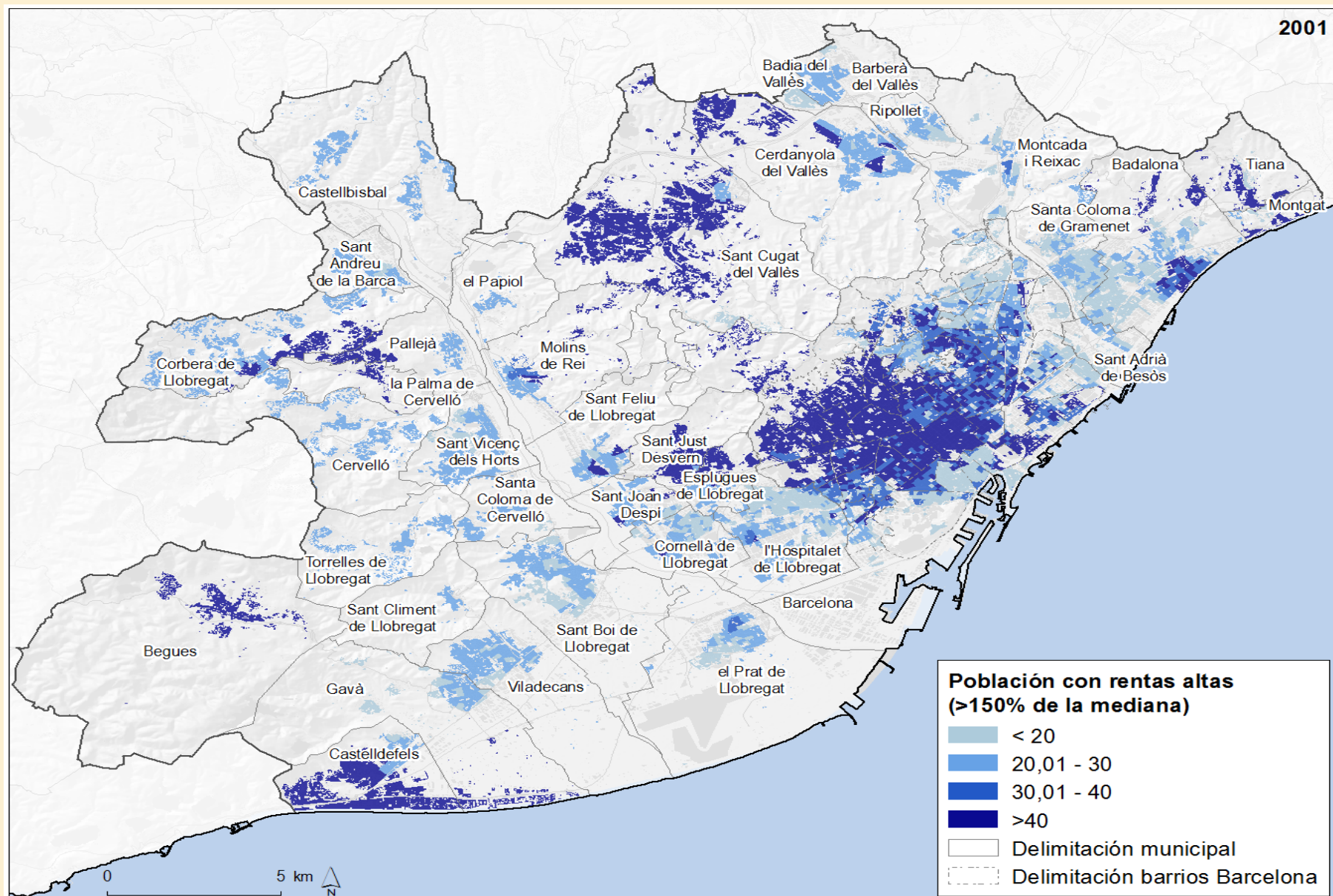
## 1991



Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Higher Income population by census tracts

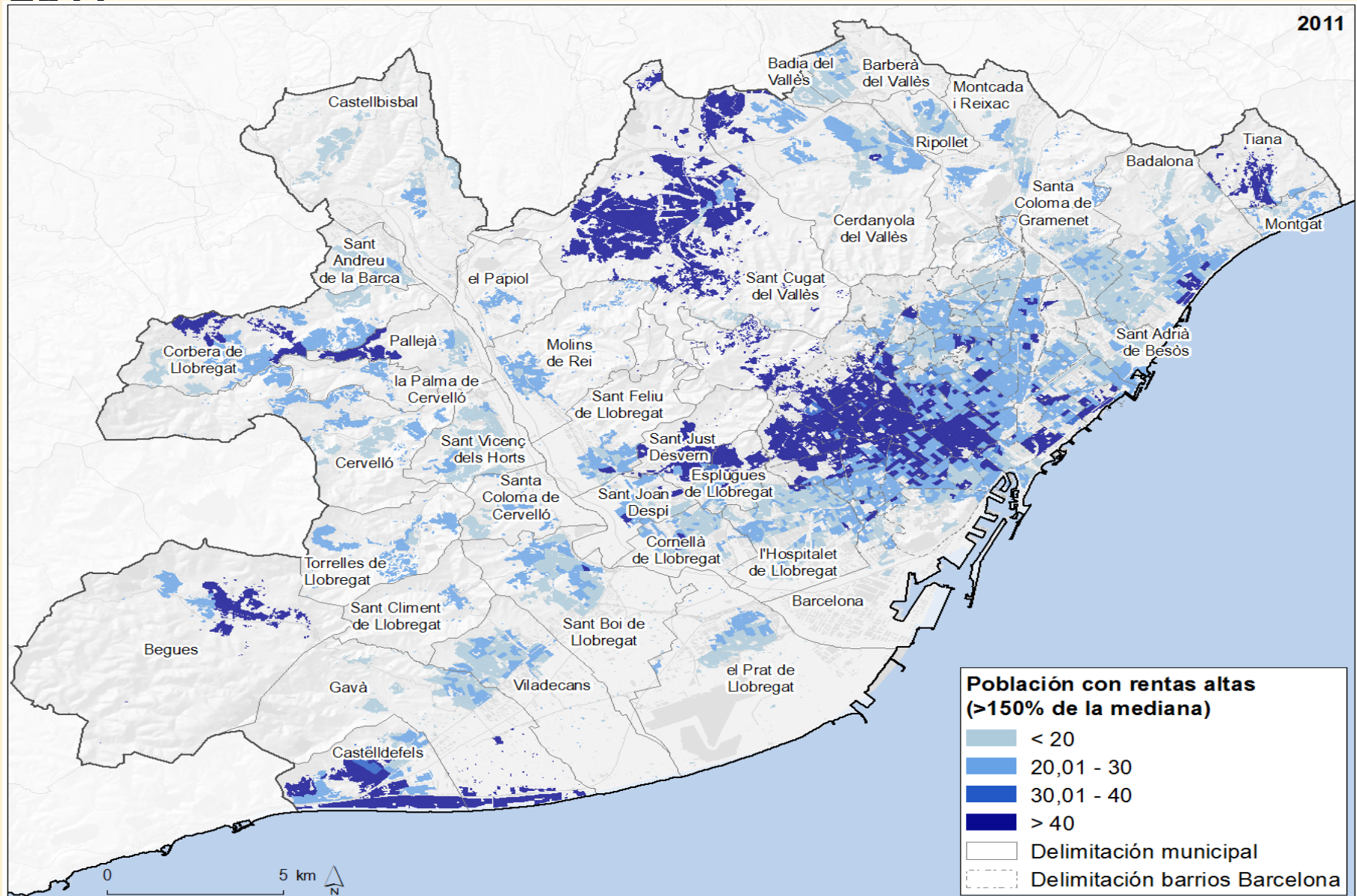
## 2001



Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

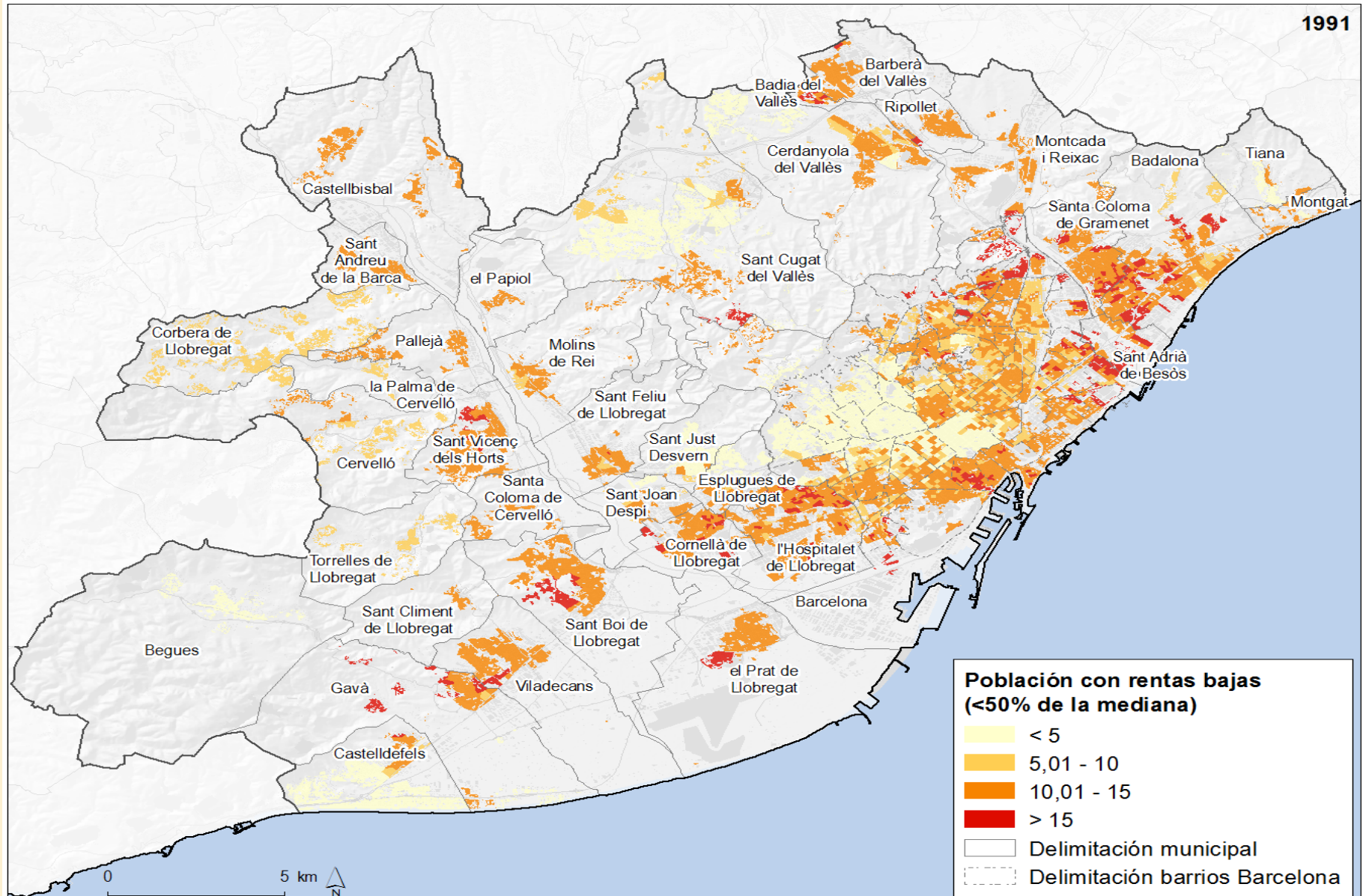
# Higher Income population by census tracts

## 2011



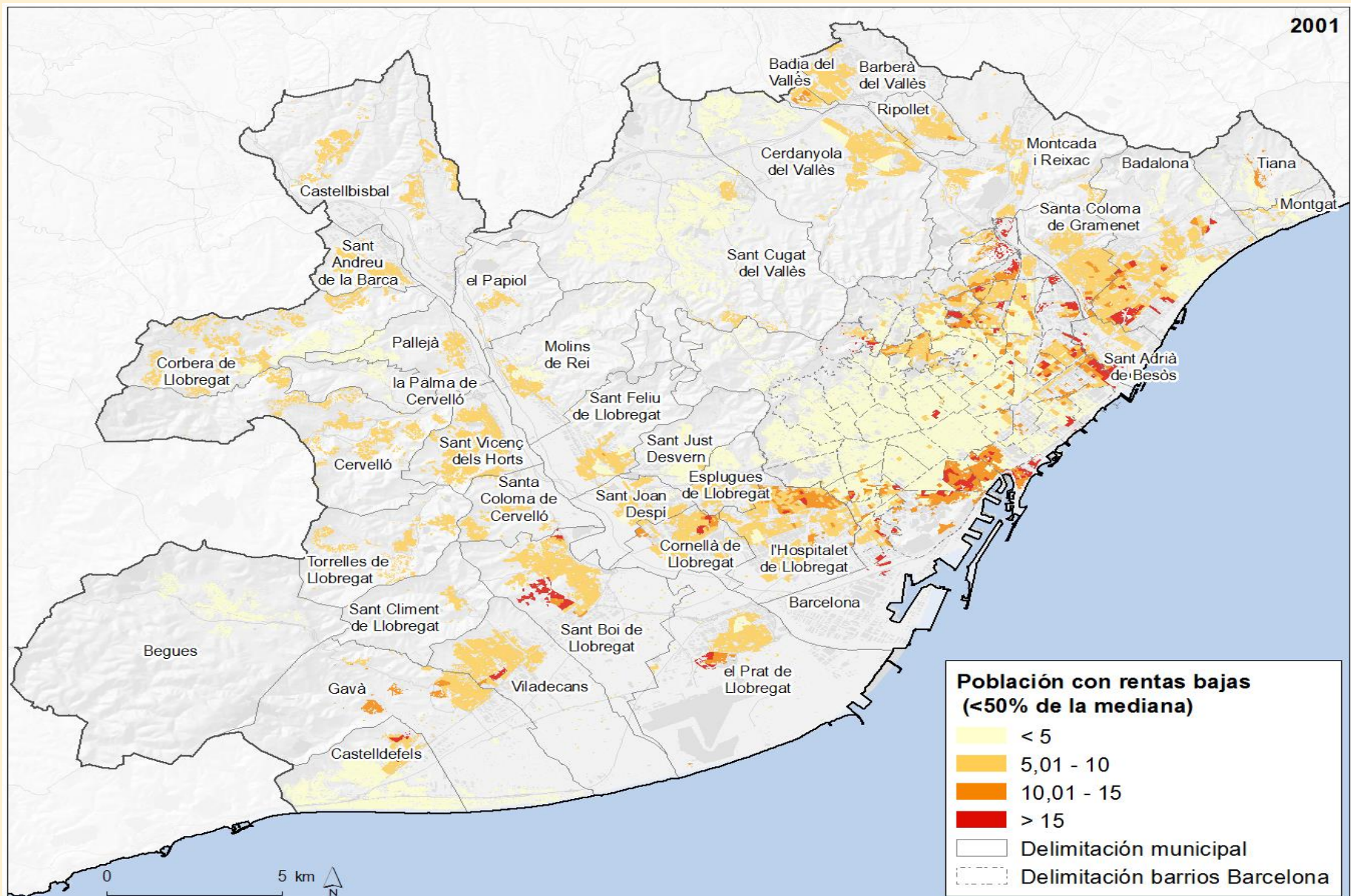
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Lowest Income Population by census tracts, 1991



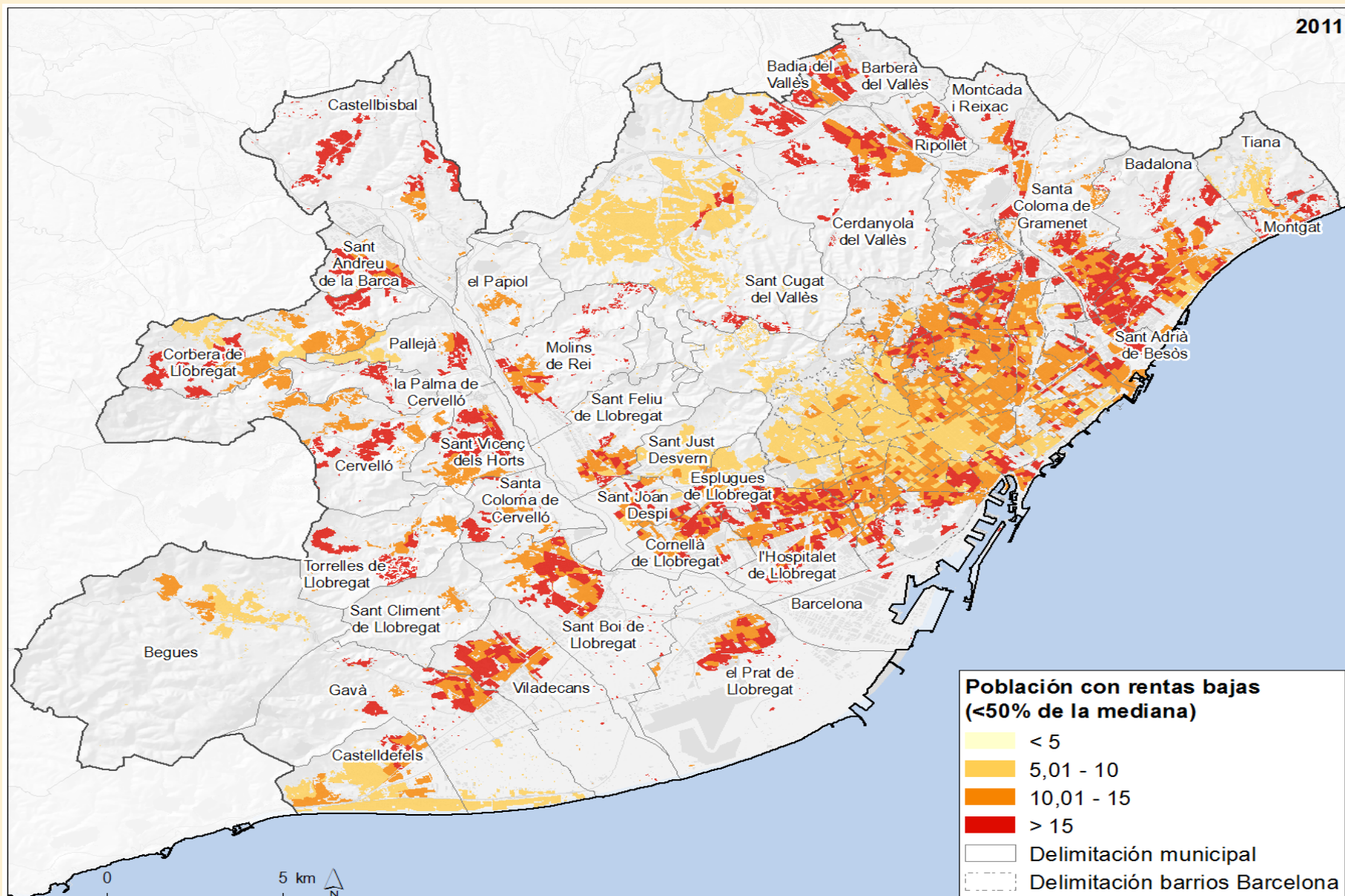
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Lowest Income Population by census tracts, 2001



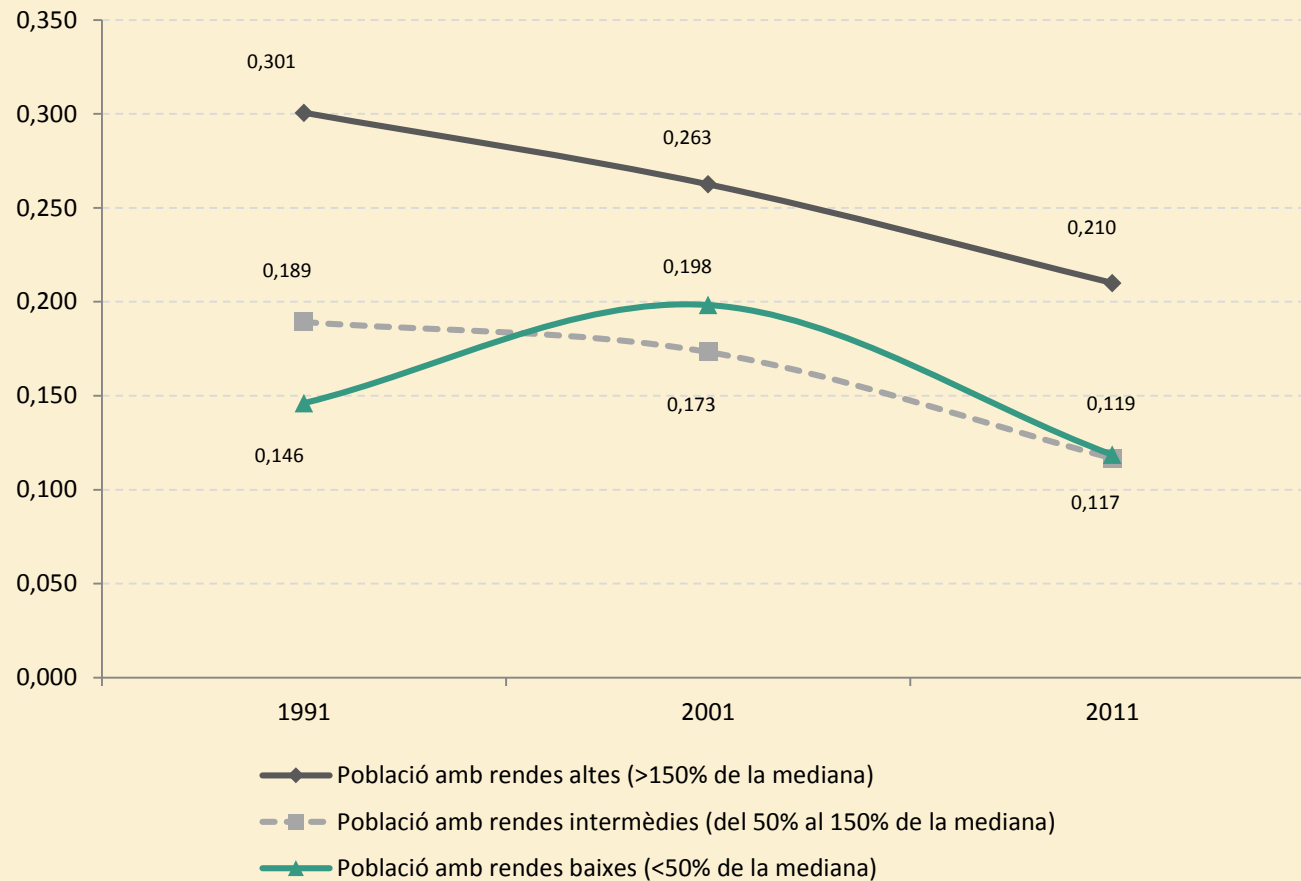
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Lowest Income Population by census tracts, 2011



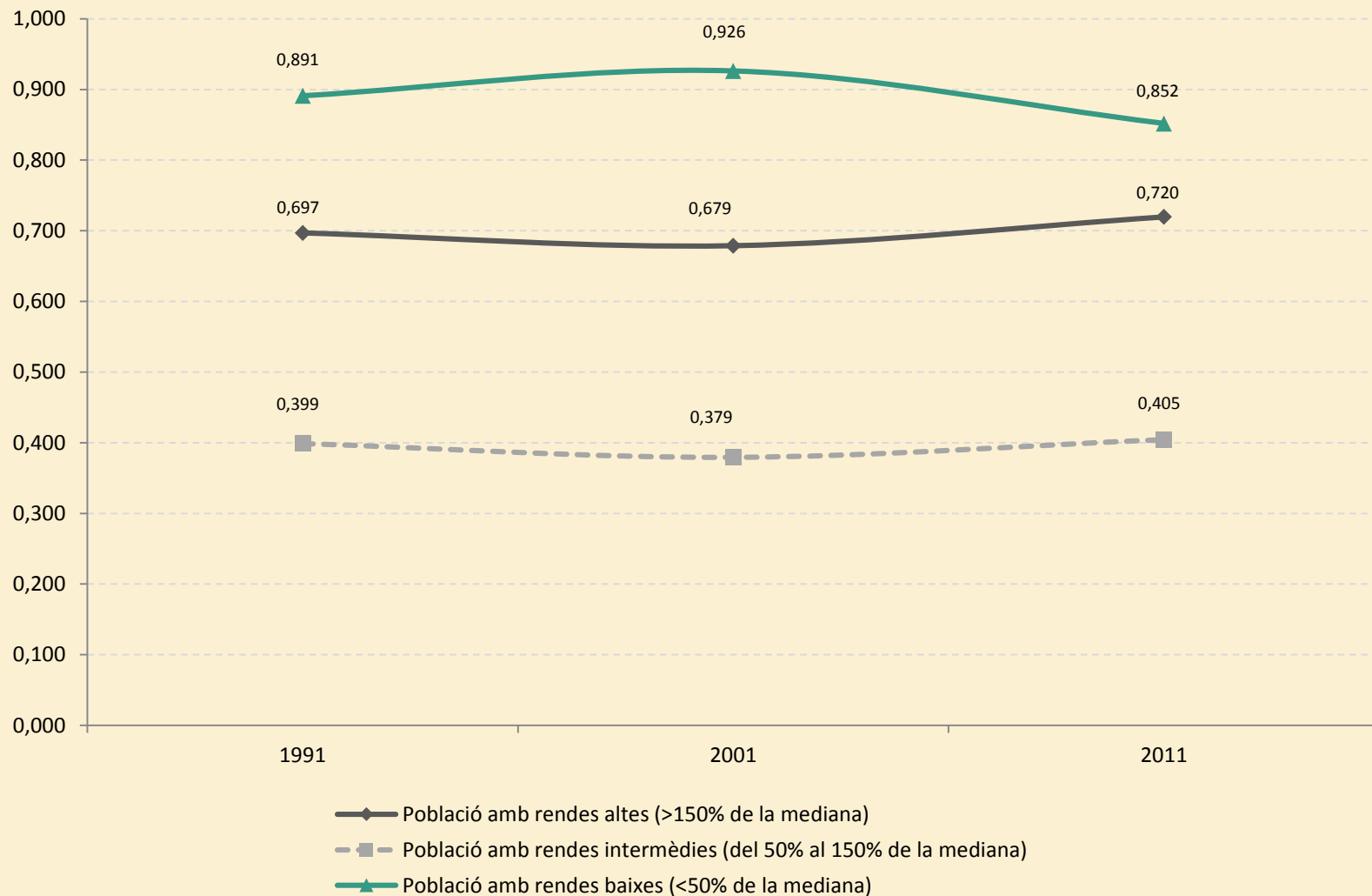
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Segregation Index (SI) by income strata. Àrea metropolitana de Barcelona, 1991-2011



Font: IERMB i CRM-UAB. Renda estimada a escala de secció censal a partir dels Censos de Població i Habitatge 1991,2001 i 2011 (INE) i Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) i 2011 (Idescat i IERMB).

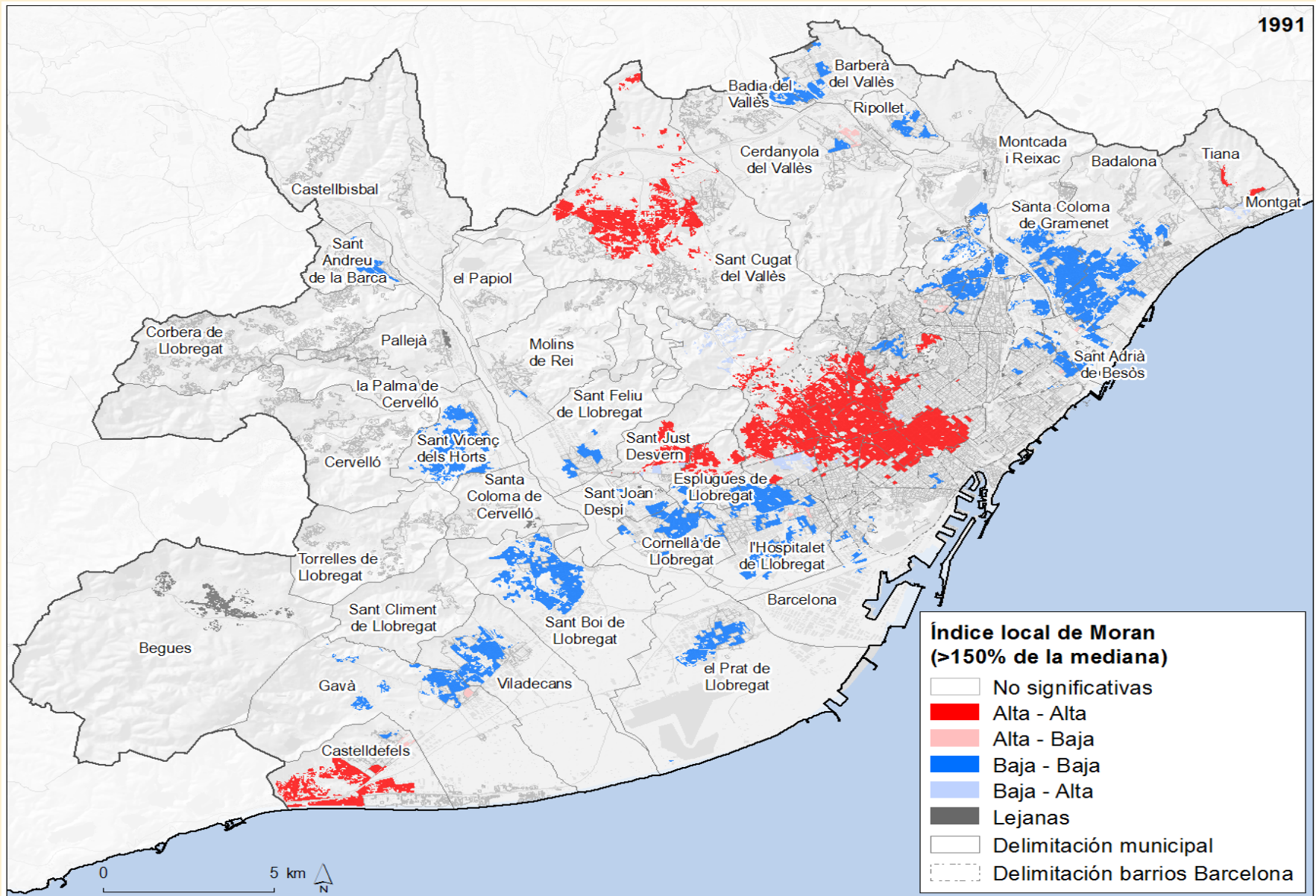
## Concentration Index (ACO) by income strata. 1991-2011



Font: IERMB i CRM-UAB. Renda estimada a escala de secció censal a partir dels Censos de Població i Habitatge 1991, 2001 i 2011 (INE) i Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) i 2011 (Idescat i IERMB).

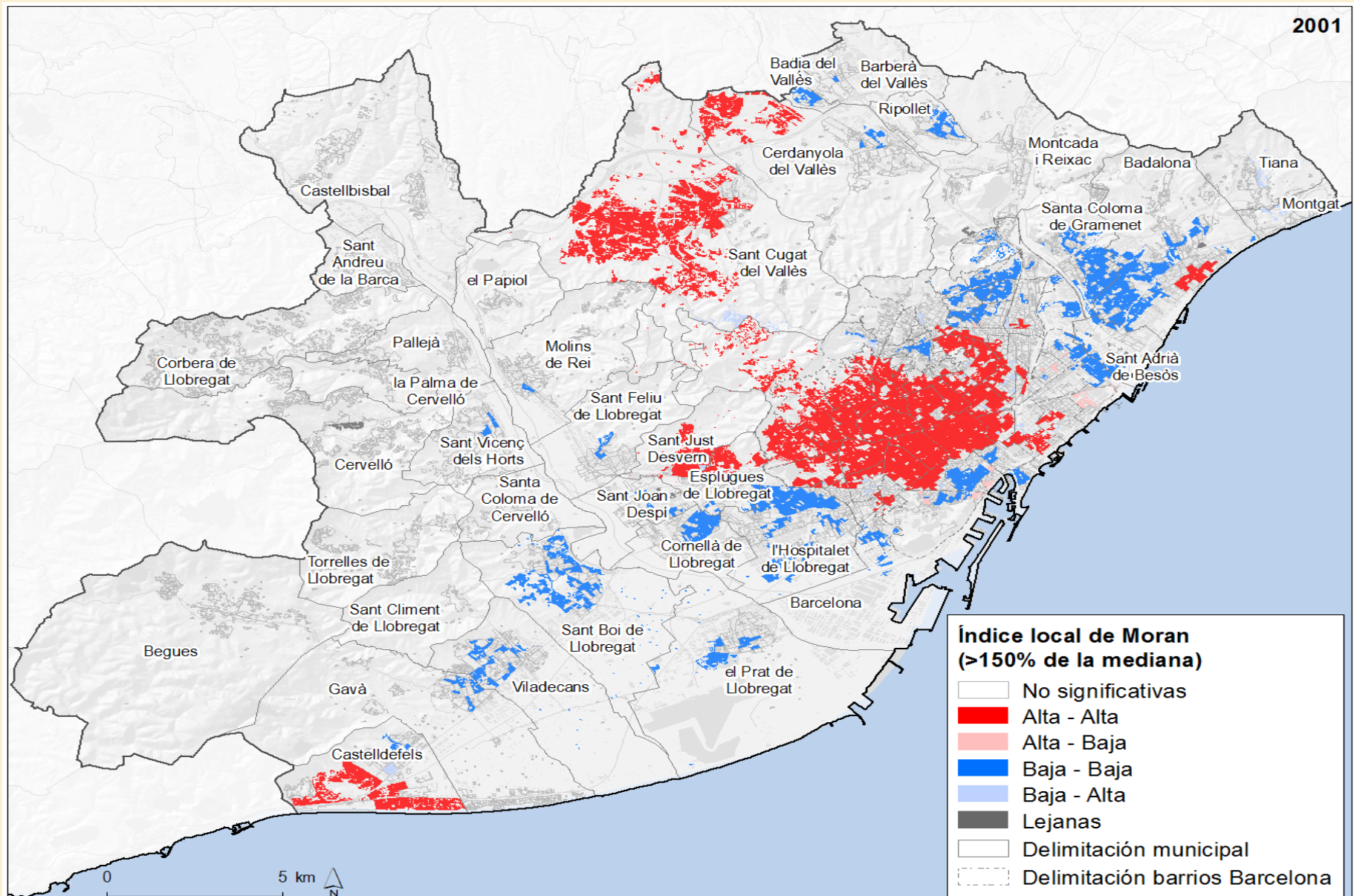


# Clusters of higher income census tracts. 1991 (Moran's Local Index)



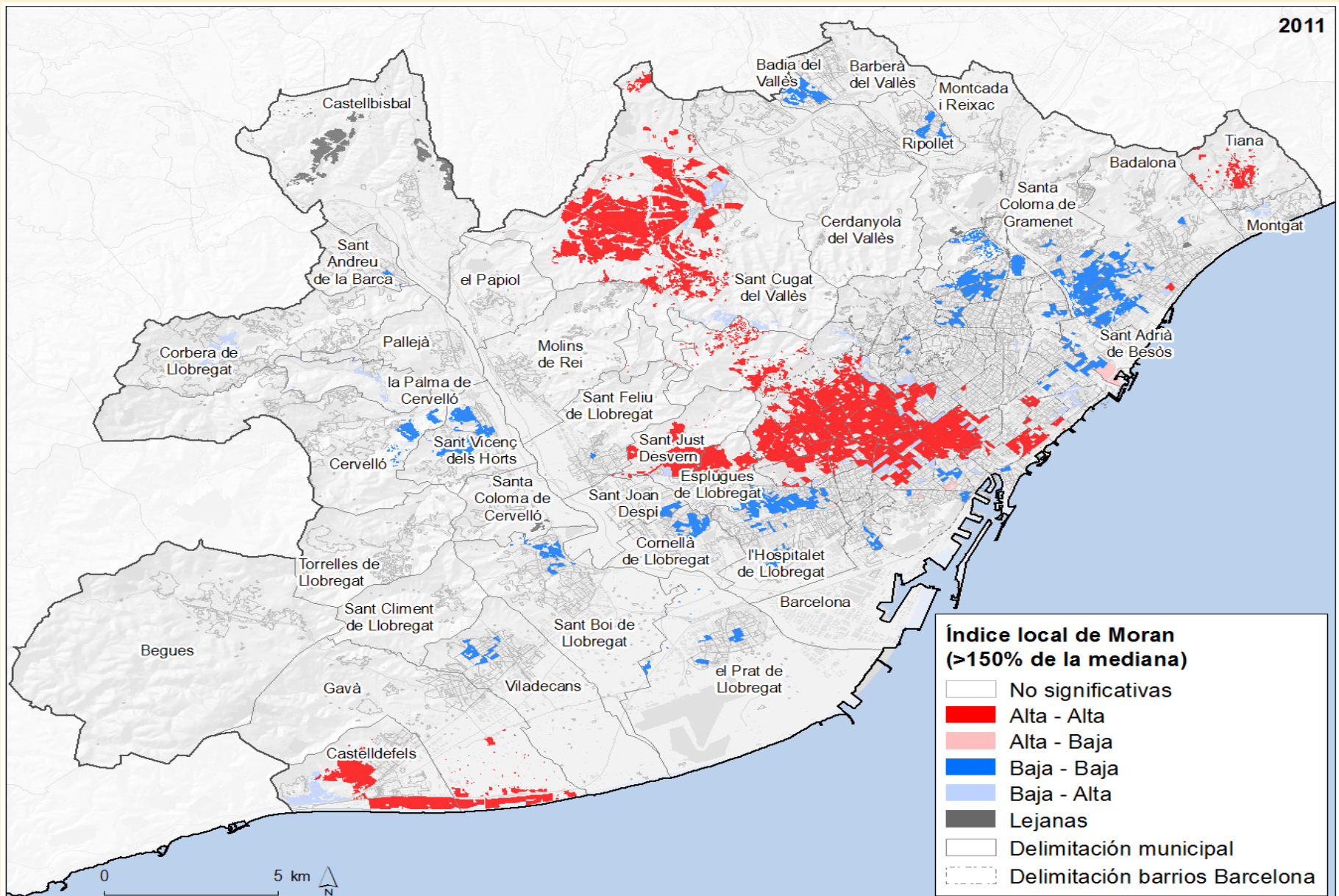
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Clusters of higher income census tracts. 2001 (Moran's Local Index)



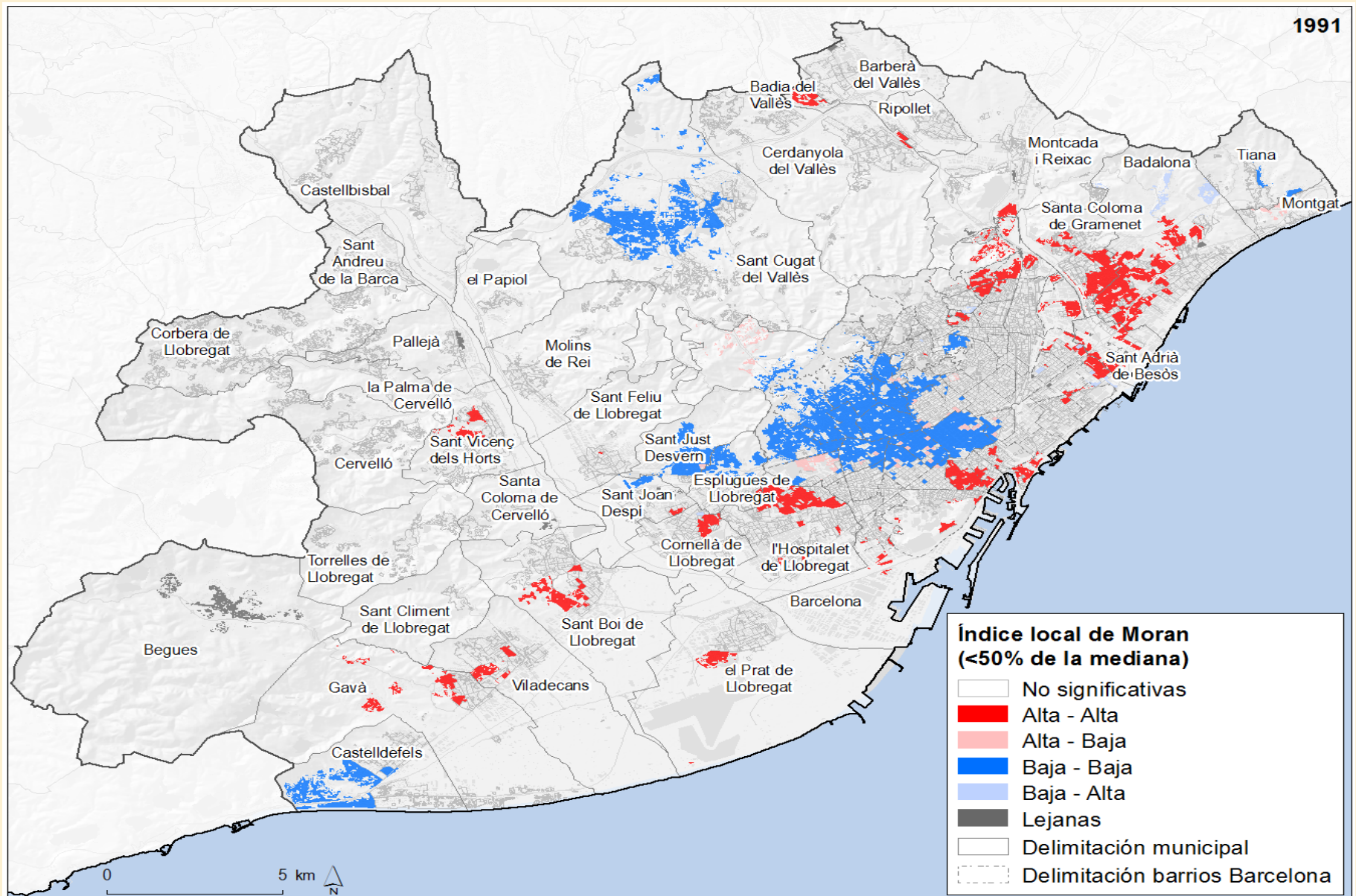
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# Clusters of higher income census tracts. 2011 (Moran's Local Index)



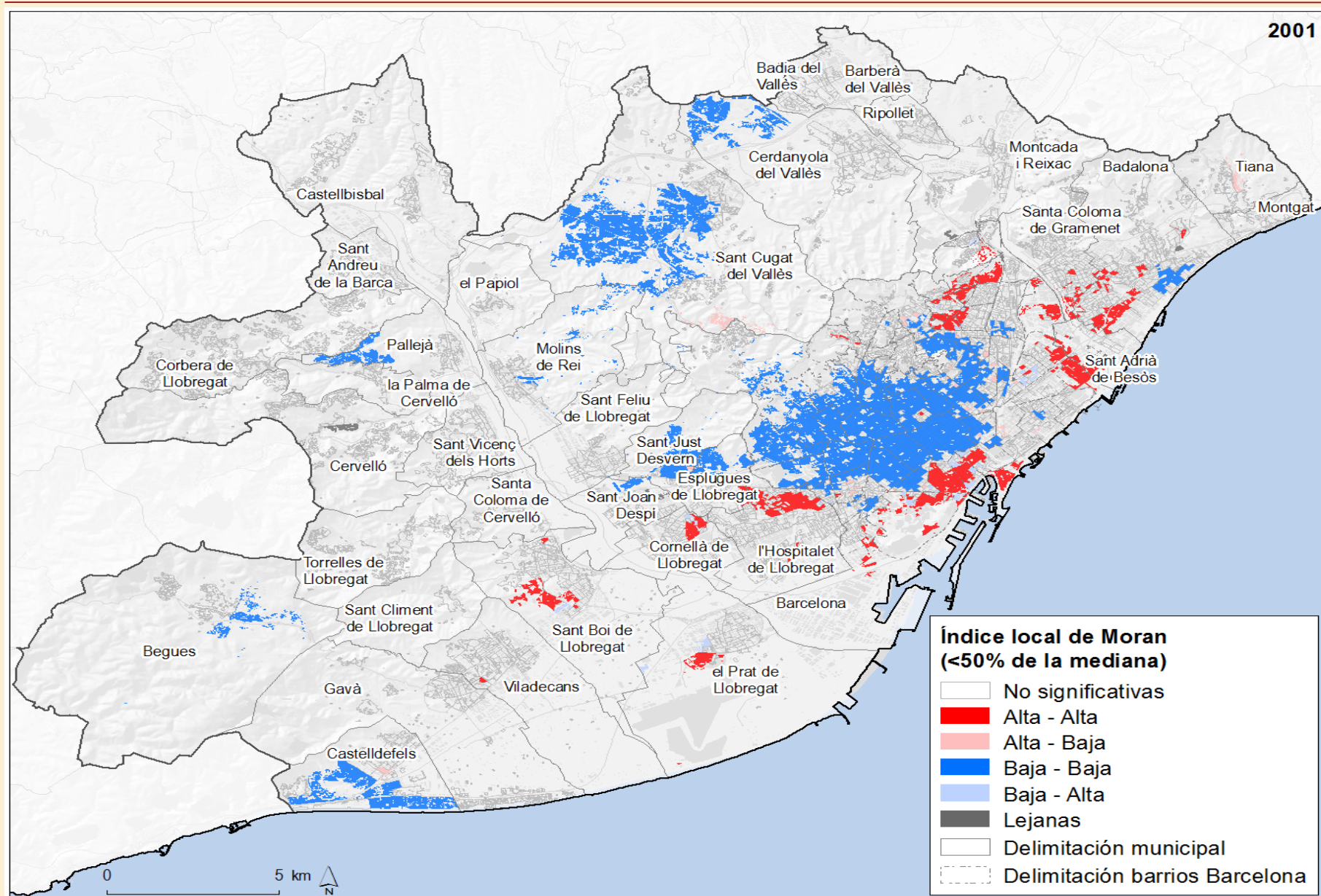
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Clusters of lower income census tracts. 1991 (Moran's Local Index)



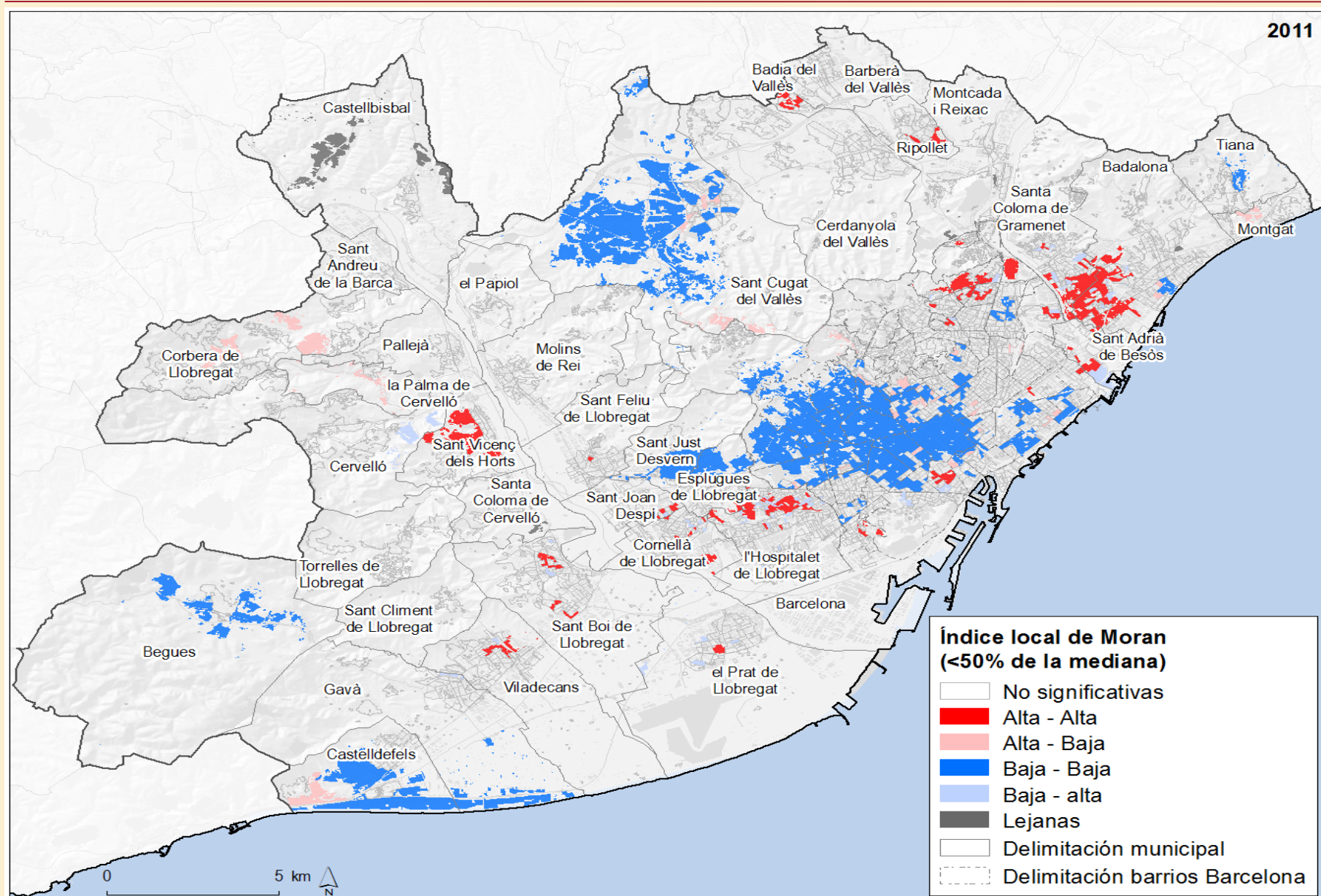
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Clusters of lower income census tracts. 2001 (Moran's Local Index)



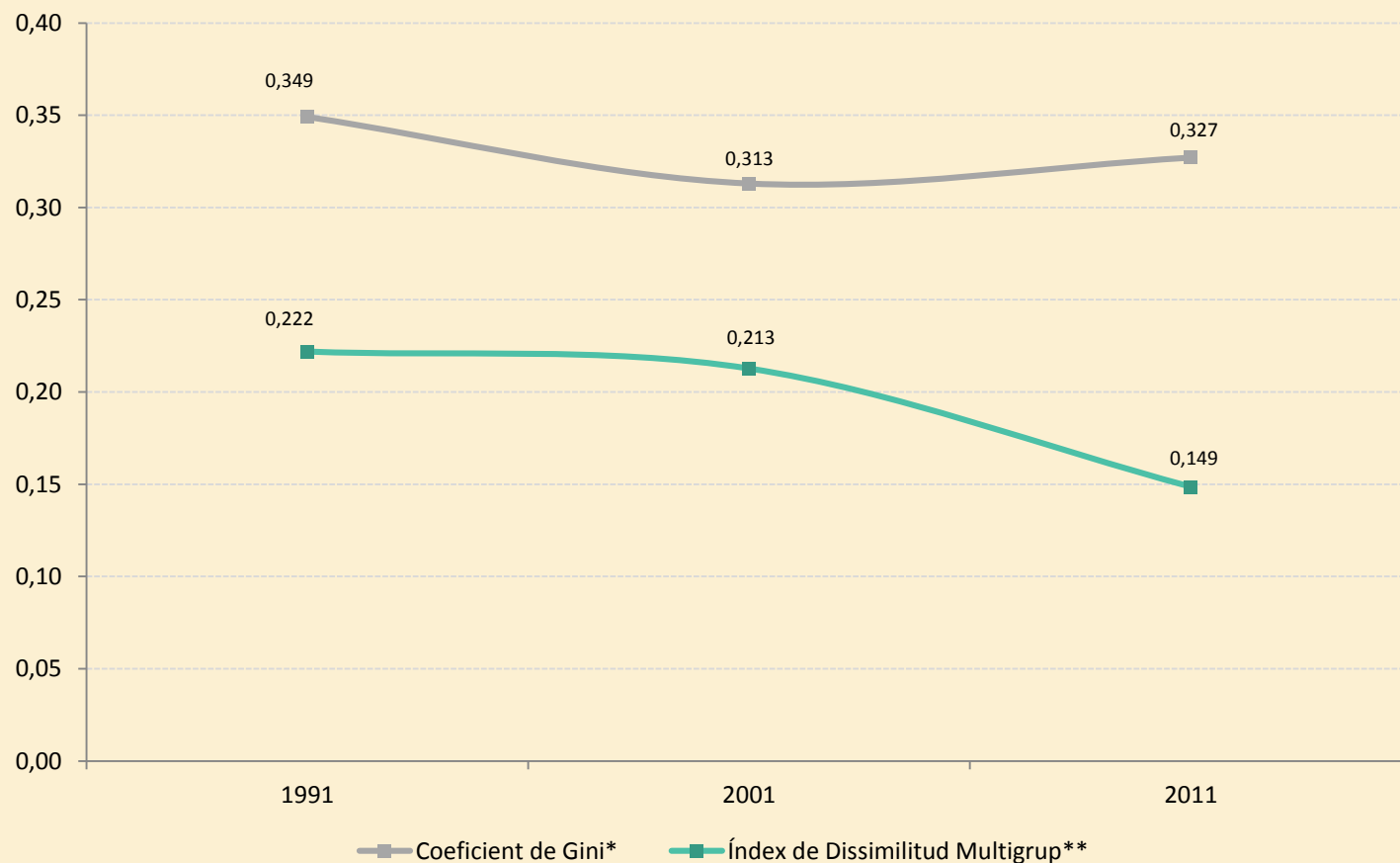
Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Clusters of lower income census tracts. 2011 (Moran's Local Index)



Fuente: IERMB y CRM-UAB. Renta estimada a escala de sección censal a partir de los Censos de Población y Vivienda 1991, 2001 y 2011 (INE) y Encuesta de condiciones de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) y 2011 (Idescat y IERMB).

# Income inequality (GINI) and Multigroup Dissimilarity Index 1991-2011



\* Font: Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) i 2011 (Idescat i IERMB).

\*\* Font: IERMB i CRM-UAB. Renda estimada a escala de secció censal a partir dels Censos de Població i Habitatge 1991,2001 i 2011 (INE) i Enquesta de condicions de vida i hàbits de la població 1990 (IERMB), 2000 (IERMB) i 2011 (Idescat i IERMB).

# Discussion

- An upgrading of occupational structure and lowering of income inequality happened before 1995.
- Since 1995 onwards, occupational polarization and poverty are increasing
- The 'service class' spilled over to many other areas. Hence, urban segregation has declined.



- The rising poverty became more segregated and concentrated, but the crisis overflowed poverty into most of BMA neighborhoods.
- At the time the research was made, BMA was less unequal and polarized than in the eighties, and less urban segregated also.
- However, the rising poverty rates before and after the crisis, together with the trends towards its segregation and concentration before the crisis, could be the base for near future ghettoization.