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Impact of Law 11/2020 on the housing rental market in Barcelona

Final report

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Research, drafting and editing:

Jordi Bosch and Joffre López, Barcelona Metropolitan Area Housing Observatory

With the suport of



Address

Plaça de la Vila de Gràcia 6, baixos

08012 Barcelona

info@ohb.cat

Follow us at www.ohb.cat and @OMHBcn

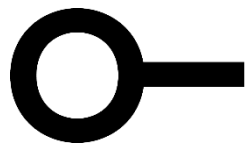


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Introduction

In order to put a halt to the inflation that had been affecting in the rental sector since 2013, in September 2013 the Catalan Parliament passed Law 11/2020, 18 September, containing urgent measures designed to curb price rises in rental agreements, that modified laws 18/2007, 24/2015 and 4/2016. This new law, together with its subsequent modification in Decree Law 33/2020, 30 September, listed a total of 61 municipalities throughout Catalonia as areas temporarily (for a year from the moment the law came into force) 'of housing concern' in which rents were subject to the regulations established by the law. As well, a mechanism was set up to renew this status or add further municipalities to the list of towns in which the housing market is 'of concern' once the law had been in force for a year.

In the municipalities on this list, initial rents were not allowed to exceed the reference price for the rental of a similar home in the same urban area. This price was established by applying a reference index of rents created by the government department responsible for housing policies based on the register of the deposits paid in rental contracts in urban areas. Furthermore, if the dwelling had been rented out in the five years before the law was passed, another limit was set corresponding to the previous rent updated using the guaranteed competitiveness index. The final rental price could not exceed either of these two limits (all exceptions were outlined in a guide produced by the Catalan Housing Agency).

Approximately 18 months after the approval of this law, the Spanish Constitutional Tribunal accepted a petition from the Partido Popular and ruled that numerous parts of the law were unconstitutional (sentence published in the Official Government Bulletin (BOE) 84, 8 April 2022). Many elements of the regulations and norms contained in the law were declared unlawful including the mechanisms designed to control rents. The main argument behind this decision was that the contents of Law 11/2020 encroached upon the competences of the Spanish State in questions of civil policy, as stated in Article 149.1.8 of the Spanish Constitution.

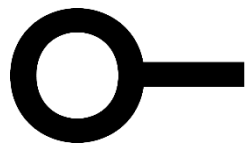
The aim of this article is to analyse the impact Law 11/2020 had on the rental sector in Barcelona Province, above all in terms of the evolution of prices, the number of rental contracts, and the number of available rental properties.

Despite the brief period in which this law was in force, three recent studies have analysed its impact on prices and supply in the Catalan rental market. According to Jofre-Monseny, Martínez-Mazza & Segú¹, this law was successful in moderating rental prices in the municipalities in which it was enforced (the average rent fell by 6.2% in the experimental group, whilst prices remained generally stable in the control group). These authors found no evidence to suggest that this law had led to any fall in the number of rental contracts signed. By contrast, Monrás & Garcia Montalvo², although agreeing that the law was effective in reducing rent prices (a fall of c. 5%), attribute half of this moderation in prices to changes in the type of housing on offer, and also claim that the application of this regulation led to a fall in the number of rental properties on the market. Finally, Kholodilin *et al.*³ used advertisements on the portal *El Idealista* (unlike the other two studies, which were based on the Financial Register of the Catalan Land Institute; INCASOL) to conclude that whilst the law was in force rental prices and the number of properties for rent on the market in Catalonia fell in both regulated and unregulated municipalities.

¹ Jofre-Monseny, J.; Martínez-Mazza, R. & Segú, M. (2022). *Effectiveness and Supply Effects of High-Coverage Rent Control Policies*. IEB Working Paper 2022/02. Available at: <http://diposit.ub.edu/dspace/bitstream/2445/183683/1/IEB22-02_Jofre%2bMartinez%2bSegu.pdf> [accessed 2 January 2023].

² Monrás, J. & Garcia Montalvo, J. (2022). *The Effect of Second Generation Rent Controls: New Evidence from Catalonia*. Economics Working Paper Series, Working Paper No. 1836. (updated version April 2022). Available at: <<https://econpapers.upf.edu/papers/1836.pdf>> [accessed 2 January 2023].

³ Kholodilin, K. A.; López, F. A.; Rey Blanco, D. i Gonzalez Arbués, P. (2022). *Lessons from an Aborted Second-Generation Rent Control in Catalonia*. DIW Berlin Discussion Paper No. 2008. Available at: <<https://dx.doi.org/10.2139/ssrn.4159469>> [accessed 2 January 2023].



Metodology

This study is based on the information contained in INCASOL's Financial Register and, specifically, on the database of rental contracts for all types of housing (single family and multi-family) signed up to 30 June 2022⁴. This means that most contracts signed during the first trimester of 2022 were included in this database as deposits had been paid during the first or second trimesters of the year.

Territorially, the study was limited to Barcelona Province and, specifically, to four particular areas: (i) the City of Barcelona and the municipalities assigned to the (ii) experimental, (iii) control or (iv) exogenous groups.

The study period was from September 2019 (a year before Law 11/2020 entered into force) to March 2022 (a year and a half later, all but coinciding with the sentence in April 2022 declaring the rent control mechanism unconstitutional). Depending on the variable, the data were analysed by month or by semester and coincided with the coming into effect of Law 11/2020, which ensured that the study captured its impact as accurately as possible. Thus, the first two semesters covered the year before the law was enforced (22 September 2019–21 September 2020), while the two following semesters coincided with the year in which areas of housing concern were declared in the municipalities listed in the annex to the law according to the Second Transitory Provision (22 September 2020–21 September 2021). The fifth and final semester ran from 22 September 2021 to 21 March 2022.

INCASOL's database has undergone various revisions. Data relating to figures for contracts and prices were purged and the contracts that exceeded three-fold the interquartile range (IQR) were removed, which in practice meant the exclusion of 1.26% of all contracts formalised during the study period (3,187 out of a total on 301,753 contracts in the study area).

In the analysis of the prices new contracts signed with the same renter as before were not included as the rents under these circumstances tend to be lower than in contracts with new tenants. As can be seen from the data, during the five semesters covered by this report the average price of these rental renewals (Table 1) was always lower than that of other rentals (Table 4) in all four studied areas. The total number of contracts excluded for this reason in the four areas was 27,471 (Table 2), around 7% of all contracts. The main reason for this difference in rents is the stronger negotiating position of sitting tenants, the absence of periods between tenants in which owners would not receive rent, and the greater trust shown to established tenants (i.e. regular payments, their care of the property, etc.). Here it is worth noting that, compared to the first edition of this laboratory, the method of identifying owners and tenants in rental agreements has been improved and in the series of average prices renewals are taken into account and not always excluded.

Table 1. Average monthly price of rental renewals with previous tenants by semester. City of Barcelona, experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| | Semester | | | | |
|---------------------------|----------|--------|--------|--------|--------|
| | 1st | 2nd | 3rd | 4th | 5th |
| Barcelona | 851.56 | 851.69 | 811.39 | 792.68 | 778.04 |
| Experimental group | 610.15 | 618.01 | 562.94 | 568.80 | 547.27 |
| Control group | 599.10 | 602.94 | 611.93 | 609.76 | 613.32 |
| Exogenous group | 541.32 | 574.08 | 593.56 | 557.59 | 576.04 |

Source: compiled by the authors using data on deposits in the INCASOL database.

⁴ A preview of the results of this study published in 2022 used 31 March 2022 as a reference for the database. To examine the difference between the two database downloads, see Bosch, J. i López, J. (2022). *Impacte de la Llei 11/2020 en el mercat de lloguer a la demarcació de Barcelona. Avenç de resultats*. Observatori Metropolità de l'Habitatge de Barcelona. Available at: <https://www.ohb.cat/wp-content/uploads/2022/07/O22015_LAB_Control-lloguer_avenç_v_amplada_Informe.pdf> [accessed: 2 January 2023].

Table 2. The number of rental renewals with previous tenants by semester. City of Barcelona, experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| | Semester | | | | |
|---------------------------|----------|-------|-------|-------|-------|
| | 1st | 2nd | 3rd | 4th | 5th |
| Barcelona | 3,305 | 1,807 | 1,955 | 1,799 | 1,699 |
| Experimental group | 3,673 | 2,363 | 2,473 | 2,178 | 2,383 |
| Control group | 385 | 265 | 333 | 372 | 369 |
| Exogenous group | 484 | 280 | 398 | 460 | 490 |

Source: compiled by the authors using data on deposits in the INCASOL database.

We also analysed on a monthly basis the evolution of the average prices, prices per unit, and number of contracts signed, and, semesterly, these same three variable in terms of the quintiles of prices and surface area of properties. The inclusion of these two latter variables highlights the lack of heterogeneity that characterises the rental market. Thus, it is important to recall that the limits of the quintiles were determined by the dates of the second quintile (when Law 11/2020 came into effect) and were not altered for either the first or latter three quintiles (see Table 3) in order to demonstrate how they evolved.

Table 3. Upper limits (in Euros per month) of the quintiles of the price of rental contracts by group in the period 22 March 2020–21 September 2020.

| | 1st quintile | 2nd quintile | 3rd quintile | 4th quintile |
|---------------------------|--------------|--------------|--------------|--------------|
| Barcelona | 700,00 | 825,00 | 950,00 | 1.200,00 |
| Experimental group | 550,00 | 650,00 | 740,00 | 850,00 |
| Control group | 525,00 | 617,40 | 700,00 | 800,00 |
| Exogenous group | 400,00 | 500,00 | 600,00 | 800,00 |

Source: compiled by the authors using data on deposits in the INCASOL database.

In terms of the surface area and other variables related, for example, to the unit price, all the rental contracts in which the surface area is not given or given as zero in the database were excluded (roughly 30% of all contracts).

A semi-experimental methodology was used to perform a systematic and coherent analysis of the impact of Law 11/2020. First, a group of municipalities was defined in which the law was applied throughout the study period (experimental or treatment group), along with a group of municipalities in which the law was not applied (control group). The City of Barcelona was treated separately as a specific territorial unit given the lack of any other remotely similar municipality in the study area that could act as a control. Thus, its importance to this study lies largely in its descriptive ability and usefulness as a reference.

Next, given that the municipalities in the control and experimental groups were socio-demographically very different from the other municipalities in the study area, we selected a second group using the hierarchical classification of Ward's minimum variance model of all the municipalities in an attempt to find possible similarities between municipalities that were apparently very dissimilar. In fact, the same method was used under two different scenarios in terms of the variables used to perform the classification since in neither of the two options were the groups clearly defined.

The first scenario only considered the resident population on 1 January 2020 (based on the census used by the Catalan Institute of Statistics), the average rental prices in 2019 (according to official figures from the Housing Study and Documentation Service of the Catalan Government), and the proportion of rented multi-family homes (taken from the rental index produced by the Spanish Government Ministry of Transport, Mobility and Urban Agenda). The second scenario incorporates the annual variation in the average price of rents between 2018 and 2019 alongside the three previous variables.

The choice of these variables meant eliminating the municipalities for which no information was available, which generally⁵ have few inhabitants and only a residual rental market. As well, as mentioned above, data for the City of Barcelona were separated, along with data for the municipality of Martorell (given that the declaration of this latter town as an area of housing concern, which should have taken place once Law 11/2020 came into force, was not renewed). Finally, eight further municipalities (Begues, Canet de Mar, Cardedeu, La Garriga, Parets del Vallès, Sant Fruitós de Bages, Sant Sadurní d'Anoia and La Palma de Cervelló) were also discarded because their declaration as areas of housing concern took place at a later date.

This definition enabled us to classify the 225 studied municipalities into three groups. Together with the resulting dendograms, the figures in Annex 2 illustrate this classification and the degree of proximity between the limits of each group in each scenario. Given that the two scenarios generate findings that differ somewhat and are in themselves inconclusive, we chose to compare results by groups of municipalities – regardless of the variables chosen – that were always located in the same group.

Thus, the municipalities in the experimental group are the 40 municipalities that always appear in the this group (excluding Castelldefels, El Masnou, Sant Cugat del Vallès, Sant Just Desvern and Sitges) and share characteristics independently of the selection criteria (see Annex 1).

The municipalities in the control group are those that were never subject to the provisions of Law 11/2020 but which, nevertheless, appear in the same group as the municipalities in the experimental group under one or either of the two scenarios. In total, in this group there are 32 municipalities (see Annex 1).

Finally, the exogenous group consisted of the majority of municipalities in the study area (224) that were never subject to the provisions of Law 11/2020 and which are not directly comparable with the municipalities in the experimental group under either of the two classification scenarios (see Annex 1).

⁵ These municipalities are as follows: Aguilar de Segarra, Alpens, Argençola, Bellprat, El Brull, Calonge de Segarra, Capolat, Castellar del Riu, Castellar de n'Hug, Castell de l'Areny, Castellfollit del Boix, Castellfollit de Riubregós, Castellnou de Bages, Castellolí, Collsuspina, Copons, l'Espunyola, Fígols, Fogars de Montclús, Gallifa, Gaià, Gisclareny, Granera, Lluçà, Malla, Les Masies de Roda, Montclar, Montmaneu, Mura, La Nou de Berguedà, Orís, Oristà, Orpí, Perafita, Pujalt, la Quar, Rubió, Sagàs, Sant Pere Sallavinera, Saldes, Sant Agustí de Lluçanès, Sant Feliu Sasserra, Sant Jaume de Frontanyà, Sant Julià de Cerdanyola, Sant Martí d'Albars, Sant Martí Sesgueioles, Sant Sadurní d'Osormort, Marganell, Santa Cecília de Voltregà, Santa Fe del Penedès, Santa Maria de Besora, Santa Maria de Merlès, Santa Maria de Miralles, Sobremunt, Sora, Tavèrnoles, Tagamanent, Tavertet, Vallcebre, Veciana, Vilada, Vilanova de Sau, Vilobí del Penedès, Viver i Serrateix, and Rupit i Pruit.



Impact on the evolution of rental prices

During the first month in which Law 11/2020 was in force the average rental price fell notably in the City of Barcelona (-8.1%) and in the experimental group (-6.6%) but fell only slightly in the exogenous group (-1.0%) and rose in the control group (+4.0%) (see Figures 1 and 2).

Indeed, it was during the first months in which the law was applied that the behaviour of the average rental price differed most between the four groups as, subsequently, prices rose in both the City of Barcelona and the experimental group, above all from April–May 2021 onwards (see Figures 1 and 2). Despite this, after the three semesters in which the law was in force the average rental prices at both monthly (see Figure 1) and semester (see Table 2) levels in Barcelona and the experimental group – unlike the control group – were still below the current prices when the law was enacted.

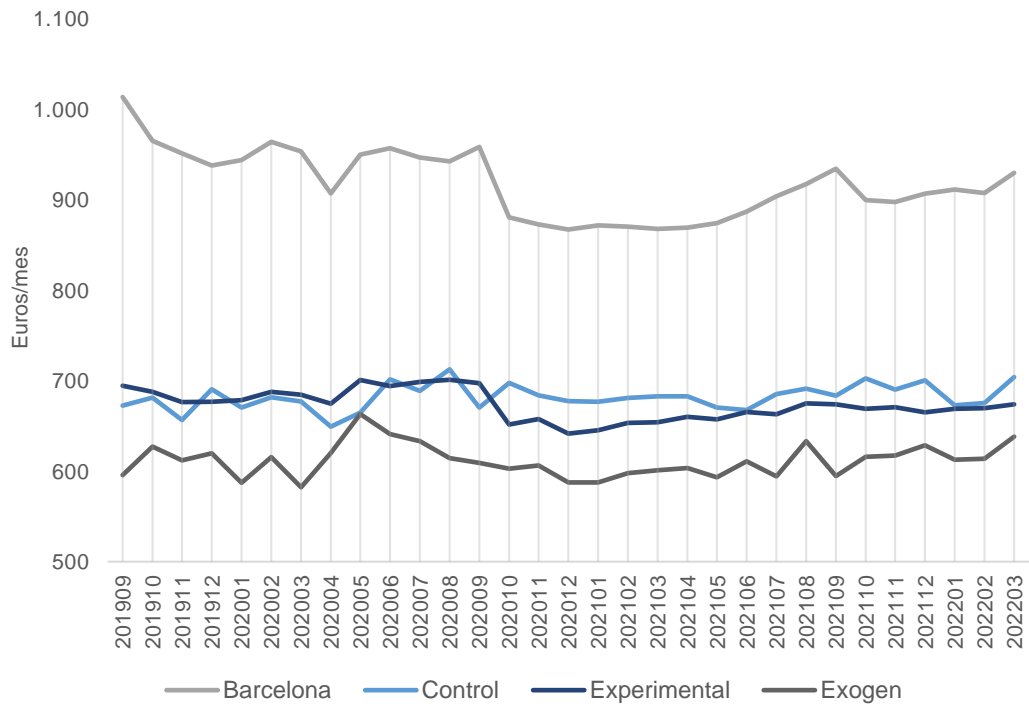
The evolution of the rental unit price followed the same pattern as before, albeit with a number of important provisos. The data by semesters show that whilst Law 11/2020 was in force the unit prices in Barcelona and in the municipalities in the experimental group – unlike the control group – were always below the price during the semester immediately before the law was enacted (see Table 3). However, the monthly figures provide greater detail and reveal that, due to the upward trend in prices that began in the middle of 2021, both in Barcelona and the experimental group the monthly unit price in the first months of 2022 exceeded the initial value from September 2020, albeit to a lesser degree than in the control and exogenous groups (see Figures 3 and 4).

Likewise, the evolution of the semestral price by quintiles illustrates differences at territorial scale. Whilst in Barcelona the average price of the most modest housing (i.e. the housing in the first quintile) remained stable – unlike the other new contracts – during the three semesters in which law 11/2020 was in force, prices in this quintile in the experimental and control groups underwent the greatest percentage fall (see Table 4).

An analysis by semester and by quintile also reveals the lack of any homogeneity in the behaviour of the unit prices. Throughout the territory, the unit price of the most expensive rental contracts (fifth quintile) increased whilst Law 11/2020 was in force, even though these increases were more moderate in Barcelona and in the experimental group (0.9 and 5.4%, respectively) than in the control and exogenous groups (14.0 and 14.6%, respectively). Indeed, the unit price continued to rise in all the quintiles of the control group and in almost all of the exogenous group (the only fall in price was in the first quintile). Conversely, the price fell in the four lower quintiles in Barcelona and in the first, third and fifth quintiles in the experimental group (see Table 5).

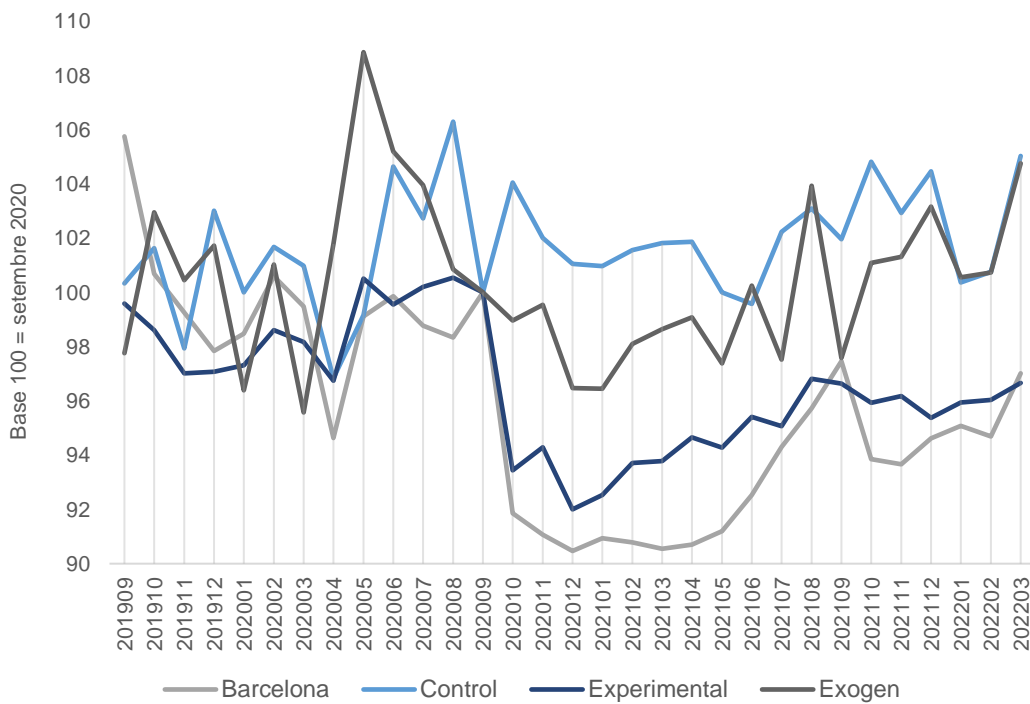
The evolution of the average price in terms of surface area during the three semesters Law 11/2020 was in force confirms the general downwards trend in prices in Barcelona and in the experimental group but, by contrast, highlights the rise in prices in the control and exogenous groups (the only exception being housing over 150 m²). The price per surface area (average and per unit) increased slightly in Barcelona but fell in the other parts of the study area, above all in the control and experimental groups, where the unit price fell by over 10% (see Tables 6 and 7).

Figure 1. Average monthly price of housing rental contracts. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



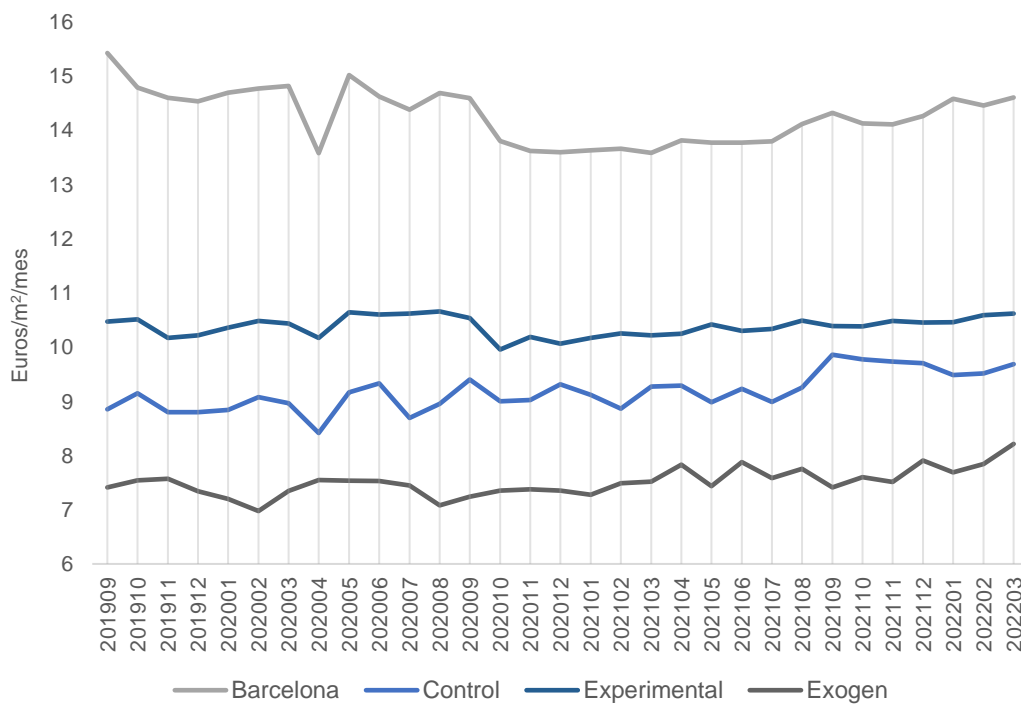
Source: compiled by the authors using data on rental deposits in the INCASOL database.

Figure 2. Variation in the average monthly price of rental contracts. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



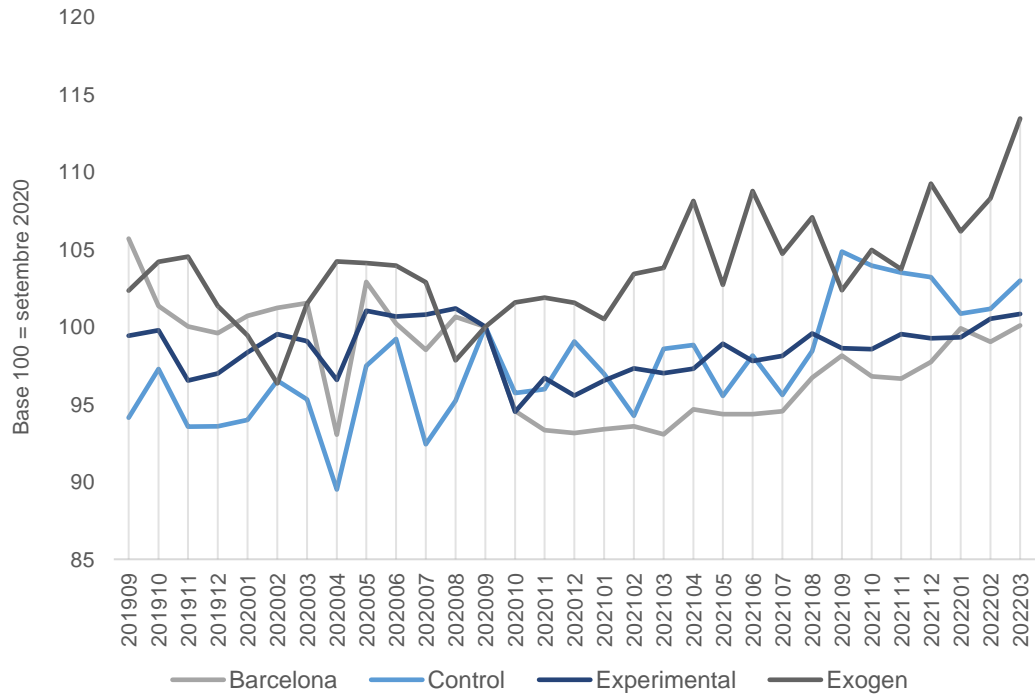
Source: compiled by the authors using data on rental deposits in the INCASOL database.

Figure 3. Average monthly unit price (€/m²) of housing rental contracts. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



Source: compiled by the authors using data on rental deposits in the INCASOL database.

Figure 4. Variation in the monthly average unit price (€/m²) of housing rental contracts. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 4. Average monthly price of housing rental contracts by quintiles and by semester. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation 2nd–5th (%) |
|---------------------------|---------------|---------------|---------------|---------------|---------------|--------------------------|
| | 1st | 2nd | 3rd | 4th | 5th | |
| 1st quintile | 560.30 | 588.13 | 588.48 | 591.23 | 587.79 | -0.1% |
| 2nd quintile | 773.09 | 773.74 | 771.26 | 771.31 | 769.91 | -0.5% |
| 3rd quintile | 892.51 | 892.80 | 888.30 | 890.52 | 889.58 | -0.4% |
| 4th quintile | 1,084.02 | 1,085.53 | 1,071.22 | 1,075.19 | 1,071.57 | -1.3% |
| 5th quintile | 1,557.25 | 1,584.93 | 1,558.62 | 1,570.35 | 1,579.99 | -0.3% |
| Total | 955.35 | 952.92 | 873.76 | 895.22 | 908.01 | -4.7% |
| Experimental group | | | | | | |
| 1st quintile | 423.03 | 443.21 | 434.01 | 441.31 | 433.39 | -2.2% |
| 2nd quintile | 617.64 | 618.69 | 613.35 | 613.68 | 613.08 | -0.9% |
| 3rd quintile | 697.48 | 698.55 | 696.01 | 696.88 | 696.65 | -0.3% |
| 4th quintile | 792.96 | 790.96 | 788.43 | 789.28 | 789.36 | -0.2% |
| 5th quintile | 1,030.43 | 1,037.23 | 1,022.05 | 1,032.45 | 1,032.25 | -0.5% |
| Total | 682.88 | 699.72 | 649.86 | 665.12 | 668.40 | -4.5% |
| Control group | | | | | | |
| 1st quintile | 429.09 | 420.53 | 437.75 | 418.67 | 414.23 | -1.5% |
| 2nd quintile | 575.19 | 576.23 | 576.79 | 576.54 | 576.49 | 0.0% |
| 3rd quintile | 665.07 | 668.65 | 665.27 | 666.89 | 667.80 | -0.1% |
| 4th quintile | 763.53 | 766.63 | 762.63 | 760.98 | 762.91 | -0.5% |
| 5th quintile | 1,030.34 | 1,031.47 | 1,036.59 | 1,014.28 | 1,001.45 | -2.9% |
| Total | 676.21 | 686.55 | 683.45 | 679.22 | 691.36 | 0.7% |
| Exogenous group | | | | | | |
| 1st quintile | 322.67 | 322.80 | 325.74 | 319.47 | 321.51 | -0.4% |
| 2nd quintile | 466.73 | 467.00 | 464.70 | 466.34 | 464.22 | -0.6% |
| 3rd quintile | 565.50 | 567.24 | 566.41 | 564.34 | 565.97 | -0.2% |
| 4th quintile | 705.90 | 707.33 | 702.42 | 699.97 | 703.55 | -0.5% |
| 5th quintile | 1,196.43 | 1,196.39 | 1,170.28 | 1,192.63 | 1,202.26 | 0.5% |
| Total | 609.48 | 629.17 | 597.82 | 604.98 | 618.84 | -1.6% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 5. Average monthly unit price (€/m²) of housing rental contracts by semester and by quintile. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation 2nd–5th (%) |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| | 1st | 2nd | 3rd | 4th | 5th | |
| 1st quintile | 12.14 | 13.16 | 12.87 | 13.04 | 13.04 | -0.9% |
| 2nd quintile | 14.71 | 14.40 | 13.67 | 13.84 | 14.16 | -1.7% |
| 3rd quintile | 15.05 | 14.57 | 13.75 | 13.94 | 14.28 | -2.0% |
| 4th quintile | 15.53 | 15.21 | 14.15 | 14.39 | 15.01 | -1.3% |
| 5th quintile | 16.66 | 16.18 | 15.19 | 15.40 | 16.32 | 0.9% |
| Total | 14.70 | 14.57 | 13.67 | 13.90 | 14.30 | -1.9% |
| Experimental group | | | | | | |
| 1st quintile | 7.54 | 8.21 | 8.28 | 8.22 | 8.20 | -0.1% |
| 2nd quintile | 10.53 | 10.65 | 10.45 | 10.64 | 10.77 | 1.1% |
| 3rd quintile | 11.23 | 11.25 | 10.76 | 11.10 | 11.17 | -0.7% |
| 4th quintile | 11.66 | 11.51 | 11.06 | 11.26 | 11.24 | -2.3% |
| 5th quintile | 12.10 | 11.96 | 11.71 | 12.16 | 12.60 | 5.4% |
| Total | 10.36 | 10.62 | 10.11 | 10.35 | 10.46 | -1.5% |
| Control group | | | | | | |
| 1st quintile | 7.18 | 7.44 | 7.48 | 7.38 | 7.52 | 1.1% |
| 2nd quintile | 9.15 | 9.12 | 9.17 | 9.46 | 9.67 | 6.1% |
| 3rd quintile | 9.58 | 9.65 | 9.82 | 9.70 | 10.11 | 4.8% |
| 4th quintile | 9.74 | 9.77 | 9.92 | 9.85 | 10.43 | 6.8% |
| 5th quintile | 9.24 | 9.02 | 9.36 | 9.58 | 10.28 | 14.0% |
| Total | 8.92 | 9.02 | 9.12 | 9.22 | 9.67 | 7.2% |
| Exogenous group | | | | | | |
| 1st quintile | 5.36 | 5.45 | 5.42 | 5.11 | 5.29 | -2.9% |
| 2nd quintile | 7.10 | 7.02 | 6.99 | 7.25 | 7.24 | 3.2% |
| 3rd quintile | 7.62 | 7.42 | 7.77 | 7.92 | 7.76 | 4.6% |
| 4th quintile | 8.30 | 8.30 | 8.32 | 8.83 | 8.90 | 7.3% |
| 5th quintile | 9.22 | 8.83 | 9.24 | 10.01 | 10.12 | 14.6% |
| Total | 7.35 | 7.36 | 7.36 | 7.67 | 7.78 | 5.8% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 6. Average monthly price of housing rental contracts by surface area and semester. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation |
|------------------------------|----------|----------|----------|----------|----------|-------------|
| | 1st | 2nd | 3rd | 4th | 5th | 2nd–5th (%) |
| Less than 50 m ² | 722.47 | 716.16 | 662.55 | 679.34 | 700.10 | -2.2% |
| 50–74 m ² | 875.94 | 866.89 | 811.77 | 825.72 | 838.66 | -3.3% |
| 75–99 m ² | 1,060.30 | 1,050.20 | 983.93 | 1,000.92 | 1,015.67 | -3.3% |
| 100–150 m ² | 1,354.75 | 1,377.68 | 1,268.16 | 1,291.07 | 1,336.14 | -3.0% |
| More than 150 m ² | 1,794.48 | 1,876.33 | 1,770.54 | 1,811.21 | 1,898.80 | 1.2% |
| No data | 1,006.60 | 1,007.97 | 909.34 | 943.13 | 953.05 | -5.4% |
| Experimental group | | | | | | |
| Less than 50 m ² | 567.02 | 585.24 | 542.48 | 557.91 | 558.16 | -4.6% |
| 50–74 m ² | 652.72 | 667.68 | 627.70 | 638.14 | 641.19 | -4.0% |
| 75–99 m ² | 733.58 | 756.98 | 716.19 | 728.26 | 733.74 | -3.1% |
| 100–150 m ² | 844.86 | 864.79 | 798.92 | 824.62 | 829.48 | -4.1% |
| More than 150 m ² | 841.57 | 853.56 | 844.28 | 824.01 | 803.07 | -5.9% |
| No data | 692.75 | 705.68 | 654.80 | 682.11 | 690.61 | -2.1% |
| Control group | | | | | | |
| Less than 50 m ² | 524.48 | 505.41 | 523.87 | 523.32 | 537.04 | 6.3% |
| 50–74 m ² | 599.15 | 611.73 | 606.16 | 605.04 | 633.78 | 3.6% |
| 75–99 m ² | 675.94 | 694.78 | 689.81 | 702.39 | 725.54 | 4.4% |
| 100–150 m ² | 813.58 | 799.55 | 845.87 | 816.05 | 841.98 | 5.3% |
| More than 150 m ² | 920.71 | 1,037.46 | 931.00 | 937.64 | 867.43 | -16.4% |
| No data | 703.76 | 701.21 | 704.68 | 701.81 | 710.25 | 1.3% |
| Exogenous group | | | | | | |
| Less than 50 m ² | 420.03 | 429.22 | 422.09 | 431.66 | 424.16 | -1.2% |
| 50–74 m ² | 493.30 | 496.69 | 489.33 | 506.44 | 517.62 | 4.2% |
| 75–99 m ² | 587.90 | 591.61 | 597.62 | 607.08 | 619.42 | 4.7% |
| 100–150 m ² | 747.71 | 777.58 | 734.67 | 758.97 | 782.70 | 0.7% |
| More than 150 m ² | 1,014.20 | 1,088.06 | 969.00 | 1,005.17 | 1,018.14 | -6.4% |
| No data | 606.42 | 614.51 | 596.53 | 600.39 | 620.02 | 0.9% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 7. Average monthly unit price (€/m²) of housing rental contracts by surface area and semester. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation |
|------------------------------|----------|-------|-------|-------|-------|-------------|
| | 1st | 2nd | 3rd | 4th | 5th | 2nd–5th (%) |
| Less than 50 m ² | 18.77 | 18.50 | 17.04 | 17.39 | 18.02 | -2.6% |
| 50–74 m ² | 14.37 | 14.23 | 13.31 | 13.55 | 13.80 | -3.0% |
| 75–99 m ² | 12.65 | 12.47 | 11.69 | 11.92 | 12.14 | -2.6% |
| 100–150 m ² | 11.67 | 11.82 | 10.90 | 11.10 | 11.43 | -3.3% |
| More than 150 m ² | 9.66 | 10.21 | 9.91 | 10.11 | 10.51 | 2.9% |
| Experimental group | | | | | | |
| Less than 50 m ² | 13.89 | 14.27 | 13.24 | 13.59 | 13.58 | -4.9% |
| 50–74 m ² | 10.66 | 10.92 | 10.27 | 10.46 | 10.54 | -3.4% |
| 75–99 m ² | 8.76 | 9.03 | 8.54 | 8.67 | 8.77 | -2.9% |
| 100–150 m ² | 7.44 | 7.63 | 7.02 | 7.26 | 7.30 | -4.3% |
| More than 150 m ² | 4.40 | 4.59 | 4.39 | 4.26 | 4.09 | -10.9% |
| Control group | | | | | | |
| Less than 50 m ² | 12.71 | 12.38 | 12.84 | 12.82 | 13.00 | 5.0% |
| 50–74 m ² | 9.69 | 9.87 | 9.83 | 9.82 | 10.39 | 5.2% |
| 75–99 m ² | 8.04 | 8.29 | 8.22 | 8.34 | 8.63 | 4.1% |
| 100–150 m ² | 6.97 | 6.77 | 7.25 | 7.17 | 7.27 | 7.4% |
| More than 150 m ² | 4.37 | 5.27 | 4.85 | 5.09 | 4.71 | -10.6% |
| Exogenous group | | | | | | |
| Less than 50 m ² | 10.41 | 10.41 | 10.20 | 10.57 | 10.56 | 1.4% |
| 50–74 m ² | 7.95 | 7.97 | 7.91 | 8.25 | 8.36 | 4.9% |
| 75–99 m ² | 6.97 | 7.02 | 7.07 | 7.21 | 7.36 | 4.8% |
| 100–150 m ² | 6.30 | 6.58 | 6.24 | 6.45 | 6.67 | 1.4% |
| More than 150 m ² | 4.79 | 4.94 | 4.81 | 5.07 | 4.83 | -2.3% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.



Impact on the
evolution in the
number of
contracts

It is vital to bear in mind two particular circumstances that could distort findings when analysing the evolution of the number of contracts awarded whilst Law 11/2020 was in force: (i) seasonal variations in the market that occur every year; and (ii) the marked descent in new contracts caused by the COVID-19 pandemic and lockdown measures imposed, above all, in March and April 2020 (see Figures 5 and 6). This latter circumstance led to a sizeable increase in the number rental properties on the market throughout 2020 that did not begin to fall until the following year as the economic and sanitary situation began to return to normal and the number of contracts signed began to rise once more. The monthly study of the number of contracts (see Figures 5 and 6) allows us to explore seasonal variations (fall in number of contracts in August and at the end of the year) and those deriving from the sanitary crisis (abrupt decline in the number of contracts signed during the first months of the pandemic followed by a progressive return to normality, above all in 2021) but is not the best mechanism for examining the evolution of the number of contracts signed before and after passing of Law 11/2020. On the other hand, a comparative analysis by semester of each of the territorial areas based on both absolute values and relative to the population (number of contracts per 1000 inhabitants) is feasible at this broader temporal scale and allows us to appreciate how the different rental sectors behaved at each territorial area (see Tables 8 and 9).

It is also important to take into account another element if we are to correctly interpret the results: the modification of Law 29/1994, 24 November, of Urban Rents (LAU). The Royal Decree-Law 7/2019, 1 March, contained urgent measures regarding housing and rents and lengthened the length of rental contracts from three to five years if the renter is a natural person, and to seven years if the renter is a legal person. Thus, the average length of contracts increased as a result of this legislative modification, above all from 2022 onwards once it had been in force for three years. This increase in the length of contracts meant that, despite no change in the number of properties, there was a fall in the number of signed contracts.

The rental sector in the City of Barcelona was the most dynamic of all the areas studied. Despite the fall in the number of contracts signed during the second semester, the increase was notable in the following semester (coinciding with the entrance in force of the Law 11/2020) and was even greater throughout the fourth semester but dropped in the fifth to levels that were just slightly above those from before the pandemic. In other words, during the three semesters in which the law was in force, the number of contracts signed in the City was clearly greater than the number registered before the pandemic (first semester) and, logically, also greater than the number signed in the second semester due to the COVID-related fall (see Table 8).

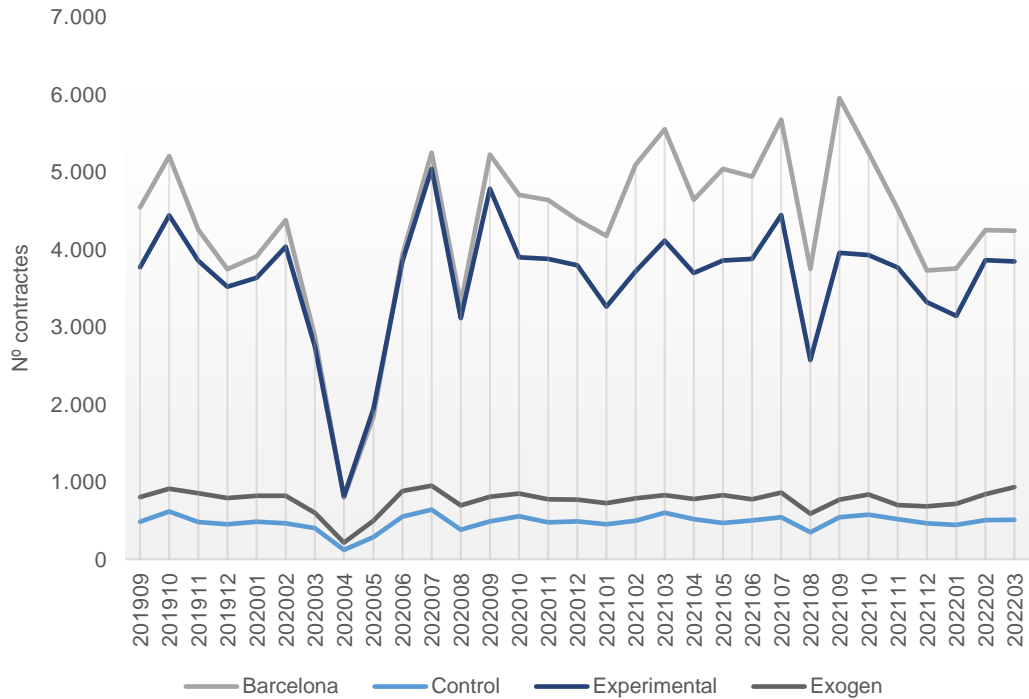
The evolution of the activity in the experimental and control groups was reasonably similar. Compared to the City of Barcelona, the rental market in these groups recovered more slowly. The number of contracts signed in these two groups increased gradually – but only weakly – during the third and fourth semesters: the growth in the average number of contracts signed whilst Law 11/2020 was in force was only 6.1% in the experimental group and 11.7% in the control group above the average monthly values registered during the previous year (first and second semesters). In the City of Barcelona, on the other hand, this increase was extraordinary and reached 32.1% (see Table 6). In relative terms, despite the different demographic evolution of the experimental and control groups, the difference in the semestral increase in the number of contracts signed per 1,000 inhabitants whilst the law was in force compared to the previous year in both groups was almost five points (6.5% in the experimental group vs. 11.3% in the control group) (see Table 9).

An analysis by quintiles reveals different patterns in the City of Barcelona compared to the experimental and control groups. Whilst in Barcelona the growth in the number of contracts mainly occurred in the lower quintiles (the percentage growth drops as the quintile number increases and by the fifth quintile was negative), in the experimental group growth occurred essentially in the first three quintiles and in the control group in the first quintile (see Tables 8 and 9).

The results of the analysis by surface area show that all three groups behaved similarly during the period Law 11/2020 was in force: a growth in the proportion of new rental contracts of smaller properties and a progressive drop in the number of contracts as surface areas increased (see Table 10).

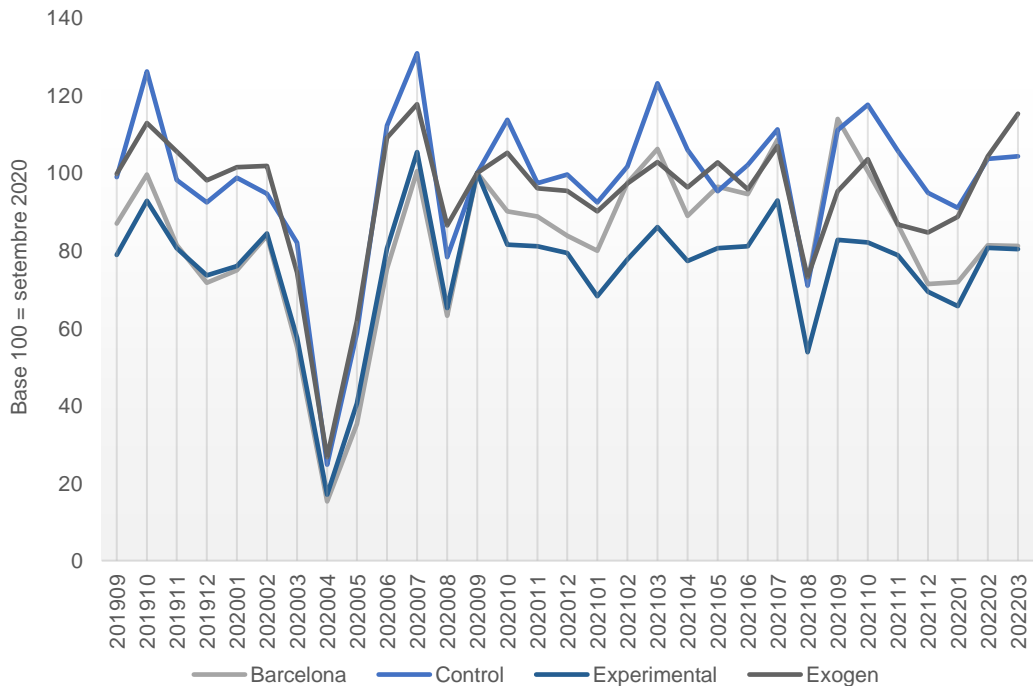
Despite fewer new contracts being signed than in the other groups, in the exogenous group during the three final semesters the number of contracts still exceeded the average monthly number of contracts signed during the year before the law came into force (see Tables 8 and 9).

Figure 5. Monthly number of rental contracts. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



Source: compiled by the authors using data on rental deposits in the INCASOL database.

Figure 7. Monthly number of rental contracts per 1,000 inhabitants. City of Barcelona and experimental, control and exogenous groups, September 2019–March 2022.



Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 8. Monthly number of rental contracts by quintiles and semesters. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| | Semester | | | | | Variation (%) | | | Monthly average number of contracts | | Variation (%) |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|-------------------------------------|----------------|---------------|
| | 1st | 2nd | 3rd | 4th | 5th | 1st–3rd | 1st–5th | 2nd–4th | 1st+2nd | 3rd+4th+5th | |
| Barcelona | | | | | | | | | | | |
| 1st quintile | 5,819 | 4,555 | 8,616 | 8,379 | 6,842 | 48.1% | 17.6% | 84.0% | 864.5 | 1,324.3 | 53.2% |
| 2nd quintile | 4,764 | 3,852 | 6,116 | 6,847 | 5,950 | 28.4% | 24.9% | 77.8% | 718.0 | 1,050.7 | 46.3% |
| 3rd quintile | 5,163 | 4,162 | 5,437 | 6,137 | 5,229 | 5.3% | 1.3% | 47.5% | 777.1 | 933.5 | 20.1% |
| 4th quintile | 5,357 | 4,014 | 4,712 | 5,480 | 4,869 | -12.0% | -9.1% | 36.5% | 780.9 | 836.7 | 7.1% |
| 5th quintile | 4,070 | 3,017 | 2,863 | 3,385 | 3,169 | -29.7% | -22.1% | 12.2% | 590.6 | 523.2 | -11.4% |
| Total | 25,173 | 19,600 | 27,744 | 30,228 | 26,059 | 10.2% | 3.5% | 54.2% | 3,731.1 | 4,668.4 | 25.1% |
| Experimental group | | | | | | | | | | | |
| 1st quintile | 6,367 | 4,573 | 6,835 | 6,362 | 6,171 | 7.4% | -3.1% | 39.1% | 911.7 | 1,076.0 | 18.0% |
| 2nd quintile | 5,020 | 4,224 | 5,690 | 5,693 | 5,373 | 13.3% | 7.0% | 34.8% | 770.3 | 930.9 | 20.8% |
| 3rd quintile | 3,324 | 2,999 | 3,808 | 3,956 | 3,875 | 14.6% | 16.6% | 31.9% | 526.9 | 646.6 | 22.7% |
| 4th quintile | 5,109 | 4,331 | 3,736 | 3,999 | 3,985 | -26.9% | -22.0% | -7.7% | 786.7 | 651.1 | -17.2% |
| 5th quintile | 3,135 | 2,801 | 2,131 | 2,487 | 2,540 | -32.0% | -19.0% | -11.2% | 494.7 | 397.7 | -19.6% |
| Total | 22,955 | 18,928 | 22,200 | 22,497 | 21,944 | -3.3% | -4.4% | 18.9% | 3,490.3 | 3,702.3 | 6.1% |
| Control group | | | | | | | | | | | |
| 1st quintile | 707 | 507 | 654 | 590 | 563 | -7.5% | -20.4% | 16.4% | 101.2 | 100.4 | -0.8% |
| 2nd quintile | 610 | 489 | 630 | 634 | 574 | 3.3% | -5.9% | 29.7% | 91.6 | 102.1 | 11.5% |
| 3rd quintile | 708 | 582 | 728 | 744 | 785 | 2.8% | 10.9% | 27.8% | 107.5 | 125.4 | 16.6% |
| 4th quintile | 455 | 375 | 452 | 485 | 571 | -0.7% | 25.5% | 29.3% | 69.2 | 83.8 | 21.1% |
| 5th quintile | 501 | 430 | 522 | 496 | 559 | 4.2% | 11.6% | 15.3% | 77.6 | 87.6 | 12.9% |
| Total | 2,981 | 2,383 | 2,986 | 2,949 | 3,052 | 0.2% | 2.4% | 23.8% | 447.0 | 499.3 | 11.7% |
| Exogenous group | | | | | | | | | | | |
| 1st quintile | 1,276 | 904 | 1,159 | 1,073 | 1,028 | -9.2% | -19.4% | 18.7% | 181.7 | 181.1 | -0.3% |
| 2nd quintile | 1,105 | 847 | 1,123 | 1,071 | 1,014 | 1.6% | -8.2% | 26.4% | 162.7 | 178.2 | 9.6% |
| 3rd quintile | 850 | 678 | 814 | 859 | 882 | -4.2% | 3.8% | 26.7% | 127.3 | 141.9 | 11.5% |
| 4th quintile | 945 | 799 | 894 | 963 | 1,074 | -5.4% | 13.7% | 20.5% | 145.3 | 162.8 | 12.0% |
| 5th quintile | 760 | 682 | 702 | 652 | 695 | -7.6% | -8.6% | -4.4% | 120.2 | 113.8 | -5.3% |
| Total | 4,936 | 3,910 | 4,692 | 4,618 | 4,693 | -4.9% | -4.9% | 18.1% | 737.2 | 777.9 | 5.5% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 9. Monthly number of rental contracts per 1,000 inhabitants by quintiles and semesters. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation (%) | | | Monthly average number of contracts | | Variation (%) |
|---------------------------|-------------|-------------|-------------|-------------|-------------|---------------|--------------|--------------|-------------------------------------|-------------|---------------|
| | 1st | 2nd | 3rd | 4th | 5th | 1st–3rd | 1st–5th | 2nd–4th | 1st+2nd | 3rd+4th+5th | |
| 1st quintile | 3.5 | 2.8 | 5.3 | 5.1 | 4.2 | 50.5% | 19.6% | 85.8% | 3.1 | 4.9 | 55.3% |
| 2nd quintile | 2.9 | 2.3 | 3.7 | 4.2 | 3.6 | 30.5% | 27.0% | 79.5% | 2.6 | 3.9 | 48.3% |
| 3rd quintile | 3.1 | 2.5 | 3.3 | 3.7 | 3.2 | 7.1% | 3.0% | 48.9% | 2.8 | 3.4 | 21.8% |
| 4th quintile | 3.2 | 2.4 | 2.9 | 3.3 | 3.0 | -10.6% | -7.6% | 37.9% | 2.8 | 3.1 | 8.6% |
| 5th quintile | 2.4 | 1.8 | 1.7 | 2.1 | 1.9 | -28.5% | -20.8% | 13.3% | 2.1 | 1.9 | -10.2% |
| Total | 15.1 | 11.9 | 17.0 | 18.5 | 15.9 | 12.1% | 5.3% | 55.7% | 13.5 | 17.1 | 26.8% |
| Experimental group | | | | | | | | | | | |
| 1st quintile | 2.4 | 1.7 | 2.6 | 2.4 | 2.3 | 7.8% | -2.6% | 39.5% | 2.1 | 2.5 | 18.5% |
| 2nd quintile | 1.9 | 1.6 | 2.2 | 2.2 | 2.0 | 13.9% | 7.5% | 35.1% | 1.7 | 2.1 | 21.3% |
| 3rd quintile | 1.3 | 1.1 | 1.4 | 1.5 | 1.5 | 15.1% | 17.1% | 32.3% | 1.2 | 1.5 | 23.2% |
| 4th quintile | 1.9 | 1.6 | 1.4 | 1.5 | 1.5 | -26.5% | -21.6% | -7.4% | 1.8 | 1.5 | -16.9% |
| 5th quintile | 1.2 | 1.1 | 0.8 | 0.9 | 1.0 | -31.7% | -18.6% | -11.0% | 1.1 | 0.9 | -19.3% |
| Total | 8.7 | 7.2 | 8.4 | 8.5 | 8.3 | -2.8% | -4.0% | 19.2% | 7.9 | 8.4 | 6.5% |
| Control group | | | | | | | | | | | |
| 1st quintile | 1.9 | 1.4 | 1.8 | 1.6 | 1.5 | -7.9% | -20.7% | 16.1% | 1.6 | 1.6 | -1.1% |
| 2nd quintile | 1.7 | 1.3 | 1.7 | 1.7 | 1.5 | 2.9% | -6.3% | 29.3% | 1.5 | 1.7 | 11.1% |
| 3rd quintile | 1.9 | 1.6 | 2.0 | 2.0 | 2.1 | 2.4% | 10.4% | 27.5% | 1.7 | 2.0 | 16.3% |
| 4th quintile | 1.2 | 1.0 | 1.2 | 1.3 | 1.5 | -1.1% | 25.0% | 29.0% | 1.1 | 1.4 | 20.7% |
| 5th quintile | 1.4 | 1.2 | 1.4 | 1.3 | 1.5 | 3.8% | 11.1% | 15.1% | 1.3 | 1.4 | 12.6% |
| Total | 8.1 | 6.4 | 8.1 | 8.0 | 8.2 | -0.2% | 2.0% | 23.5% | 7.3 | 8.1 | 11.3% |
| Exogenous group | | | | | | | | | | | |
| 1st quintile | 1.8 | 1.3 | 1.6 | 1.5 | 1.4 | -10.1% | -20.2% | 18.0% | 1.5 | 1.5 | -1.1% |
| 2nd quintile | 1.6 | 1.2 | 1.6 | 1.5 | 1.4 | 0.6% | -9.2% | 25.7% | 1.4 | 1.5 | 8.7% |
| 3rd quintile | 1.2 | 1.0 | 1.1 | 1.2 | 1.2 | -5.2% | 2.7% | 26.0% | 1.1 | 1.2 | 10.6% |
| 4th quintile | 1.3 | 1.1 | 1.3 | 1.4 | 1.5 | -6.3% | 12.5% | 19.8% | 1.2 | 1.4 | 11.1% |
| 5th quintile | 1.1 | 1.0 | 1.0 | 0.9 | 1.0 | -8.6% | -9.5% | -5.0% | 1.0 | 1.0 | -6.0% |
| Total | 7.0 | 5.5 | 6.6 | 6.5 | 6.6 | -5.9% | -5.9% | 17.4% | 6.3 | 6.6 | 4.7% |

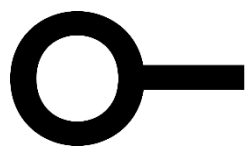
Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 10. Monthly number of rental contracts by surface area and semesters. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| Barcelona | Semester | | | | | Variation (%) | | | Monthly average number of contracts | | Variation (%) |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|-------------------------------------|----------------|---------------|
| | 1st | 2nd | 3rd | 4th | 5th | 1st–3rd | 1st–5th | 2nd–4th | 1st+2nd | 3rd+4th+5th | |
| Less than 50 m ² | 4,319 | 3,393 | 5,265 | 5,630 | 4,920 | 21.9% | 13.9% | 65.9% | 642.7 | 878.6 | 36.7% |
| 50–74 m ² | 8,826 | 6,608 | 9,615 | 10,648 | 9,327 | 8.9% | 5.7% | 61.1% | 1,286.2 | 1,643.9 | 27.8% |
| 75–99 m ² | 4,203 | 3,278 | 4,542 | 4,904 | 4,045 | 8.1% | -3.8% | 49.6% | 623.4 | 749.5 | 20.2% |
| 100–150 m ² | 1,641 | 1,279 | 1,716 | 1,868 | 1,476 | 4.6% | -10.1% | 46.1% | 243.3 | 281.1 | 15.5% |
| More than 150 m ² | 376 | 271 | 369 | 408 | 332 | -1.9% | -11.7% | 50.6% | 53.9 | 61.6 | 14.3% |
| No data | 5,808 | 4,771 | 6,237 | 6,770 | 5,959 | 7.4% | 2.6% | 41.9% | 881.6 | 1,053.7 | 19.5% |
| Total | 25,173 | 19,600 | 27,744 | 30,228 | 26,059 | 10.2% | 3.5% | 54.2% | 3,731.1 | 4,668.4 | 25.1% |
| Experimental group | | | | | | | | | | | |
| Less than 50 m ² | 2,691 | 2,150 | 2,911 | 2,962 | 3,046 | 8.2% | 13.2% | 37.8% | 403.4 | 495.5 | 22.8% |
| 50–74 m ² | 7,581 | 6,078 | 7,948 | 8,283 | 8,151 | 4.8% | 7.5% | 36.3% | 1,138.3 | 1,354.6 | 19.0% |
| 75–99 m ² | 3,872 | 3,196 | 3,631 | 3,786 | 3,610 | -6.2% | -6.8% | 18.5% | 589.0 | 612.6 | 4.0% |
| 100–150 m ² | 1,256 | 1,099 | 1,145 | 1,012 | 976 | -8.8% | -22.3% | -7.9% | 196.3 | 174.1 | -11.3% |
| More than 150 m ² | 335 | 251 | 229 | 237 | 224 | -31.6% | -33.1% | -5.6% | 48.8 | 38.3 | -21.5% |
| No data | 7,220 | 6,154 | 6,336 | 6,217 | 5,937 | -12.2% | -17.8% | 1.0% | 1,114.5 | 1,027.2 | -7.8% |
| Total | 22,955 | 18,928 | 22,200 | 22,497 | 21,944 | -3.3% | -4.4% | 18.9% | 3,490.3 | 3,702.3 | 6.1% |
| Control group | | | | | | | | | | | |
| Less than 50 m ² | 223 | 158 | 202 | 215 | 246 | -9.4% | 10.3% | 36.1% | 31.8 | 36.8 | 16.0% |
| 50–74 m ² | 779 | 615 | 758 | 799 | 857 | -2.7% | 10.0% | 29.9% | 116.2 | 134.1 | 15.4% |
| 75–99 m ² | 585 | 409 | 555 | 557 | 568 | -5.1% | -2.9% | 36.2% | 82.8 | 93.3 | 12.7% |
| 100–150 m ² | 242 | 201 | 231 | 220 | 228 | -4.5% | -5.8% | 9.5% | 36.9 | 37.7 | 2.2% |
| More than 150 m ² | 119 | 102 | 103 | 96 | 89 | -13.4% | -25.2% | -5.9% | 18.4 | 16.0 | -13.1% |
| No data | 1,033 | 898 | 1,137 | 1,062 | 1,064 | 10.1% | 3.0% | 18.3% | 160.9 | 181.3 | 12.7% |
| Total | 2,981 | 2,383 | 2,986 | 2,949 | 3,052 | 0.2% | 2.4% | 23.8% | 447.0 | 499.3 | 11.7% |

| Exogenous group | | | | | | | | | | | |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Less than 50 m ² | 311 | 217 | 272 | 277 | 288 | -12.5% | -7.4% | 27.6% | 44.0 | 46.5 | 5.7% |
| 50–74 m ² | 1,027 | 724 | 1,006 | 1,017 | 1,047 | -2.0% | 1.9% | 40.5% | 145.9 | 170.6 | 16.9% |
| 75–99 m ² | 752 | 605 | 723 | 738 | 729 | -3.9% | -3.1% | 22.0% | 113.1 | 121.7 | 7.6% |
| 100–150 m ² | 439 | 396 | 427 | 416 | 418 | -2.7% | -4.8% | 5.1% | 69.6 | 70.1 | 0.7% |
| More than 150 m ² | 335 | 283 | 289 | 227 | 232 | -13.7% | -30.7% | -19.8% | 51.5 | 41.6 | -19.3% |
| <i>No data</i> | 2,072 | 1,685 | 1,975 | 1,943 | 1,979 | -4.7% | -4.5% | 15.3% | 313.1 | 327.6 | 4.6% |
| Total | 4,936 | 3,910 | 4,692 | 4,618 | 4,693 | -4.9% | -4.9% | 18.1% | 737.2 | 777.9 | 5.5% |

Source: compiled by the authors using data on rental deposits in the INCASOL database.



Impact on the volume of rental properties

As can be deduced intuitively from the analysis of the evolution of the number of new rental contracts signed, the total number of currently rented properties did not fall whilst Law 11/2020 was in force in any of the studied areas. Indeed, the opposite was true and the number of contracts increased across the board and easily exceeded the values from before the pandemic. The number of contracts signed increased most of all in the City of Barcelona during the three semesters in which Law 11/20 was in operation: 6.7% in absolute terms and 7.3% relatively (per 1000 inhabitants), whilst in the experimental and control groups the increase was more moderate (3.9 and 4.3%, respectively in absolute terms and around 4–4.1% in terms of populations; see Tables 11 and 12). It should be noted that this increase in the number of rental contracts was not a circumstantial effect restricted to the study period but, rather, a reflection of the expansive structural trend in this type of housing that began at the beginning of the twentieth century⁶.

Table 11. Number of dwellings with current rental contract at the beginning and end of each semester. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| | 22/9/2019 | 22/03/2020 | 22/09/2020 (a) | 22/03/2021 | 22/09/2021 | 22/03/2022 (b) | Variation (a-b %) |
|---------------------------|-----------|------------|-------------------|------------|------------|-------------------|----------------------|
| Barcelona | 204,242 | 207,342 | 204,251 | 205,048 | 210,647 | 217,907 | 6.7% |
| Experimental group | 197,187 | 200,082 | 201,970 | 203,884 | 206,212 | 209,754 | 3.9% |
| Control group | 24,391 | 24,761 | 25,086 | 25,403 | 25,639 | 26,159 | 4.3% |
| Exogenous group | 39,477 | 40,167 | 40,959 | 41,697 | 42,160 | 42,903 | 4.7% |

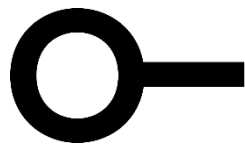
Source: compiled by the authors using data on rental deposits in the INCASOL database.

Table 12. Number of dwellings with current rental contract per 1,000 inhabitants at the beginning and end of each semester. City of Barcelona and experimental, control and exogenous groups, 22 September 2019–21 March 2022.

| | 22/9/2019 | 22/03/2020 | 22/09/2020 (a) | 22/03/2021 | 22/09/2021 | 22/03/2022 (b) | Variation (a-b %) |
|---------------------------|-----------|------------|-------------------|------------|------------|-------------------|----------------------|
| Barcelona | 123.4 | 124.9 | 124.1 | 125.3 | 128.7 | 133.1 | 7.3% |
| Experimental group | 74.9 | 75.7 | 76.6 | 77.4 | 78.3 | 79.7 | 4.0% |
| Control group | 66.3 | 67.0 | 67.8 | 68.6 | 69.2 | 70.6 | 4.1% |
| Exogenous group | 56.5 | 57.1 | 57.9 | 58.8 | 59.4 | 60.5 | 4.4% |

Note: from January 2021 onwards, the population data correspond to the most recent published census figures dating from 1 January 2021.

Source: compiled by the authors using data on rental deposits in the INCASOL database.



Conclusions

The results of this evaluation of the impact of the rent-control mechanism enforced by Law 11/2020 during the three semesters in which it was in operation (above all in comparison with the two previous semesters) suggest the following:

(I) This law helped reduce slightly rents in the municipalities in Barcelona province in which it was implemented (a conclusion that coincides with the study by Jofre-Monseny, Martínez-Mazza & Segú, and that of Monràs & Garcia Montalvo), above all during the first months in which it was in force. Besides the updating of the rental price reference index, one hypothesis that would explain this gradual loss in ability of this law to moderate prices – which would be coherent with the analysis by Monràs & Garcia Montalvo (2022) – is the increase in the number of contracts signed that were over the maximum reference price established by this law once it had been in force for a few months.

(II) The profile of the rental agreements signed whilst this law was in effect changed in comparison with the contracts signed in the two semesters before it was passed. The results of the analysis of new contracts by surface area (Table 10) confirm this, as Monràs & Garcia Montalvo also found. Whilst the law was in force in Barcelona, in the experimental and control groups there was an inverse tendency between the surface area of the dwelling and the number of new contracts, that is, the proportion of rental contracts for dwellings with smaller surface areas increased as the proportion of contracts with greater surface area decreased progressively. Given that this trend took place as much in Barcelona as in the experimental and control groups, it is logical to think that it was more a reflection of market rental trends than a direct consequence of any rent-control measure.

(III) During the three semesters that Law 11/2020 was in force there was no fall in the number of rental contracts signed in the studied municipalities. The evolution of the experimental and control groups was in relative terms similar to the overall population: whilst the law was in force in the experimental group on average per semester 8.4 contracts were signed per 1,000 inhabitants (an increase of 6.5% compared to the previous year), while in the control group during the same period 8.1 contracts were signed for every 1,000 inhabitants (11.3% more than the previous year). The number of contracts signed in Barcelona was very high and even exceeded the semester before the pandemic. Our results match those of the study by Jofre-Monseny, Martínez-Mazza & Segú but tend to contradict those of Monràs & Garcia Montalvo, probably because of the methodological differences between these two studies⁶.

(IV) The total number of dwellings with a current rental contract did not fall whilst Law 11/2020 was in force in any of the studied areas; indeed, the opposite was true and the number of contracts increased in all and clearly exceeded the values from before the pandemic. In relative terms, this increase was particularly intense in the City of Barcelona (+7.3%) but more moderate in both the experimental (+4.0%) and control (+4.1%) groups.

Nevertheless, prudence is required when analysing the results of our evaluation for a number of reasons related, essentially, to the time period, the methodology employed and the contextual circumstances.

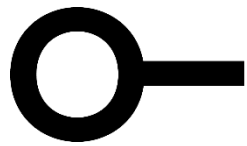
(I) Timewise, it is vital to highlight the fact that Law 11/2020 was only in force for a year and a half. This is particularly relevant as an important body of literature on this type of legislation warns of the increasing risk of negative external effects in the mid- and long terms as the differences between regulated and unregulated rents are accentuated. Thus, during the brief period it was in force, it is possible that the results were affected by the annual seasonal variations that occur in the rental market.

⁶ Amongst other things, the differences include: how the data were treated, the territorial and temporal extent of the two studies (Monràs i Garcia Montalvo used data from 2016 up to June 2021, while our study used data from September 2019 until Law 11/2020 was declared nul in March 2022), and in the original data base used (our evaluation was based on information contained in the INCASOL financial register dating from 30 June 2022).

(II) Our methodology was essentially descriptive and, apart from the choice of the municipalities included in the experimental and control groups, did not take into account exogenous variables that could have affected the market in terms of rental prices and offer. Moreover, given the non-existence of any other similar municipality in Catalonia, the impossibility of defining a control group for the City of Barcelona affected the analysis of the impact of this law on the Catalan capital. In addition, it is also important to bear in mind that our evaluation – unlike other similar studies – was restricted to Barcelona Province, which constrained the configuration of the experimental and control groups. Significant differences exist between the municipalities in the experimental and control groups, above all in terms of their population and the size of their rental markets, which affect the dynamics of the housing market at a local scale (in fact, some but not all of the studied municipalities were declared areas of housing concern). In terms of the data used, although the INCASOL Financial Register is an extraordinarily valuable source for studying the evolution of the rental market, it should be noted that, despite the legal obligation to do so, no rental deposits are paid to INCASOL in an indeterminate number of cases and so no information on these contracts is contained in the database. It is estimated that in 2021 in 70% of rental contracts a deposit was placed with INCASOL⁷. This high percentage enabled us to use this source to conduct a precise and reliable analysis of the global evolution of rents. Nevertheless, if the analysis (the INCASOL database was purged a number of times) is based on the comparison of territorial variables (e.g. municipalities with few rental contracts) with other variables relating to the characteristics of the dwelling (e.g. surface area, a variable for which there was no valid information available) or the contract (the price), the possibility of significant deviations in the results increases notably.

(III) Finally, the impact of the pandemic on the rental market cannot be underestimated. The passing of Law 11/2020 just one semester after the COVID-19 outbreak obliges us to examine our results within the context of the rental market at that particular moment in time and to broaden the temporal outlook. The most logical and plausible hypothesis is that the main factor determining the evolution of the rental sector during the whole period the law was in force was the social and economic impact of COVID-19. In light of this, neither (i) the recovery of the rental market (in terms of the number of contracts) that took place from the second half of 2020 onwards and during much of 2021 nor (ii) the moderation at the beginning of 2021 that continued into the first semester of 2022 can be attributed to Law 11/2020. In fact, the beginning of each of these different phases bears no relation to either the entrance in force of the law or the declaration of its unconstitutionality (Figures 5 and 6) and so logically no causal relationship can be drawn between both elements (the aim of this study in terms of rental prices and volumes – a different subject altogether – was to determine whether the application of this legislation contributed to accentuating or mitigating market dynamics). Thus, to be able to undertake a comparative longitudinal view of the situation, we structured this study over five semesters that embraced the year before the pandemic, the first semester of the pandemic before the legislation came into force, and the three semesters in which the law was in force.

⁷ See: O-HB (2022). *Estructura i concentració de la propietat d'habitatges a Barcelona. Conjunt del parc i segment de lloguer 2021*. Observatori Metropolità de l'Habitatge de Barcelona. Available at: https://www.ohb.cat/wp-content/uploads/2022/11/O22010_Lab_Propietat_2021.pdf [accessed: 18 January 2023].



Annexes

Annex 1. List of municipalities included in the experimental, control and exogenous groups

Experimental group

| | |
|-----------------------------|--------------------------|
| Badalona | Ripollet |
| Castellar del Vallès | Rubí |
| Cornellà de Llobregat | Sabadell |
| Esplugues de Llobregat | Sant Adrià de Besòs |
| Gavà | Sant Andreu de la Barca |
| Granollers | Sant Boi de Llobregat |
| Hospitalet de Llobregat, l' | Sant Feliu de Llobregat |
| Igualada | Sant Joan Despí |
| Manlleu | Vilassar de Mar |
| Manresa | Sant Pere de Ribes |
| Mataró | Santa Coloma de Gramenet |
| Molins de Rei | Barberà del Vallès |
| Mollet del Vallès | Santa Perpètua de Mogoda |
| Montcada i Reixac | Sant Vicenç dels Horts |
| Montgat | Cerdanyola del Vallès |
| Olesa de Montserrat | Terrassa |
| Pallejà | Vic |
| Pineda de Mar | Viladecans |
| Prat de Llobregat, el | Vilafranca del Penedès |
| Premià de Mar | Vilanova i la Geltrú |

Control group

| | |
|----------------------------|---------------------------|
| Abrera | Montmeló |
| Arenys de Mar | Montornès del Vallès |
| Arenys de Munt | Palau-solità i Plegamans |
| Argentona | Papiol, el |
| Caldes d'Estrac | Hostalets de Pierola, els |
| Caldes de Montbui | Polinyà |
| Calella | Roca del Vallès, la |
| Canovelles | Sant Andreu de Llavaneres |
| Castellbisbal | Sant Antoni de Vilamajor |
| Corbera de Llobregat | Sant Cebrià de Vallalta |
| Cubelles | Sant Climent de Llobregat |
| Esparreguera | Sant Pol de Mar |
| Franqueses del Vallès, les | Sant Quirze del Vallès |
| Llagosta, la | Santa Coloma de Cervelló |
| Llinars del Vallès | Torrelles de Llobregat |
| Malgrat de Mar | Ullastrell |

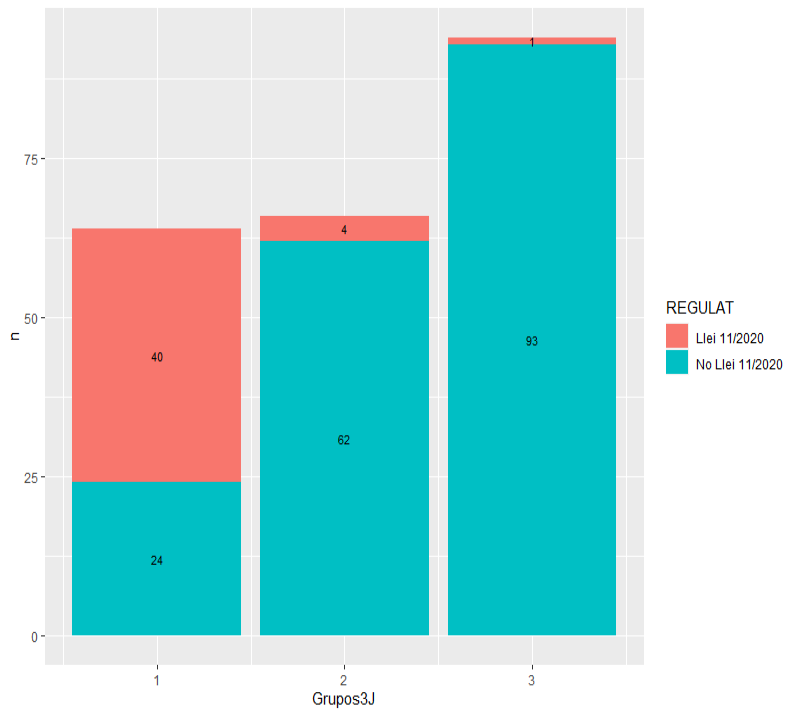
Exogenous group

| | |
|----------------------------|----------------------------|
| Aguilar de Segarra | Fogars de Montclús |
| Alella | Fogars de la Selva |
| Alpens | Folgueroles |
| Ametlla del Vallès, l' | Fonollosa |
| Argençola | Font-rubí |
| Artés | Gallifa |
| Avià | Gaià |
| Avinyó | Gelida |
| Avinyonet del Penedès | Gironella |
| Aiguafreda | Gisclareny |
| Bagà | Granada, la |
| Balenyà | Granera |
| Balsareny | Gualba |
| Bellprat | Sant Salvador de Guardiola |
| Berga | Guardiola de Berguedà |
| Bigues i Riells del Fai | Gurb |
| Borredà | Jorba |
| Bruc, el | Llacuna, la |
| Brull, el | Liçà d'Amunt |
| Cabanyes, les | Liçà de Vall |
| Cabrera d'Anoia | Lluçà |
| Cabrera de Mar | Malla |
| Cabrils | Martorelles |
| Calaf | Masies de Roda, les |
| Calders | Masies de Voltregà, les |
| Calonge de Segarra | Masquefa |
| Calldetenes | Matadepera |
| Callús | Mediona |
| Campins | Monistrol de Montserrat |
| Cànoves i Samalús | Monistrol de Calders |
| Canyelles | Muntanyola |
| Capellades | Montclar |
| Capolat | Montesquiu |
| Cardona | Montmajor |
| Carme | Montmaneu |
| Casserres | Figaró-Montmany |
| Castellar del Riu | Montseny |
| Castellar de n'Hug | Moià |
| Castellbell i el Vilar | Mura |
| Castellcir | Navarcles |
| Castell de l'Areny | Navàs |
| Castellet i la Gornal | Nou de Berguedà, la |
| Castellfollit del Boix | Òdena |
| Castellfollit de Riubregós | Olvan |
| Castellgalí | Olèrdola |
| Castellnou de Bages | Olesa de Bonesvalls |
| Castellolí | Olivella |
| Castellterçol | Olost |
| Castellví de la Marca | Orís |
| Castellví de Rosanes | Orià |
| Centelles | Orpí |
| Cervelló | Òrrius |
| Collbató | Pacs del Penedès |
| Collsuspina | Palafolls |
| Copons | Perafita |
| Dosrius | Piera |
| Espunyola, l' | Pla del Penedès, el |
| Estany, l' | Pobla de Claramunt, la |
| Fígols | Pobla de Lillet, la |
| Pontons | Santa Eulàlia de Ronçana |

| | |
|---------------------------------|------------------------------|
| Prats de Rei, els | Santa Fe del Penedès |
| Prats de Lluçanès | Santa Margarida de Montbui |
| Puigdàlber | Santa Margarida i els Monjos |
| Puig-reig | Santa Maria de Besora |
| Pujalt | Esquirol, l' |
| Quar, la | Santa Maria de Merlès |
| Rajadell | Santa Maria de Martorelles |
| Rellinars | Santa Maria de Miralles |
| Pont de Vilomara i Rocafort, el | Santa Maria d'Oló |
| Roda de Ter | Santa Maria de Palautordera |
| Rubió | Santa Susanna |
| Sagàs | Sant Vicenç de Castellet |
| Sant Pere Sallavinera | Sant Vicenç de Montalt |
| Saldes | Sant Vicenç de Torelló |
| Sallent | Sentmenat |
| Santpedor | Cercs |
| Sant Iscle de Vallalta | Seva |
| Sant Agustí de Lluçanès | Sobremunt |
| Sant Bartomeu del Grau | Sora |
| Sant Boi de Lluçanès | Subirats |
| Sant Celoni | Súria |
| Sant Cugat Sesgarrigues | Tavèrnoles |
| Sant Esteve de Palautordera | Tagamanent |
| Sant Esteve Sesrovires | Talamanca |
| Sant Fost de Campsentelles | Taradell |
| Sant Feliu de Codines | Tavertet |
| Sant Feliu Sasserra | Teià |
| Vilassar de Dalt | Tiana |
| Sant Hipòlit de Voltregà | Tona |
| Sant Jaume de Frontanyà | Tordera |
| Sant Joan de Vilatorrada | Torelló |
| Sant Julià de Vilatorrada | Torre de Claramunt, la |
| Sant Llorenç d'Hortons | Torrelavit |
| Sant Llorenç Savall | Torrelles de Foix |
| Sant Martí de Centelles | Vacarisses |
| Sant Martí d'Albars | Vallbona d'Anoia |
| Sant Martí de Tous | Vallcebre |
| Sant Martí Sarroca | Vallgorguina |
| Sant Martí Sesgueioles | Vallirana |
| Sant Mateu de Bages | Vallromanes |
| Premià de Dalt | Veciana |
| Sant Pere de Riudebitlles | Vilada |
| Sant Pere de Torelló | Viladecavalls |
| Sant Pere de Vilamajor | Vilanova del Camí |
| Sant Quintí de Mediona | Vilanova de Sau |
| Sant Quirze de Besora | Vilobí del Penedès |
| Sant Quirze Safaja | Vilalba Sasserra |
| Sant Sadurní d'Osormort | Viver i Serrateix |
| Marganell | Rupit i Pruit |
| Santa Cecília de Voltregà | Vilanova del Vallès |
| Santa Eugènia de Berga | Sant Julià de Cerdanyola |
| Santa Eulàlia de Riuprimer | Badia del Vallès |

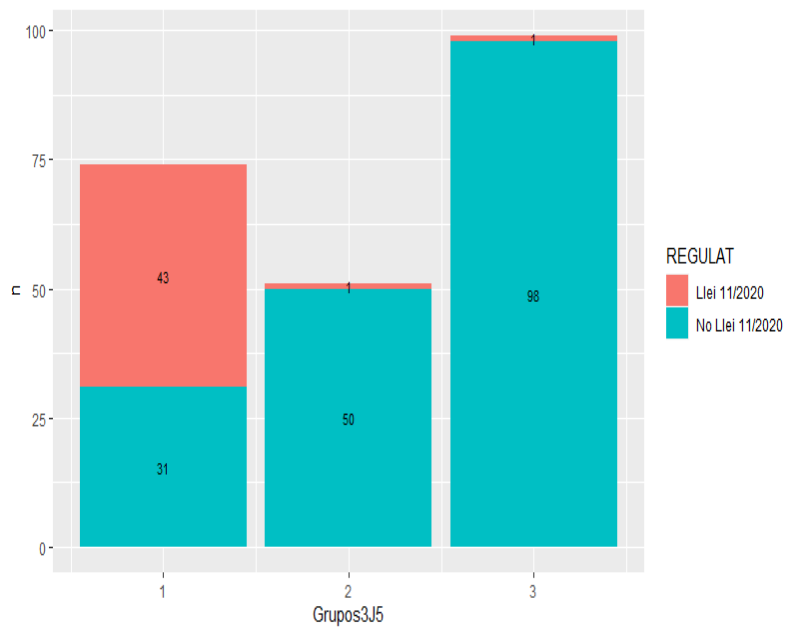
Annex 2. Groups of municipalities and their characteristics

Figure 7. Groups of municipalities according to various different classifications, scenario 1.



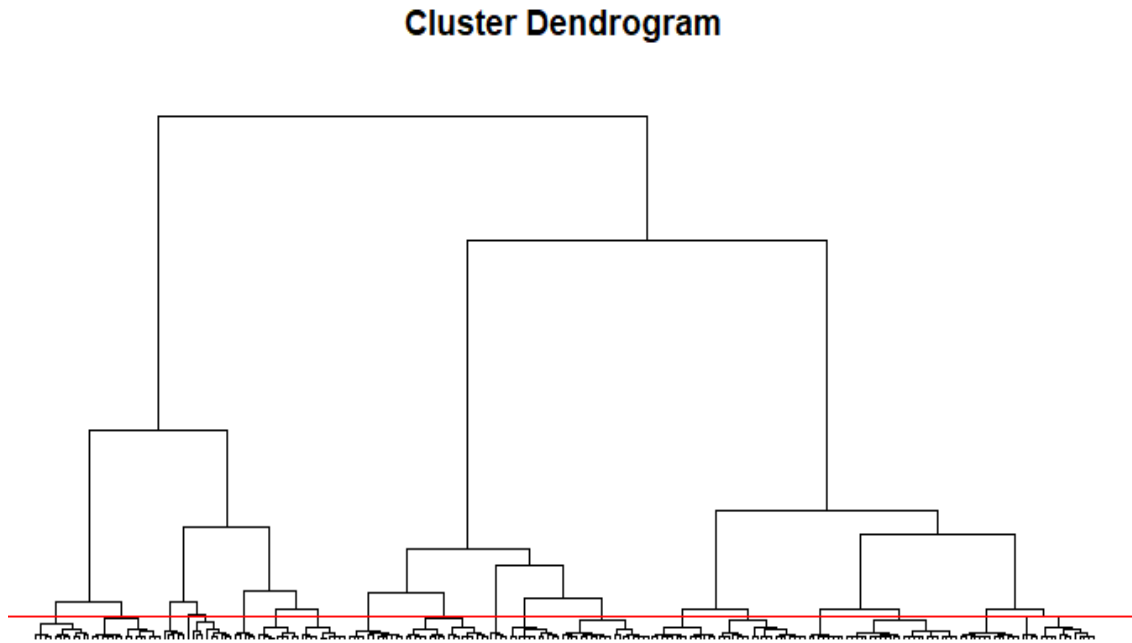
Source: compiled by the authors.

Figure 8. Groups of municipalities according to various different classifications, scenario 2.



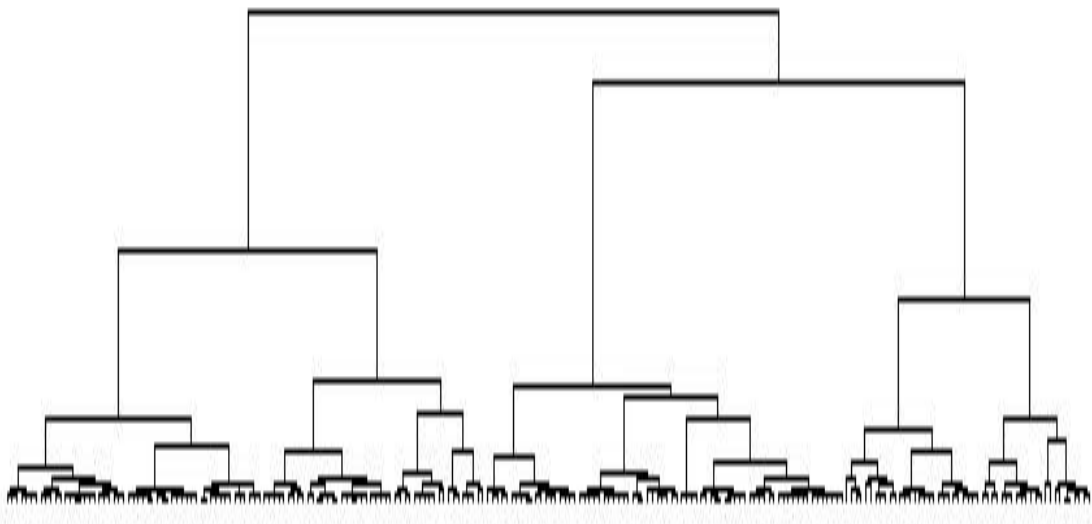
Source: compiled by the authors.

Figure 9. Dendrogram of the studied municipalities, scenario 1.



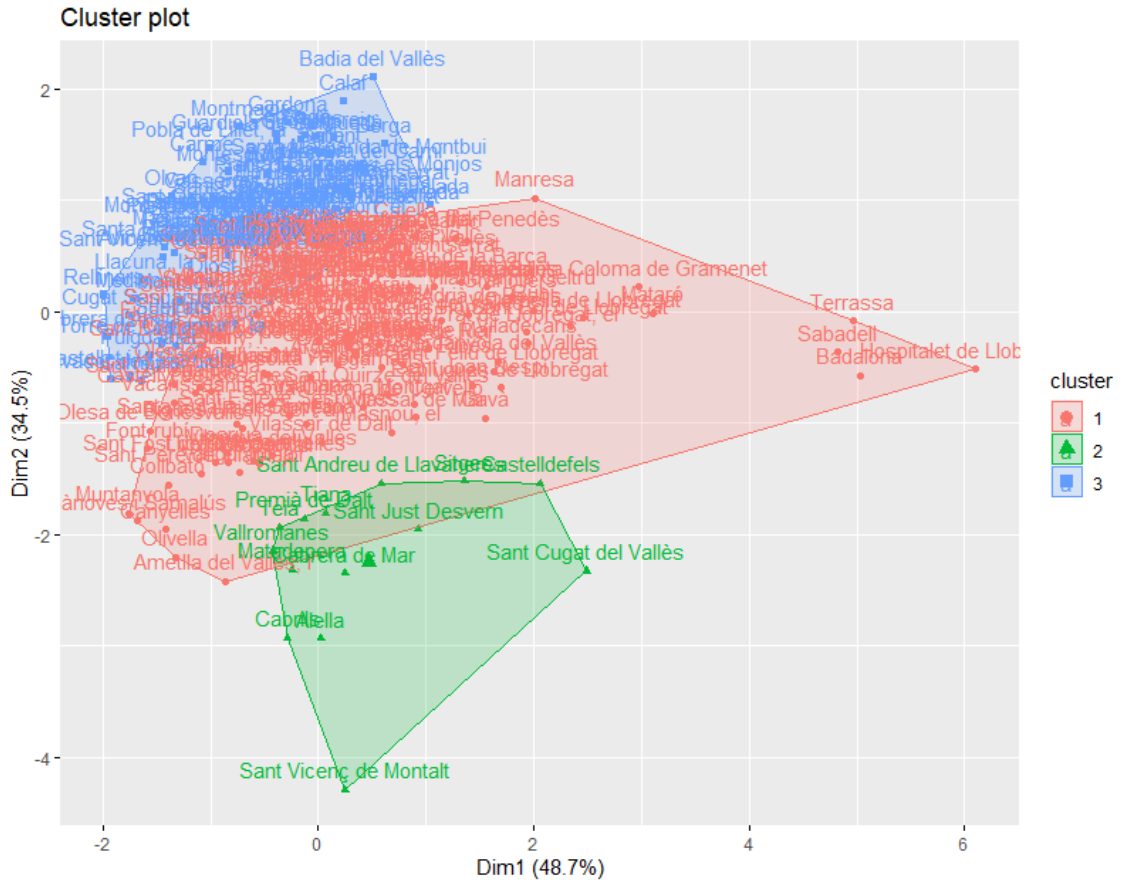
Source: compiled by the authors

Figure 10. Dendrogram of the studied municipalities, scenario 2.



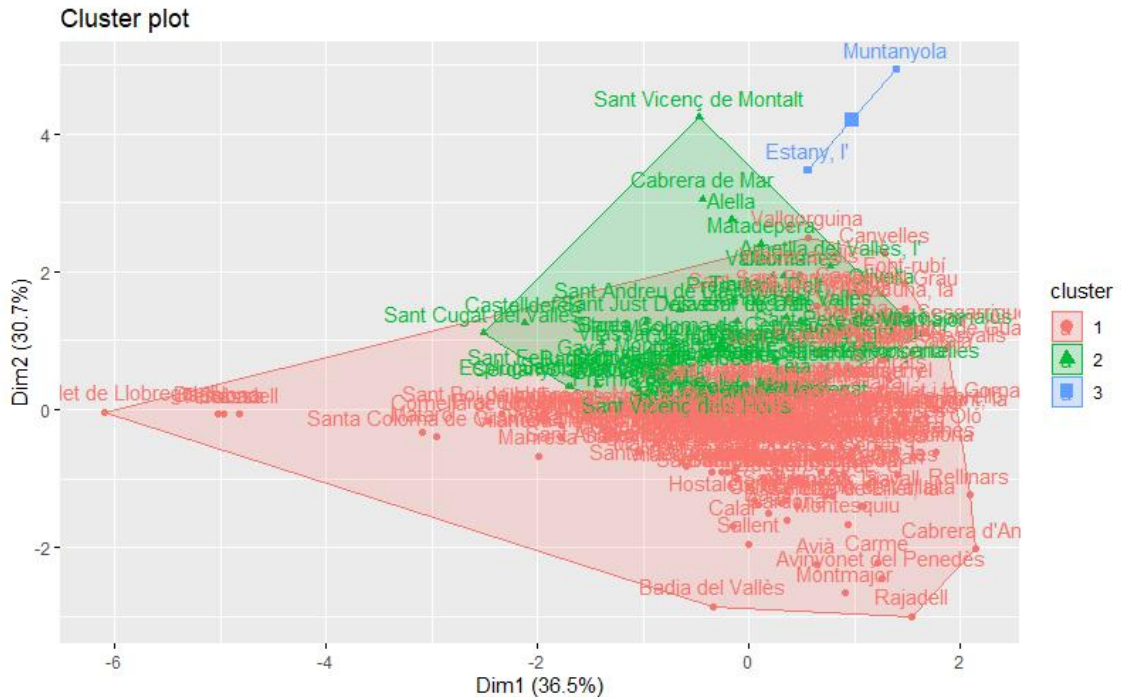
Source: compiled by the authors

Figure 12. Bidimensional reduction of the three studied groups, scenario 1.



Source: compiled by the authors

Figure 12. Bidimensional reduction of the three studied groups, scenario 2.



Source: compiled by the authors

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