How to cite this work: Parreño Castellano, J. M., Domínguez-Mujica, J., Moreno-Medina, C. (2020). Real estate dispossession, income and immigration in Las Palmas de Gran Canaria (Spain). Boletín de la Asociación de Geógrafos Españoles, (87). https://doi.org/10.21138/bage.3000

Real estate dispossession, income and immigration in Las Palmas de Gran Canaria (Spain)

Desposesión inmobiliaria, renta e inmigración en Las Palmas de Gran Canaria (España)

Juan Manuel Parreño Castellano
juan.parreno@ulpgc.es

Josefina Domínguez-Mujica
josefina.dominguezmujica@ulpgc.es

Claudio Moreno-Medina
claudio.moreno@ulpgc.es
Departamento de Geografía
University of Las Palmas de Gran Canaria (Spain)

Abstract
The legal proceedings of real estate dispossession are essential elements in understanding the impact of the economic crisis on Spanish cities. Those that took place between 2009 and 2017 in Las Palmas de Gran Canaria, their quantitative dimension and their intra-urban distribution are analysed in this study. This perspective allows an appreciation of their relationship with the unequal distribution of income and alien status, factors leading the investigations on the loss of property. In order to achieve this objective, the records of the Common Service of Notifications and Seizures have been used together with data of the Inland Revenue Ministry and Municipal Register, combining statistical and cartographical analysis with the purpose of finding associations.
and predictive factors. The study reveals that there is a great concentration of real estate deprivation in the central areas of the city and that the standards of distribution of dispossession are inversely related to the level of income of the urban districts and directly related to the foreign population. This tends to confirm that dispossession must be interpreted as the result of mechanisms of capitalist accumulation, which reinforce socio-urban inequalities.

**Keywords:** real estate dispossession; mortgage foreclosure; level of income; immigration; urban vulnerability.

**Resumen**
Las actuaciones judiciales de desposesión son elementos esenciales para entender el impacto de la crisis económica en las ciudades españolas. En este estudio se analizan las que tuvieron lugar entre 2009 y 2017 en Las Palmas de Gran Canaria, su dimensión cuantitativa y su distribución intraurbana. Esta perspectiva permite apreciar su relación con la desigual distribución de la renta y de la extranjería, factores que ganan un gran protagonismo en las investigaciones sobre pérdida de propiedad. Para alcanzar este objetivo se han utilizado los registros del Servicio Común de Notificaciones y Embargos y los datos del Ministerio de Hacienda y del Padrón de Población, combinando análisis estadístico y cartográfico, con el fin de establecer asociaciones y factores predictores. El estudio revela que se produce una fuerte concentración de la pérdida de la propiedad inmobiliaria en zonas centrales de la ciudad y que las pautas de distribución de la desposesión están relacionadas de forma inversa con el nivel de renta de los distritos urbanos y de forma directa con la población extranjera. Esto viene a confirmar que la desposesión debe ser interpretada como resultado de mecanismos de acumulación capitalista que refuerzan las desigualdades socio-urbanas.

**Palabras clave:** desposesión inmobiliaria; ejecución hipotecaria; nivel de renta, inmigración; vulnerabilidad urbana.

**1 Introduction**
Real estate dispossession is a global phenomenon (Brickell, Fernandez Arrigoitia & Vasudevan, 2017), although the frameworks and the causes are different according to the diverse territorial realities. In most developed countries the increase in dispossession is related to the last financial crisis, but, in reality its economic and political consequences are linked to failure of housing policies in North America and Europe (Fields & Hodkinson, 2018). Decades of liberalisation, deregulation and privatisation in urban and housing politics, together with the financialisation
processes have led to the dispossession of poorer urban social groups in European and American metropolises (Desmond, 2016; Wehrhahn, 2019).

In the case of Spain, the period preceding the real estate crisis (1995-2007) was characterised by great economic expansion based on the building sector, in a general context of growth sustained by the ongoing increase in indebtedness of households and companies (Burriel, 2008; Naredo, 2010). This post-Fordist economic model introduced certain dynamics to housing markets that a few decades later culminated in a crisis (Aalbers, 2015).

The spatial and economic consequences of the subsequent real estate crisis were felt with such force that their effects prolonged over time (Romero et al., 2012; Burriel, 2014; Lois et al., 2016; García Martín et al., 2020; Cañizares & Rodríguez-Domènech, 2020). Many companies and households had difficulties dealing with their debts and the situations of default, the requests for mortgage moratoria and debt refinancing increased, as well as the legal actions for enforcement of titles.

The reduction of household income, as a result of the crisis, was the detonating factor for the foreclosures that were triggered. Nevertheless, the reasons for this generalised process of dispossession go beyond and are related to a model of economic structure and legal regulation set up since the eighties (Aalbers, 2009 and 2019; Fernández & Aalbers, 2016, Méndez, 2019) and were even earlier rooted than this (López & Rodríguez, 2010, 2011). Although the housing crisis has been international in scope, headlined by housing market crashes across wealthy countries, with the loss of millions of homes to foreclosure, Spain was hit the hardest together with the United States (Beswick et al., 2016).

1.1 The legal framework of mortgage regulation in Spain

This model is based on three basic principles. First, the establishment of a system of financing in the inter-bank market based on mortgages. After the passing of Act 19/1992, of 7th July, on the Regime of Companies and Real Estate Investment Funds and Funds of Mortgage Securitisation, and Royal Decree 926/1998, of 14th May, on the Asset Securitisation Funds and the management companies for securitisation funds —revoked in 2015—, mortgages were allowed to be securitised and, therefore, sold, packaged or otherwise, on the secondary markets (Tapia Hermida, 2008). “Mortgages were authorised to create titles which could be sold on the market or could be used as a guarantee to obtain advances on the inter-bank market” (Zunzunegui, 2013, p. 6). This fact contributed to banking institutions relaxing the criteria for granting mortgage loans. It was necessary to capture the customers who were capable of taking out a
mortgage without the Bank of Spain making effective limiting regulations. The system was sustainable as long as mortgages were paid, was extended to more and more numerous social groups, and mechanisms for re-securitisation were used.

Secondly, the creation of a mortgage system aimed at protecting credit institutions. This is clear from the approval of Act 2/1981, of 25th March, in regulation of the mortgage market and its main reform, Act 41/2007, of 7th December. The Civil Code itself has confirmed the principle of universal liability of the debtor, which means that the creditor may force the debtor to pay his debt with his current and future goods. In this same regard, we must mention the lack of wide regulation on giving the property in payment, that is to say, the handover of the real estate as a mechanism for extinguishing all liability of the debtor. In the case of mortgage debts, the only limitation in law was that the amount of the liability of the debtor might reach, at most, the value of the mortgaged property. Until the passing of Royal Decree Law 6/2012, of 9th March, on urgent measures for the protection of mortgage debtors without resources, and above all Act 1/2013, of 14th May, on measures to strengthen the protection for mortgage debtors, the restructuring of debt and social rents, no advance was made towards a more balanced system. Since then, the suspension of evictions in the case of vulnerable groups has been the main instrument in favour of the debtor, although with a more palliative than structural philosophy (Albarrán Gómez, 2015).

And thirdly, the establishment of a legal procedure of attachment of title which looks after the rights of the creditor above all. Act 1/2000, of 7th January, on Civil Lawsuits—the LEC—, before the reform approved by Act 1/2013, of 14th May, made it very difficult for the debtor to defend himself or to halt the enforcement proceeding (Nicasio Jaramillo, 2017).

These three basic principles are the legal basis for the establishment of a regime of capitalist accumulation by dispossession (Harvey, 2003), in which even the losses of the creditors may be socialized (Alexandri & Janoschka, 2018). Therefore, if after 2008 the situations of non-payment increased in an unusual manner, this was due to the existence of an economic model based on the securitisation of mortgages since at least 1992. Similarly, the increase of foreclosures is a consequence of the maintenance of a legal regulatory system which facilitated judicial action in cases of default. This panorama was no different from those which characterised many other countries, such as Great Britain, Ireland and the United States, where regulatory instruments were developed to trigger the financial-real estate bubble. In the United States, the real estate market absorbed much of the capital surplus devoting it to new building, while the rapid inflation in the
price of housing took place, supported by mortgage financing with historically low interest rates and without adequate controls on risk assessment (Harvey, 2013).

1.2 Real Estate dispossession in Spain and the case of Las Palmas de Gran Canaria

The study of the processes of real estate dispossession in Spain has a fruitful history. However, research papers on the social consequences of dispossession are not very numerous, and neither are those which analyse the raison-d’être of these processes in the territorial sphere. This is a result of the fact that the official information available only makes it possible to partially quantify the phenomenon because the data of an economic and socio-demographic nature on the people affected are not offered. Consequently, the level of territorial disaggregation of information is limited, as it is only given about the whole of Spain or the provinces and judicial districts. The only way of getting more deeply into the spatial dimension is through a detailed study, using the original data which contain the records regarding the location of the legal actions. For its part, the social perspective requires qualitative analytical techniques or processes of inference which use the geographical information as an indicator of economic and socio-demographic levels. The latter is the procedure we use in this paper to analyse the actions of dispossession which were carried out in the borough of Las Palmas de Gran Canaria between 2009 and 2017, a case study which we consider to be of great interest for a number of reasons.

The first reason is based on the very urban hierarchy of the Canary Islands and of Spain. On the one hand, Las Palmas de Gran Canaria is the most heavily populated city in the archipelago, taking on functions of centrality, in a metropolitan area which covers a large part of the island space. On the other hand, it is the ninth largest city in Spain —379,925 inhabitants in 2019—, co-capital of one of the seventeen Spanish regions, or Autonomous Communities. The second is based on the peculiarities of its location in the European tourist ultra-outlying space and its specialisation in the international real estate market. The third reason is the powerful territorial expansion experienced by the city and the high number of real estate transactions which occurred at the stage prior to the economic crisis, which turn it into a good example of the “urbanising tsunami” of the Spanish coastal urban enclaves (Fernández Durán, 2006; Gaja i Díaz, 2008). And, finally, we cannot forget the great economic growth linked to international immigration to the city in the first decade of this century and the importance and more prolonged economic crisis afterwards. The levels of unemployment and poverty during the economic crisis provoked high figures of real estate dispossession in Las Palmas de Gran Canaria.
1.3 Objectives and structure of the research

This study aims to analyse the quantitative and territorial impact of real estate dispossession in Las Palmas de Gran Canaria based on the detailed analysis of the judicial action files registered during the period between 2009 and 2017. In this sense, we must understand that dispossession is not an exact synonym for eviction. Eviction may occur for other reasons that do not always entail loss of property, such as non-payment of rent. Dispossession, on the other hand, may occur at the same time that a person is expelled from their place of residence, but this is not always the case, as it may affect properties that are not the habitual residence.

More precisely, we set ourselves the following objectives: In the first place, to quantitatively evaluate the judicial actions for dispossession which have been carried out in the city from the point of view of the type of the dispossessed, of the diligence used and of its evolution in time. In the second place, to recognise the territorial incidence of legal dispossessions in the intra-urban geography. And, finally, to advance in the social geography of dispossession from a territorial analysis. In this sense, real estate dispossession affecting individuals and companies, is restricted to the former, although in comparative terms we analyse, on occasion, its effects on companies.

We intend to analyze how dispossession is related to the territorial distribution of income and of the foreign population, in order to deepen the knowledge of the social groups affected by judicial action. With this purpose, the article is structured into eight chapters, apart from the references. After a presentation of the state of the matter in section 2, we analyse the information sources and the methodology used in the work, in the third section. In the two following sections, the main results are presented in relation to the quantitative incidence of foreclosures and their territorial distribution in the urban space. In sections six and seven, the relationship between actions of dispossession on individuals with the levels of income and the foreign population is studied. The article concludes with a section for discussion and conclusions.

2 Studies on the social dimension of real estate dispossession in Spain

The academic interest in getting to know who was being affected by the non-payment of mortgages and the associated real estate loss appeared from the very moment at which it became a grave social problem. The first analyses began to be carried out from the information given by those affected or the platforms and civil associations, which were created to defend them. Thus, the studies based on in-depth ethnography (Palomera, 2014; García-Lamarca, 2016) and on
interviews with the members of the Platforms for those Affected by Mortgages (PAH) in Catalonia made clear the special repercussions of disposessions on families with low incomes (Colau & Alemany, 2012; Valiño, 2015). In some of these studies, the relationship between residence, poverty and health was analysed, with a special look at childhood (Delgado, 2018). In this same regard, unemployment as a factor in dispossession and the psycho-social effects induced were also studied by Arredondo Quijada and Palma García (2013) in the city of Malaga. Likewise, Vásquez Vera et al. (2016) dealt with the repercussions on the health of the members of the PAH of Catalonia affected by eviction processes.

Some of the work emphasised the polyhedral nature of evictions in Spain, which enriched the social analysis. A range of profiles has been recognised among those affected, not exclusively linked to the loss of work, but also to other biographical factors such as family breakdowns or illnesses (Sabater & Giró, 2015). Other studies have placed special emphasis on dispossession among the foreign non-European Community population. In this way, Suárez (2017) has analysed the relationship between job insecurity and eviction on a transnational scale, concentrating on the Ecuadorian population resident in Barcelona. Raya (2017), using multi-variant analysis, concluded that the conditions in which loans were offered and the lack of capacity for payment were the two essential factors which affected the foreign population, mainly. In a complementary fashion, Díaz-Serrano and Raya (2014) have dealt with the relationship between dispossession and immigration from the point of view of discrimination in the mortgage conditions suffered by some of the immigrant population.

From the first moment, the social analysis of disposessions in geography came up against the limitation of the lack of socio-spatial information and the difficulty of characterising the territorial incidence in detail. The first geographical studies only approached the socio-spatial analysis on a provincial scale or of judicial district, as this was the aggregated information that was available. Nevertheless, the relationship between dispossession and social vulnerability was evident at that scale to the extent that the map of the foreclosures seemed to be the result of the combination of the vulnerability of certain social groups and territories (Méndez et al., 2014; Méndez & Plaza, 2016; Méndez, 2017).

In an intra-urban perspective, Obeso Muñiz (2014) theoretically related unemployment, poverty and social exclusion with evictions by foreclosure and confirmed that the evictions were concentrated in the districts of Madrid with the lowest income. The detailed geo-referencing of foreclosures and non-payment of rents allowed Vives-Miró et al. (2015, 2017, 2018) to conclude
that the legal actions were concentrated in areas with low social status in Palma and Menorca. Parreño-Castellano et al. (2018a, 2018b) carried out an analysis of the territorial distribution of mortgage enforcements and evictions for non-payment of rents in the city of Las Palmas de Gran Canaria, also on the basis of geo-location of judicial proceedings, as well as a gender analysis (Domínguez-Mujica et al., 2020). García-Hernández et al. (2018) and García-Hernández and Ginés de la Nuez (2020) did so for Santa Cruz de Tenerife, emphasising the greater incidence of the judicial actions in the second urban periphery of the city. Gutiérrez and Domènech (2018, 2020) established the factors which placed conditions on the evictions of housing by banking institutions in a number of Catalan cities using techniques of spatial analysis with the register of empty housing held by the Housing Agency of Catalonia (Agencia de Vivienda de Cataluña).

The urban dimension has also been dealt with using non-official sources such as the portals for sale of used housing belonging to financial institutions. To be exact, using the geo-location of housing for sale by banks, Gutiérrez and Arauzo-Carod (2018) and Gutiérrez and Delclòs (2016, 2017), for the cases of Tarrasa and Tarragona, as well as Gutiérrez and Domènech (2017a), for Lleida, concluded that evictions have tended to be concentrated in the most disadvantaged districts and the lower-quality housing, a fact which has reinforced the urban inequalities in these cities. Gutiérrez and Domènech (2017b) for Alicante, Murcia and Zaragoza have reached the same conclusions, using as territorial information the housing sold by the SAREB (Asset Management Company from Bank Restructuring). For their part, Jiménez Barrado and Martín Sánchez (2016), using the stock of housing for sale by the estate agencies of the five largest Spanish banking institutions, concluded that these properties were concentrated in the districts with the lowest prices in the southern quarter of Madrid. These areas also recorded the highest rates of unemployment, youth and demographic growth and the lowest values of family income.

Over the last few years, in the context of the internationalisation of the housing market in Spain, with the strengthening of formulae such as the REITS and the impulse of new forms of tourism of a collaborative nature, the loss of housing has been analysed from the point of view of gentrification. In this regard, Janoschka (2018) has stated that expulsion from housing is due to gentrification caused by tourism and the strategies of the financial and investment institutions in the post-crisis period, although all of this is reflected to a greater effect in evictions due to non-payment of rents. Vives-Miró and Rullan (2017) have studied the relationship between tourist development and evictions for non-payment of rents and foreclosures in the historical district of Palma. Cócola Gant (2016) and Yrigoy (2017), for their part, characterised the social displacement caused by tourist gentrification through the holiday housing in Barcelona and
Menorca. Domínguez-Mujica et al. (2020) did so in the case of the tourist district in Las Palmas de Gran Canaria, where the variables of international mobility play a significant role. From another point of view, the privatisation of social housing as a result of the actions of investment funds has also been analysed as an expression of new forms of expulsion (Janoschka et al., 2020).

In general terms, these geographic studies, carried out in the last five years, tend to analyze evictions from a critical viewpoint, as an instrument of enrichment of certain social groups and companies, while highlighting the greater incidence among the most vulnerable population.

3 Source, limitations and methodology of the analysis

In the case we are studying, the analysis of the processes of real estate dispossession has been carried out from the judicial register of ejectments and acts of taking possession supported by the Common Service of Notifications and Seizures of the Judicial District of Las Palmas de Gran Canaria. The Spanish judicial districts of greatest demographic size have the so-called Common Services, a procedural unit which was configured in 2003, which centralises the actions of the different courts and carries out the acts of notification and enforcement. With this purpose, the Common Services use a system of digital procedural management that belongs to the administration of Justice, called Atlante in the Canary Islands (Parreño-Castellano et al., 2019).

The commencement of the enforcement proceeding has not been taken as a reference, as is done in the official statistics at the provincial level, which are published by the National Statistical Institute —INE according to its Spanish name— but the enforcements carried out. It should be remembered that a mortgage enforcement has different procedural moments: the bringing of the action for enforcement in the court of first instance where the property is located; notification and demand for payment; inscription at the land registry; auction or adjudication of the property; and eviction by ejectment or acts of taking possession. The Civil Proceedings Act sets down mechanisms so that a debtor may interrupt the proceedings for enforcement and pay the debt, the corresponding interest and the costs, with the result that a significant percentage of the proceedings initiated does not culminate in eviction. This is what is called rehabilitation of mortgage loans in the Civil Proceedings Act, developed by Act 41/2007 on reform of the Mortgage Market. This implies that the number of judicial actions concluded is less than the number of proceedings initiated. Therefore, since we are concentrating on the final enforcement in this paper, the real dimension of the real estate dispossession is offered.
The fact that the study refers to the final act of the judicial procedure has a drawback that should not be forgotten. After the passing of Act 1/2013, of 14th May, on measures to reinforce the protection of mortgage debtors, restructuring of debt and social renting, some foreclosure proceedings affecting housing of vulnerable persons were suspended or delayed. Notwithstanding, it seemed to us more suitable to use exclusively the records of foreclosures concluded, as this more closely matches our interest. Thus, all the records included in the Atlante II procedural management system were consulted, in a proper anonymous manner, with the following being a number of fields of special importance for the objectives of the study: the person involved, type of proceedings, court, postal address, date of entry, date of action, and state of action. The data refer both to houses and other real estate properties and those affected may be individuals or legal entities.

With this information, a database was created which was cleaned up with the aim of eliminating repetition. Each legal case was converted into a record in the database. Subsequently, according to the postcode, a geographical database was created with QGIS, in which most of the records were geo-located. For this purpose, the street map of Las Palmas de Gran Canaria was used through an automated procedure, exhaustively debugging the spatial information. To the geographical information other variables were added which were of interest to the study, such as the postcode, the district, the census tract and the neighbourhood.

The research required linking information from other sources. For this reason, new variables relating to the resident population according to nationality and country of origin at scale of census tract were added, taking the information from the Padrón Continuo de Población (Continuous Register Statistics) of the INE (National Statistics Institute). This was done with data of 2011, 2014 and 2018. The changes in the number and delimitation of the census tracts that have occurred over the last few years made it necessary to consider different maps. Likewise, using the postal district as a geographical entity, the information on average disposable income was added as supplied by the Tax Agency from Income Tax declarations. The values for 2013 were taken, as this was the central year of the period analysed (2009–2017). Nevertheless, the positive relationship between the data of the different years for which we have this information is very high, with the result that the choice of any other one would make it possible to obtain similar conclusions.

With this information, it was possible to carry out the territorial and statistical analysis of real estate dispossession in Las Palmas de Gran Canaria. The first was carried out by means of the mapping
of actions, for which the neighbourhood was used together with the census tract as territorial units. This mapping was approached from the analysis of the frequency of the distribution of the foreclosures, which made clear that vis-à-vis general tendencies, statistically anomalous spatial realities defined from the delimitation of ranges of slight and extreme outliers were also detected.

The main statistical analysis was oriented towards the measurement of associations, the search for predictors and well-adjusted regression models. The peculiarities that can be appreciated in the spatial distribution of dispossession actions in Las Palmas de Gran Canaria led us to consider possible predictive variables. Consequently, measurement indicators such as available average income, number of foreign residents and non-European community residents were selected, carrying out bivariate analyses of correlation and regression with them. The bivariate analysis allowed the calculation of correlations and an ad hoc regression model, at postal district level, for the average disposable income, and, at census section level, for the foreign population. Parametric and non-parametric statistical methods were used depending on the level of normality presented by the different variables considered according to the scale. However, the analysis was completed with the development of a multiple regression model with the postal districts by which the joint incidence of income and foreign status in the distribution of title executions in Las Palmas de Gran Canaria was quantified.

The study of intra-urban dispossession has the added difficulty of the lack of data on those variables which might behave as explanatory factors. For this reason, on occasion, it was necessary to have recourse to municipal and provincial data so as to objectivise a number of trends and, for this reason, the series of Mortgages Set Up in the province for the period 2003-2019 of the INE was used.

4 Legal proceedings of loss of property in Las Palmas de Gran Canaria

Starting from a much larger number of actions initiated, 2,421 cases of deprivation of property were enforced in Las Palmas de Gran Canaria between 2009 and 2017. From the point of view of the proceedings used, dispossession should not be interpreted only as the result of the impossibility of paying a mortgage loan but also as a situation of bankruptcy or insolvency of the person affected. That is to say, not only is the property lost because it is not possible to pay the mortgage, but because the owners —individuals or companies— may be obliged to answer to creditors with their property, although the property may not be subject to a mortgage. This is the case of limited societies (Ltd.), in which the partners may have to answer for the debts with their
properties in some specific legal situation, or individuals who have a business or professional activity, on the basis of Act 22/2003, of 9th July, on Insolvency.

Nor should we forget that, sometimes, dispossession is the consequence of the processes of family breakdown, conflicts in acceptance of inheritances, crimes and debts with the Tax Agency and the Social Security, etc. But, in any case, the loss of property arises through a procedure of ejectment or an act of taking possession. In Las Palmas de Gran Canaria, the former predominated (62.6%) in comparison with the latter, a further expression of the personal and social conflict involved in these actions.

On the other hand, it is interesting to study how the proceedings are classified from the point of view of type of person enforced against. Thus, we know that the person involved is a private person—an individual— in 78.1% of the cases vis-à-vis the remaining 21.9% in which it is a company. Nevertheless, we should not forget that the division between properties acquired by companies or by individuals is more diffuse than it could appear, since the real estate properties on occasions are acquired by individuals using asset-holding companies as a fiscal strategy, especially in the case of inheritances and large properties. Anyway, the data of foreclosures in Las Palmas de Gran Canaria coincide with the fact that, in Spain, 86.3% of houses registered between 2010 and 2017 were bought by individuals, according to the College of Registrars.

In relation to the time sequence, in figure 1 the legal actions against private citizens and companies are represented according to their date of execution. We must be conscious that the legal proceedings take place over long periods of enforcement. The protocols set down prolong the proceedings up to two years after their commencement, on average. Furthermore, it is common to start a legal procedure after a prior period, during which payments or debts have been requested extra-judicially, mortgage moratoria have been requested or a renewal of the mortgage has been attempted.

Bearing this in mind, the data allow us to appreciate the great increase in the enforcements finalised between 2009 and 2011 regarding the previous situation. During this period, the total went from 235 positive actions to 409, this annual figure being the greatest in the period analysed. From 2011 to 2013, the number of actions showed a clear decrease, especially among private citizens. After that year, the figure began to descend in a more moderate manner, in a context of a certain economic recovery, which began to be clearer in 2015. In 2017, the year with the lowest number of positive enforcements, only 155 actions were recorded.
It is wise to infer, in accordance with the sequence presented, that the high figures in the first few years are the expression of the incapacity to pay of many households and companies due to the economic crisis beginning in 2008. And this occurs despite the fact that, with the passing of Royal Decree 1975/2008, of 28th November, on the urgent measures to be taken in matters economic, fiscal, employment and access to housing, the basic conditions were set down for access to the ICO-Mortgage Moratorium Line. This regulation made it possible, between 1st March 2009 and 28th February 2011, to temporarily delay the payment of 50% of the amount of mortgage instalments or up to 500 Euros a month, in the case of habitual dwelling of vulnerable social groups.

Subsequently, from 2011 onwards, despite the fact that the economic crisis had become more acute, with the so-called debt crisis, the number of actions was reduced. This descent is related, on the one hand, to the gradual reduction in private indebtedness beginning in 2008, due to the greater difficulty in gaining access to mortgage loans as a result of the tightening of the conditions offered by credit institutions. And, on the other hand, to regulatory changes. The first change was introduced by Royal Decree Law 8/2011, of 1st July, on support measures for mortgage debtors, control of public spending and cancellation of debts to companies and the self-employed, taken out by local authorities in support of business activity and boosting rehabilitation and administrative simplification. This regulation made a certain number of seizures...
impracticable. The second was the passing of the suspension of evictions in the case of vulnerable groups, a suspension which has been maintained up to the present with different extensions and which explains the reduction of foreclosures even better.

Finally, unlike what happened in other spatial areas, such as Madrid and Barcelona, where the local administrations (González Pérez et al., 2016; Piñeira et al., 2019) or the Anti-Eviction Offices and the Platforms for those Affected by Mortgages put the brakes on legal procedures for eviction or rehousing, in Las Palmas de Gran Canaria such initiatives were rare. That is to say that the changes in the sequence that we have been able to appreciate in Figure 1 obey factors of economic or regulatory order, rather than social pressure to prevent real estate dispossession.

5 Social reading of the territorial distribution of dispossessions

The territorial dimension of disposessions was measured by using the postal address of the property recorded in the judicial proceedings, which allowed us to appreciate the generalisation of the phenomenon in Las Palmas de Gran Canaria and the unequal degree of its spatial effects.

As regards the neighbourhood, in 99 of the 123 neighbourhoods in the city, dispossession cases have been found. We appreciate, nevertheless, a strong concentration in the four neighbourhoods located in the vicinity of the port of Las Palmas de Gran Canaria and Las Canteras beach (Santa Catalina-Canteras, Guanarteme, La Isleta and Alcaravaneras), with 33% of the total of all cases. These neighbourhoods, developed as a result of the creation of the Puerto de La Luz in the late 19th century, are the focal point for services and logistical activities related to port activity. In addition, since the urban beaches of Las Canteras and Alcaravaneras are located in this area, the tourist sector and much of the commercial and leisure activities of the city is also concentrated in this zone (see Figure 2).

13.7% of the cases were located in what we might consider to be the remainder of the urban centre, which made up of the neighbourhoods comprised geographically between Ciudad Jardín and Vegueta. This is an area which includes the historical centre of the city –Vegueta and Triana— and the developments which took place from the mid-19th century, where commercial and service activities and much of the public administration are located.

Therefore, the first relevant aspect in the territorial analysis of disposessions in Las Palmas de Gran Canaria is that almost half of the actions (46.7%) are located in the central neighbourhoods of the city. The remainder are spread around the different suburbs, built since the end of the 1940s, the time at which the city grew out from the coastal plain where it had started, and began
to spread along the adjacent high sedimentary platform -Ciudad Alta- and through the agricultural areas and networks of ravines around the city.

On the outskirts, the legal actions were especially concentrated, on the one hand, in the main neighbourhoods built in the Fifties, Sixties and Seventies in Ciudad Alta and Barranco de Mata – Schamann, Escaleritas, La Feria, Miller—, coinciding, in general terms, with areas of massive production of subsidised housing. On the other hand, in the main neighbourhoods which have accepted the growth of the city over the last twenty years —Tamaraceite, San Lázaro and Las Torres— the areas of the most recent real estate boom, where we find not only self-built houses and subsidised housing, but also privately financed properties for the middle class.

In general terms, the territorial distribution of the actions against individuals and companies by neighbourhood shows some differences, as it indicates that the value of the non-parametric Spearman correlation is of 0.54 —statistically significant at 0.01. For this reason, in order to have a socio-territorial reading it is necessary to go deeper exclusively in the territorial distribution of 1,879 cases enforced against private citizens. In this case, the spatial analysis will be carried out at the scale of the census tract using absolute figures. The homogenous distribution of the population by spatial unit determines that the territorial analysis does not register relevant differences if the number of foreclosures per person is considered. The resulting map is shown in Figure 3, grouping the dispossessions in four intervals, defined from the peculiar distribution of the frequency of the variable. Given that this has a marked positive asymmetry —3.01— and that it includes up to eleven mild outliers and four extreme values, the classification has been carried out from the median value and the range of mild outliers —from 15 to 23— and extreme values —over 23.

From a reading of the map, we can reach some interesting socio-urban conclusions. First, the incidence in the central and port areas of the city is somewhat lower —42% of the total number of cases—, in comparison with what we described above for all the legal actions. The dispossessions of companies are characterised by a greater presence where there is greater economic activity, especially in the central areas of the city. In this way, it is here that up to a third of the cases against companies were enforced. In the neighbourhoods of Triana, Ciudad del Mar and Vegueta this percentage reaches nearly 50%, while in the city as a whole it amounts to only 21%. With lower percentages, the figures in the port neighbourhoods are also above the average for the city. Therefore, it is logical that the dispossessions of individuals are more frequent in those areas with residential specialisation.
Secondly, on this scale, it is still possible to appreciate the great concentration of the actions in the port area, except that now it is in more specific sectors such as the neighbourhoods of Santa Catalina-Canteras, La Isleta and Guanarteme.
Thirdly, the presence in the peripheral areas is conversely more homogeneous, being located especially in the massive developments of protected housing, built between the Fifties and the early Eighties, in other more recent expansions and in the main neighbourhoods of self-built properties in the city. That is to say, a dispersed distribution on the edges of the city is observed which affects the main town-planning and real estate models which have characterised the urban growth of Las Palmas de Gran Canaria. The classification of the sections according to the number of actions per 1,000 inhabitants makes it possible to reach similar conclusions.

And fourthly, the most disadvantaged neighbourhoods do not show, in relative terms, a greater presence of actions. The Catalogue of Vulnerable Neighbourhoods created in 2011 by the Observatory of Urban Vulnerability attached to the Ministry of Transport, Mobility and the Urban Agenda (Alguacil, Camacho and Hernández Aja, 2014) included thirty vulnerable neighbourhoods and statistical areas in the city of Las Palmas de Gran Canaria, which housed 54.92% of the population, a high percentage in the context of large Spanish cities.

Most of the vulnerability was explained at that time by the high unemployment rates and the deficient condition of the housing in these areas. The vulnerable areas in Ciudad Baja—the area between Guanarteme and Vegueta—were related to the state of the housing stock, while those that were situated on the outskirts were the result of high rates of unemployment, deficient maintenance of housing and, even, a high percentage of unskilled people. One factor or another had greater influence depending on the neighbourhood. For example, in the neighbourhoods with public development from the Sixties, the three factors were present, while, in the self-built neighbourhoods, the conservation of the dwelling was more important. The percentage of foreign non-Community population (EU-15) served as a complementary parameter to explain the vulnerability of certain areas, although it was not so relevant.

As a consequence thereof, there was in Las Palmas de Gran Canaria a neighbourhood with critical vulnerability (Cruz de Piedra) and two with severe values (Rehoyas-Polvorín and Lomo Blanco-Lomo Verdejo), corresponding to public developments from the Sixties and Seventies. Nine neighbourhoods showed medium vulnerability, being private developments with subsidies from the same decades and the main historical and recent self-built neighbourhoods. The remainder, eighteen, were areas of slight vulnerability, and included, apart from a few less dilapidated areas of public or private subsidised development on the outskirts from those same years, neighbourhoods and statistical areas of the Centre and the Port of Las Palmas de Gran Canaria.
Figure 3. The loss of property of individuals in absolute figures according to the median and the range of atypical values

Source: own elaboration based on Servicio Común de Notificaciones y Embargos del Partido Judicial de Las Palmas de Gran Canaria (Common Service of Notifications and Seizures of the Judicial District of Las Palmas de Gran Canaria)

The comparison of this map of neighbourhoods and vulnerable areas with that of dispossession of individuals at the scale of the census tract does not make it possible to obtain significant
relationships, either because in these areas there are no more legal actions than in the others, in comparative terms, or because the incidence is very low. This result is different to what is offered by other studies which have established a close relationship between mortgage enforcement and social and urban vulnerability, and which have already been mentioned. For example, for the case of Catalonia, Colau and Alemany (2012) concluded that mortgage enforcements had been concentrated among the most vulnerable social groups—the unemployed, ethnic minorities, single-parent families. Likewise, in a study carried out for the cities of Tarragona and Tarrasa, from the used housing stock on sale by financial institutions, after processes of dispossession, it was stated that these dwellings were concentrated in the most disadvantaged areas of both cities (Gutiérrez & Arauzo-Carod, 2018).

In this regard, it is worth wondering why, if this is so in other Spanish cities, it is not reproduced as a model in the map of dispossessions of individuals for Las Palmas de Gran Canaria. Here, on the contrary, it is possible to appreciate a very marked concentration of enforcements in the port area and, paradoxically, a tendency towards dispersion on the outskirts of the city, a behaviour which does not coincide with the social map of vulnerability. The answer to this question requires going deeper into the possible factors of dispossession from a geographical point of view, something we shall attempt in the following sections.

6 Dispossession and income

We have indicated that some of the intra-urban studies on dispossession have concluded that it is concentrated especially in disadvantaged areas. In the case of Las Palmas de Gran Canaria, the distribution corresponds only partially with the vulnerable neighbourhoods, with the result that we might wonder to what extent the territorial inequalities of income are related to and explain the distribution of judicial enforcements.

One suitable indicator for this objective is the average available income based on the postal district. The average values, obtained from the declarations presented for the assessment of Income Tax, show the economic status of different areas of the city. Taking as a reference the information for 2013, the central year in the period analysed, the average income in the city was 25,608 Euros (Figure 4).

In that year, seven postal districts did not reach 20,000 Euros, corresponding to the areas which housed, mostly, the massive protected housing developments of the city—Schamann, La Paterna, Miller, Cono Sur— or the growth in self-building—La Matula, Tamaraceite. Another five were
located between this value and the average, those corresponding to the urban development in the area of the port and Las Canteras beach—Alcaravaneras, Santa Catalina, Puerto, Guanarteme—as well as Escaleritas, in Ciudad Alta. There were only seven districts that were above average, two of which exceeded 30,000 euros, located, mostly, in the city centre between Vegueta and Ciudad Jardín, to which must be added the peri-urban area of Tafira, with private developments and of a garden city type, and the district of Siete Palmas. This one is the main area of recent expansion that has been developed since the beginning of this century and which has become a secondary city centre with the middle classes predominating. Triana and Ciudad Jardín were in a privileged position, as they were districts with a certain cachet in the city.

The analysis of the relationship between the available average income at the scale of the postal district and the number of foreclosures carried out against individuals in the period 2009–2017 was done using the Pearson correlation coefficient, giving a value of -0.59, with a level of bilateral significance of 0.01. That is to say, to the extent that income improves, the number of mortgage enforcements decreases with a strong level of association. Both variables tend to normality according to the Shapiro-Wilk test, with the result that their correlation is robust. We can therefore take into account the determination co-efficient, which gives a value of 0.34, that is to say that the average available income explains 34% of the distribution of foreclosures.

From this parametric association, we can ask ourselves if the average available income is a suitable predictor on the scale considered. In this regard, we appreciate that the necessary requirement is satisfied that there should be no statistical evidence of positive and negative serial self-correlation between residuals according to the Durbin-Watson test. The linear regression between the two variables is expressed by the function $y=0.007x+248.74$, which is significant in all its terms. The ANOVA (F) analysis of the contrast of the actions and the residuals from the model of linear regression is significant (=0.01), with emphasis on its role as a predictor. Nevertheless, some residuals from districts with a low or medium-to-low available average income, as can be appreciated in Figure 5, are higher. In these cases, the variable available average income seems to have a lesser adjustment. These are the districts of Santa Catalina and Guanarteme. In consequence, the way in which the two variables considered are related leads us to consider that the processes of dispossession are conditional on other variables, with special incidence in those districts which show the highest residuals.
Figure 4. Average available income by postal districts in Las Palmas de Gran Canaria (2013)

Source: own elaboration based on Tax Agency, Statistics from those declaring for Income Tax from the largest boroughs by postcode. Classified for levels of dispersion from the arithmetic mean.
Vives-Miró et al. (2018) related the classified average income in four groups, from the data of the INE AUDIT of 2013, with the evictions for mortgage enforcements and non-payment of rents in Palma (Mallorca) between 2003 and 2014. They observed that the enforcements took place above all in the neighbourhoods with incomes of less than 30,000 Euros, with 33% of actions in those of low income —less than 24,000— and 47% in those with a medium-to-low income - from 25 to 30,000. Although direct comparison with Palma is not possible, because in this study only the actions of dispossession are included and because there is a difference in the way in which income has been measured in each case, it is possible to appreciate similar trends. In Las Palmas de Gran Canaria, 46.6% of the actions are located in districts with low income - less than 20,000 Euros, 40.6% in areas with medium-to-low income —between 20,000 and 25,000 Euros— and only 13% corresponding to those of medium-to-high income —over 25,000 Euros.

This distribution does not imply that the effect on areas with lower income is greater because the distribution of income in Las Palmas de Gran Canaria is asymmetrical, and the majority of the population had low incomes in 2013. Therefore, it is necessary to bear in mind the number of actions per 1,000 persons declaring by district in order to assess that aspect. In those with a higher income, on average 9.2 actions were carried out per 1,000 persons declaring. The value goes up to 13.6 for those with an income of less than 20,000 Euros, and increases to 16.7 in districts of medium-to-low income, some of which had shown a lesser adjustment to the variable of available average income, as we have indicated. We refer to the districts of Santa Catalina and Guanarteme, the worst affected by dispossession in consequence of another explanatory factor, the relationship with the dimension of the foreign population.
Figure 5. Curves of linear and exponential regression of the average available income (2013) and foreclosures (2009–2017) by postal district in Las Palmas de Gran Canaria

Source: own elaborated based on Tax Agency, Statistics from declarations for Income Tax of the largest boroughs by post code and the Common Service of Notifications and Seizures of the Judicial District of Las Palmas de Gran Canaria

7 The dispossession-foreign population “binomial”

The stage of strong growth of sales, between 1998 and 2008, is also the period in which Spain became a country subject to immigration. In fact, González and Ortega (2013) have suggested that immigration has been responsible for 25% of the growth in the price of housing and between 1.2 and 1.5% of the increase in production values. In particular, in the province of Las Palmas, mortgages set up on all kinds of properties, according to the INE, had a growing trend in parallel to the increase in the number of resident foreigners. In 2006 a total of 56,300 mortgages were set up, while the foreign population came to represent 11.1%, when in 1998 they only amounted to 3% (Figure 6).

This parallelism between the real estate market and immigration was maintained after 2008, to the extent that between that year and 2014, the setting up of mortgages was reduced to a minimum of 8,656, while at the same time the number of foreigners was reduced in absolute terms, after a previous stage of stabilisation of the figures. Since 2017, the number of new mortgages and of resident aliens has begun to go up again although now with more modest absolute values.
Therefore, it seems self-evident that the high figures of the sales market, at least until 2008, were encouraged by the growth of the immigrant population. This appears to be confirmed, moreover, by the specific campaigns conducted over those years by certain banking institutions, so as to attract the immigrant population to the mortgage market. As a result of this and from the fact that the non-EU alien status might be a factor of social vulnerability, we can suggest a relationship between the number of dispossessions and the number of foreign persons. When we analyse the histograms of frequency of both variables it is possible to note a certain positive asymmetry with the presence of slight and extreme outliers. These two facts indicate that both variables cannot be considered as normal, with the result that on this scale it is necessary to have recourse to coefficients of non-parametric correlation.

The correlation measured by means of the Spearman coefficient oscillates between 0.5 and 0.51 according to the year being considered for the population data. With the non-community foreign population, the values are almost identical (see Table 1). In both cases, the associations are bilaterally significant to 0.01. With the community population, the correlations are weaker. In other words, where the foreigners are concentrated there are more dispossessions, especially when they come from countries outside the European Union.
Table 1. Correlation ($r_s$) of actions of dispossession of individuals (2009–2017) and the foreign population by census tract in Las Palmas de Gran Canaria

| Year | $r_s$ Foreigners | $r_s$ Non-EU community foreigners | Number Foreigners | Number Non-EU community foreigners |
|------|-----------------|----------------------------------|------------------|-----------------------------------|
| 2011 | 0.51            | 0.52                             | 30,736           | 21,694                            |
| 2014 | 0.50            | 0.52                             | 27,617           | 18,114                            |
| 2018 | 0.50            | 0.51                             | 25,674           | 17,114                            |

*Statistics with 99% significance

Source: own elaboration based on INE, Ongoing Electoral Roll and Common Service of Notifications and Seizures of the Judicial District of Las Palmas de Gran Canaria

The relationship between foreclosure and migration has been established in other intra-urban studies, such as that carried out by Raya (2017), which states that immigration is one of the weightiest features in the model in explanation of evictions. Gutiérrez and Declós (2016), for their part, indicated the high parametric statistical correlation that exists between the supply of dwellings for sale by banking institutions and the percentage of the population that is foreign at the level of the census tract in Tarragona and Tarrasa. These correlations were also appreciated after calculation with spatial indicators. In both cases, foreigners appear to occupy vulnerable neighbourhoods, with low status, and low-quality housing.

In Las Palmas de Gran Canaria, the distribution of the foreign population is not wholly explained by this trend. Most of the foreigners who resided in the city did so in district 3, between the Port and the beach of Las Canteras, a consolidated area with an average medium-to-low income. This can only be explained by local geo-historical factors: the traditional model of settlement of the foreign population in the city (Domínguez Mujica, 1996) and the opportunities for business and accommodation offered by the port area.

The city, thanks to its vocation as a port and its importance for tourism, had welcomed a notable number of foreigners in relation to its urban hierarchy, with some communities being outstanding such as the British, the Moroccans - many of whom were Saharan in origin -, the Koreans or those from Hindustan. At the outset, most of these foreign contingents settled in the surroundings of the port area and Las Canteras beach. To them were added from the 1970s onwards, the Europeans, who chose this area as a space for second, or sometimes first, residences, and, from the Eighties onwards, the Latin Americans - especially Colombians, Cubans, Argentines, Ecuadorians and...
Venezuelans, the numbers of whom greatly increased at the turn of the century (see Figure 7). Many of these immigrants showed their preference for living in the territorial areas in which the foreign population had traditionally settled, that is to say, in the vicinity of Puerto de La Luz and Las Canteras beach, areas which became a genuine “melting pot”.

Many of these foreigners bought a home in this urban sector, taking advantage of the specific and favourable financial conditions that the Spanish banks offered them. Loans of 100% of the sale price of the property, overvaluations of the properties, long repayment periods of up to 30 years, undemanding requirements as regards the economic conditions of the borrowers were some of the conditions, which contributed to the indebtedness of the foreign population. The financial conditions allowed them to buy in the areas in which they had traditionally settled, instead of moving to other cheaper neighbourhoods. In this context, we cannot ignore that the purchase of housing was conceived as a strategy of social progress among the new immigrants, a class definition factor and an investment instrument, given the belief in the ongoing and permanent growth in value, which appeared to accompany real estate investments (Suárez, 2017).

When in 2008 some of these foreign purchasers lost their jobs or saw their incomes reduced, their ability to continue to pay their mortgages was seriously affected. The vulnerability which their situation as foreigners involved limited even more their capacity to respond, with the result that the legal-financial machinery designed for situations of non-payment came to the fore, stimulated in this case by high location rents which the buildings affected might produce. These were dwellings which could be auctioned without much difficulty and which, therefore, would make it possible to receive the high interest rates for default rapidly. And even if the property was not auctioned, the banking institution was gaining an asset with good prospects for sale, in the situation of an improving market. That is to say, many of the properties bought by the foreign population did not have the status of a toxic asset, with the result that their seizure and subsequent sale could be a business opportunity.

Finally, we proceeded to make a model of multiple association-regression in which we combined the figures for judicial proceedings with the data on income and foreign population. The judicial actions and the number of foreigners are characterised by an asymmetrical frequency distribution at the level of the census tract. The spatial concentration of both variables in certain sections determined that both presented some outliers. This lack of normality means that the analyses of parametric association have a clear bias. Furthermore, the slight and extreme outliers could not
be omitted since they are real values. In this situation, it was decided to carry out the analysis at the level of postal district. The aggregation of data at this scale normalises the distribution. In the case of the foreign population, it was also necessary to transform the data by means of the natural logarithm, with the aim of reducing its internal variation. As a result of this, both variables fulfil the condition of normality, according to the Shapiro-Wilk test.

**Figure 7. Foreign population by large nationality groups in Las Palmas de Gran Canaria**

![Graph showing foreign population by large nationality groups in Las Palmas de Gran Canaria]

Source: own elaboration based on INE, Municipal Register

Before making the model of multiple association-regression, we previously evaluated the interdependence of the predictive variables by means of the calculation of partial correlations. This made it possible to obtain significant results with associations of $r_{12.3}=-0.68$ for income and $r_{13.2}=0.784$ for the foreign population, with the result that we may consider that there is no common underlying cause for both predictors. In other words, both variables have predictive capacity, since each variable explains an important part of what the other does not explain.

The result shows a very high joint association ($r=0.87$), with an adjusted determination coefficient ($r^2$) of 0.72, i.e. 72% of the variability of judicial actions is explained by the joint influence of both predictive variables. The model of multiple linear regression responds to the function $y=48.256x-0.005y-117.998+e$. The result reveals that this model explains three quarters of the cases of foreclosures in the city of Las Palmas de Gran Canaria, with only two of the variables used in the studies of urban vulnerability in Spain.

The analysis of variance test (F contrast of ANOVA) informs us, with a significance of 0.0001, that the variance explained by the multiple regression is higher than the unexplained one, which
supports the proper adjustment of the linear regression. On the other hand, the Durbin-Watson coefficient indicates, with a significance of 0.05, that there is no positive and negative autocorrelation of the residuals. Finally, no multi-collinearity is recognised between the two predictive factors with a Tolerance close to unity in both cases.

In addition, the standardization of the model reports that the foreign population seems to have more influence as a predictor of the distribution of legal proceedings than the disposable income. The former has a standardized coefficient of 0.645 against -0.473 for income, both being significant. Semi-partial correlations abound in this idea, as they express the specific contribution of each regressor on the dependent variable, being 0.635 for foreigners and -0.466 for disposable income.

In short, the analysis of multiple regression shows, first, the predictive power that both variables have in explaining the territorial distribution of real estate dispossession in the city of Las Palmas de Gran Canaria. And, secondly, it highlights the peculiarity of the dispossession process in this city, which is conditioned by the access to property of the foreign population that has mainly arrived in the previous decade.

8 Conclusions: real estate dispossession and socio-spatial vulnerability

Just as for many other Spanish cities, the judicial records in Las Palmas de Gran Canaria are an inestimable source of information to recognise the quantitative magnitude, the time sequence and the territorial dimension of real estate dispossession. From these sources, the study that we have carried out has been based on the positive resolutions of judicial proceedings of dispossession accomplished between 2009 and 2017. These judicial actions include information on the properties which were acquired at public auction, sold through the real estate portals of creditors and transferred to the SAREB for marketing.

We have confirmed that the quantitative incidence of real estate dispossession in Las Palmas de Gran Canaria reached a high level in the period analysed and individuals were the most affected. Likewise, ejections predominated, which gives a more dramatic dimension to the foreclosures since there is a strong relationship between ejection and eviction. We have also claimed that the legal procedures followed the rhythm and the evolution of the crisis, although not only economic reasons explain the loss of property. Different factors mentioned in this paper can be argued to understand the evolution in time of real estate dispossession: the loss of employment and the precarious nature of work, the failure of business and professional projects; over-indebtedness
linked to a model of financing based on over-valuation and on the flexibilization of loans within a specific legal-financial framework.

Knowledge of the urban spatial distribution of judicial dispossessions was the second objective. We have observed that the distribution has been conditioned by the spatial differences in the constitution of mortgages. Those areas with a more dynamic housing market in the years of economic expansion in the turn of the century, were the ones with the highest number of foreclosures. So, this happened in the sectors of urban expansion of the city, such as San Lorenzo, Tamaraceite and Las Torres. In addition, we must mention the neighbourhoods of the isthmus of Guanarteme as well, an area in which the real estate market was very dynamic due to the impact of the international demand and the increase in foreign immigration. Both are spaces where medium average income prevails.

Because of this, the map of dispossessions in Las Palmas de Gran Canaria has the peculiarity of showing a strong concentration of judicial actions in its central areas, coinciding with the tourist and port spaces. This configures a model of location of dispossession differentiated from that identified in other Spanish cities. Even, it is possible that the dispossession geography of Las Palmas de Gran Canaria may be different to that of other coastal cities, which will have to be confirmed in further comparative studies.

As a response to the third objective, we have statistically measured the influence of two social factors closely linked to urban vulnerability: the income levels of the population and the location of foreign population. With this purpose, the diachronic information on foreclosures of individuals and synchronous information on the available average income and foreign population were combined at different scales. In Las Palmas de Gran Canaria, both indicators show a strong association with real estate dispossession; negative in the first case and positive in the second. The analysis of multiple regression allowed us to explain the territorial behaviour of both factors with statistical significance, the presence of foreigners being the most influential predictor.

Finally, it is worth concluding that the judicial procedures in the most affected neighbourhoods confirms that loss of property is a mechanism of accumulation. In this regard, many of the properties involved offer a business opportunity for the creditors. The location of these real estate assets in areas with good revaluation perspectives allows creditors to obtain benefits through public auction or direct sale. What is more, most of the foreclosures are in neighbourhoods affected by processes of gentrification. Consequently, we can claim that the relationship between urban vulnerability and dispossession is a to and fro relationship. Urban vulnerability favours real
estate dispossession and, at the same time, dispossession contributes to reinforcing urban vulnerability by means of the dynamics of social substitution.

**Acknowledgements:** We would like to express our gratitude to Common Service of Notifications and Seizures of the Judicial District for Las Palmas de Gran Canaria and to its head, for the support given. This research was funded by the Ministry of Science, Innovation and Universities; State Research Agency (AEI) and the European Regional Development Fund (ERDF) with R&D projects “Crisis and vulnerability in Spanish island cities: transformations in social reproduction spaces” (CSO2015-68738-P) and “Housing and international mobility in cities of the Canary Islands. The emergence of new forms of urban inequality” (RTI2018-093296-B-C21).

**Authorship statement:** The authors declare no conflict of interest. Conceptualization, consulting and treatment of original sources: Juan M. Parreño Castellano & Josefina Domínguez Mujica. Writing: Juan M. Parreño Castellano, Josefina Domínguez Mujica & Claudio Moreno Medina. Mapping: Juan M. Parreño Castellano & Claudio Moreno Medina.
References

Aalbers, M. (2009). The globalisation and Europeanisation of mortgage markets. International Journal of Urban and Regional Research, 33, 389-410. https://doi.org/10.1111/j.1468-2427.2009.00877.x

Aalbers, M. (2015). The great moderation, the great excess and the global housing crisis. International Journal of Housing Policy, 15(1), 43-60.

Aalbers, M. (2019). Financial Geography II: Financial Geographies of Housing and Real Estate. Progress in Human Geography, 43(2), 376-87. https://doi.org/10.1177/0309132518819503

Albarrán Gómez, M. (2015). El tratamiento de la insolvencia de la persona natural: la exoneración del pasivo insatisfecho y el acuerdo extrajudicial de pagos. Universidad de Cantabria. Retrieved from https://repositorio.unican.es/xmlui/bitstream/handle/10902/7710/ALBARRANGOMEZMARIA.pdf?sequence=4&isAllowed=y

Alguacil, J., Camacho, J., & Hernández Aja, A. (2014). La vulnerabilidad urbana en España. Identificación y evolución de los barrios vulnerables. EMPIRIA. Revista de Metodología de Ciencias Sociales, 27, 73-94. https://doi.org/10.5944/empiria.27.10863

Alexandri, G., & Janoschka, M. (2018). Who loses and who wins in a housing crisis? Lessons from Spain and Greece for a nuanced understanding of dispossession. Housing Policy Debate, 28(1), 117-134. https://doi.org/10.1080/10511482.2017.1324891

Arredondo, R., & Palma García, M. (2013). «Aproximación a la realidad de los desahucios: perfil y características de las familias en proceso de desahucios en la ciudad de Málaga». Alternativas. Cuadernos de Trabajo Social, 20, 113-140. https://doi.org/10.14198/ALTERN2013.20.07

Beswick, J., Alexandri, G., Byrne M., Vives-Miró, S., Fields, D., Hodkinson, S., & Janoschka, M. (2016) Speculating on London’s housing future, City, 20(2), 321-341. https://doi.org/10.1080/13604813.2016.1145946

Brickell, K., Fernández Arrigoitia, M., & Vasudevan, A. (2017). Geographies of Forced Eviction: Dispossession, Violence, Resistance. In Geographies of Forced Eviction (pp. 1-23). London: Macmillan Publishers Ltd.
Burriel, E. L. (2008). La “década prodigiosa” del urbanismo español (1997-2006). *Scripta Nova, XII*, 270 (64). Retrieved from [http://www.ub.es/geocrit/sn/sn-270/sn-270/sn-270-64.htm](http://www.ub.es/geocrit/sn/sn-270/sn-270/sn-270-64.htm)

Burriel, E. L. (2014). El estallido de la burbuja inmobiliaria y sus efectos en el territorio. In J. M. Albertos Puebla & J. L. Sánchez Hernández (Eds.), *Geografía de la crisis económica en España* (pp. 101-140). Valencia: Universidad de Valencia.

Cañizares, M. C., & Rodríguez-Domènech, M. Á. (2020). “Ciudades fantasma” en el entorno del Área Metropolitana de Madrid (España). Un análisis de la Región de Castilla-La Mancha. *Revista EURE-Revista de Estudios Urbanos Regionales, 46*(139), 209-231. Retrieved from [http://eure.cl/index.php/eure/article/view/3176/1305](http://eure.cl/index.php/eure/article/view/3176/1305)

Cócola Gant, A. (2016) Holiday rentals: The new gentrification battlefront. *Sociological Research Online, 21*(3), 1-9. [https://doi.org/10.5153/rso.4071](https://doi.org/10.5153/rso.4071)

Colau, A., & Alemany, A. (2012). *Vidas hipotecadas. De la burbuja inmobiliaria al derecho a la vivienda.* Barcelona: Cuadrilátero de libros.

Delgado, L. (Coord.) (2018). *Radiografies de la situació del dret a l’habitatge, la pobresa energètica i el seu impacte en la salut a Barcelona.* Barcelona: Observatori DESC.

Desmond, M. (2016). *Eviction: Poverty and profit in the American city.* London: Allen Lane.

Díaz-Serrano, L., & Raya, J. M. (2014). Mortgages, immigrants and discrimination: An analysis of the interest rates in Spain. *Regional Science and Urban Economics, 45*, 22-32. [https://doi.org/10.1016/j.regsciurbeco.2013.12.004](https://doi.org/10.1016/j.regsciurbeco.2013.12.004)

Domínguez-Mujica, J. (1996). *La inmigración extranjera en la provincia de Las Palmas.* Las Palmas de Gran Canaria: CIES-La Caja de Canarias.

Domínguez-Mujica, J., Parreño-Castellano, J. M., & Moreno-Medina, C. (2020). Vacation Rentals, Tourism, and International Migration: Gentrification in Las Palmas de Gran Canaria (Spain) From a Diachronic Perspective. In C. Ribeiro de Almeida, A. Quintano, M. Simancas, R. Huete & Z. Breda (Ed.), *Handbook of Research on the Impacts, Challenges, and Policy Responses to Overtourism.* (pp. 237-260). IGI Global. [https://doi.org/10.4018/978-1-7998-2224-0.ch013](https://doi.org/10.4018/978-1-7998-2224-0.ch013)

Domínguez-Mujica, J., Parreño-Castellano, J. M., & Armengol Martín, M. (2020). Género y desposesión inmobiliaria en Las Palmas de Gran Canaria. In J. Farinós et al. (Ed.), *Desafíos y oportunidades de un mundo en transición. Una interpretación desde la geografía* (pp. 637-646). Valencia: Publicacions de la Universitat de València.
González, L., & Ortega, F. (2013) Immigration and housing booms: Evidence from Spain. *Journal of Regional Science, 53*, 37-59. [https://doi.org/10.1111/jors.12010](https://doi.org/10.1111/jors.12010)

Gutiérrez, A., & Arauzo-Carod, J. M. (2018). Spatial Analysis of Clustering of Foreclosures in the Poorest-Quality Housing Urban Areas: Evidence from Catalan Cities. *ISPRS International Journal of Geo-information, 7*(1), 23. [https://doi.org/10.3390/ijgi7010023](https://doi.org/10.3390/ijgi7010023)

Gutiérrez, A., & Delclòs, X. (2016). The uneven distribution of evictions as new evidence of urban inequality: A spatial analysis approach in two Catalan cities. *Cities, 56*, 101-108. [https://doi.org/10.1016/j.cities.2016.04.007](https://doi.org/10.1016/j.cities.2016.04.007)

Gutiérrez, A., & Delclòs, X. (2017). Geografía de la crisis inmobiliaria en Cataluña: una lectura a partir de los desahucios por ejecución hipotecaria. *Scripta Nova, 21*(557), 7-33.

Gutiérrez, A., & Domènech, A. (2017a). The Spanish mortgage crisis: Evidence of the concentration of foreclosures in the most deprived neighbourhoods. *Die Erde, 148*(1), 39-57. [https://doi.org/10.12854/erde-148-29](https://doi.org/10.12854/erde-148-29)

Gutiérrez, A., & Domènech, A. (2017b). Geografía de los desahucios por ejecución hipotecaria en las ciudades españolas: evidencias a partir de las viviendas propiedad de la SAREB. *Revista de Geografía Norte Grande, 67*, 33-52. [https://doi.org/10.4067/S0718-34022017000200003](https://doi.org/10.4067/S0718-34022017000200003)

Gutiérrez, A., & Domènech, A. (2018). The mortgage crisis and evictions in Barcelona: identifying the determinants of the spatial clustering of foreclosures. *European Planning Studies, 26*(10), 1939-1960. [https://doi.org/10.1080/09654313.2018.1509945](https://doi.org/10.1080/09654313.2018.1509945)

Gutiérrez, A., & Domènech, A. (2020). Identifying the Socio-Spatial Logics of Foreclosed Housing Accumulated by Large Private Landlords in Post-Crisis Catalan Cities. *ISPRS International Journal of Geo-Information, 9*(5), 313. [https://doi.org/10.3390/ijgi9050313](https://doi.org/10.3390/ijgi9050313)

Harvey, D. (2003). *The ‘New’ Imperialism: Accumulation by dispossession*. Oxford: Oxford University Press.

Harvey, D. (2013). *Ciudades rebeldes. Del derecho de la ciudad a la revolución urbana*. Madrid: Akal.

Janoschka, M. (2018). Gentrificación en España Reloaded. *Papers: Regió Metropolitana de Barcelona: Territori, estratègies, planejament, 60*, 24-33. Retrieved from [https://ddd.uab.cat/record/194953](https://ddd.uab.cat/record/194953)
Janoschka, M., Alexandri, G., Ramos, H. O., & Vives-Miró, S. (2020). Tracing the socio-spatial logics of transnational landlords’ real estate investment: Blackstone in Madrid. *European Urban and Regional Studies, 27*(2), 125-141. https://doi.org/10.1177/0969776418822061

Jiménez Barrado, V., & Sánchez Martín, J. M. (2016). Banca privada y vivienda usada en la ciudad de Madrid. *Investigaciones Geográficas, 66*, 43-58. https://doi.org/10.14198/INGEO2016.66.03

Lois, R., Piñeira, M. J., & Vives, S. (2016). El proceso urbanizador en España (1990-2014): una interpretación desde la geografía y la teoría de los circuitos de capital. *Scripta Nova, XX*(539). Retrieved from http://www.ub.es/geocrit/sn/sn-539.pdf

López, I., & Rodríguez, E. (2010). *Fin de ciclo. Financiarización, territorio y sociedad de propietarios en la onda larga del capitalismo hispano (1959-2010)*. Madrid: Traficantes de Sueños.

Méndez, R. (2017). De la hipoteca al desahucio: ejecuciones hipotecarias y vulnerabilidad territorial en España. *Revista de Geografía Norte Grande, 67*, 9-31. https://doi.org/10.4067/S0718-34022017000200002

Méndez, R. (2019). *Ciudades en venta: Estrategias financieras y nuevo ciclo inmobiliario en España*. Valencia: Universitat de València.

National Statistics Institute (2020). *Continuous Register Statistics*. Retrieved from https://www.ine.es/jaxi/Tabla.htm?path=~/t20/e245/p07/a2019/I0/&file=3502.px&L=0
Nicasio Jaramillo, I. M. (2017). La crisis del título ejecutivo en un contexto de ejecuciones hipotecarias masivas frente a consumidores (Doctoral dissertation, Universidad Pablo Olavide, Spain). Retrieved from https://rio.upo.es/xmlui/bitstream/handle/10433/6949/nicasio-jaramillo-tesis-16-17.pdf?sequence=1&isAllowed=y

Obeso Muñiz, I. (2014). Análisis geográfico de los desahucios en España. Ería, 95, 327-342. https://doi.org/10.17811/er.95.2014.327-342

Palomera, J. (2014). How did finance capital infiltrate the world of the urban poor? Homeownership and social fragmentation in a Spanish neighborhood. International Journal of Urban and Regional Research, 38(1), 218-235.

Parreño-Castellano, J. M., Domínguez-Mujica, J., Armengol-Martín, M., Pérez-García, T., & Boldú Hernández, J. (2018a). Descapitalización inmobiliaria y desahucio en Las Palmas de Gran Canaria: una aproximación desde fuentes judiciales. In F. Cebrián Abellán (Eds.), Ciudades Medias y Áreas Metropolitanas. De la dispersión a la regeneración (pp. 719-732). Cuenca: Ediciones de la Universidad de Castilla-La Mancha.

Parreño-Castellano, J. M., Domínguez-Mujica, J., Armengol-Martín, M., Pérez García, T., & Boldú Hernández, J. (2018b). Foreclosures and evictions in Las Palmas de gran Canaria during the economic crisis and post-crisis period in Spain. Urban Science, 2(4), 109. https://doi.org/10.3390/urbansc2040109

Parreño-Castellano, J. M., Domínguez-Mujica, J., Armengol-Martín, M., Boldú-Hernández, J., & Pérez-García, T. (2019). Real estate dispossession and evictions in Spain: a theoretical geographical approach. Boletín de la Asociación de Geógrafos Españoles, (80), 2602, 1-25. https://doi.org/10.21138/bage.2602

Piñeira Mantiñán, M. J., Lois González, R. C., & González Pérez, J. M. (2019). New models of urban governance in Spain during the post-crisis period: the fight against vulnerability on a local scale. Territory, Politics, Governance, 7(3), 336-364. https://doi.org/10.1080/21622671.2018.1485595

Raya, J.M. (2017). The determinants of foreclosures: Evidence from the Spanish case. Papers in Regional Science. Early View. https://doi.org/10.1111/pirs.12316

Romero, J., Jiménez, F., & Villoria, M. (2012). (Un) sustainable territories: causes of the speculative bubble in Spain (1996–2010) and its territorial, environmental, and sociopolitical
consequences. *Environment and Planning C: Government and Policy*, 30, 467-486. [https://doi.org/10.1068/c11193r](https://doi.org/10.1068/c11193r)

Sabater Fernández, C., & Giró Miranda, J. (2015). New poverty. Eviction as a process of exclusion. *Ethiquidad. International Welfare Policies and Social Work*, 3, 77-106. Retrieved from [https://www.coursehero.com/file/37652310/Ehquidad-International-Welfare-Policiespdf/](https://www.coursehero.com/file/37652310/Ehquidad-International-Welfare-Policiespdf/)

Suárez, M. (2017). *The Subprime Middle Class: Precarious Labour, Mortgage Default, and Activism among Ecuadorian Migrants in Barcelona*. London: Goldsmiths, University of London.

Tapia Hermida, A. J. (2008). Instituciones financieras para la mejora del mercado inmobiliario: los fondos de titulización (en particular, los fondos de titulización hipotecaria) y las instituciones de inversión colectiva inmobiliarias (en particular, los fondos de inversión inmobiliaria). *Revista de Derecho del Mercado de Valores*, 3, 37-57.

Tax Agency. Statistics from declarations for Income Tax of the largest boroughs by post code. Retrieved from [https://www.agenciatributaria.es/AEAT.internet/datosabiertos/catalogo/hacienda/Estadistica_del_IRPF_por_codigo_postal.shtml](https://www.agenciatributaria.es/AEAT.internet/datosabiertos/catalogo/hacienda/Estadistica_del_IRPF_por_codigo_postal.shtml)

Valiño, V. (Coord.) (2015). *Emergència habitacional a Catalunya. Impacte de la crisi hipotecària en el dret a la salut i els drets dels infants*. Barcelona: Observatori DESC y Plataforma de Afectados por la Hipoteca.

Vásquez-Vera, H., Rodríguez-Sanz, M., Palència, L., & Borrell, C. (2016). Foreclosure and health in southern Europe: results from the Platform for People Affected by Mortgages. *Journal of Urban Health*, 93(2), 312-330. [https://doi.org/10.1007/s11524-016-0030-4](https://doi.org/10.1007/s11524-016-0030-4)

Vives-Miró, S., González-Pérez, J. M., & Rullan, O. (2015). Home dispossession: the uneven geography of evictions in Palma (Majorca). *DIE ERDE—Journal of the Geographical Society of Berlin*, 146, 2-3, 113-126. [https://doi.org/10.12854/erde-146-10](https://doi.org/10.12854/erde-146-10)

Vives-Miró, S., & Rullan, O. (2017). ¿Desposesión de vivienda por turistización? Revalorización y desplazamientos en el Centro Histórico de Palma (Mallorca). *Revista de Geografía Norte Grande*, 67, 53-71. [https://doi.org/10.4067/S0718-34022017000200004](https://doi.org/10.4067/S0718-34022017000200004)

Vives-Miró, S., Rullan, O., & González-Pérez, J. M. (2017). Consecuencias sociales del modelo económico basado en el crédito. Geografía de las ejecuciones hipotecarias. *Scripta Nova*, XXI(553). Retrieved from [http://revistes.ub.edu/index.php/ScriptaNova/article/view/553](http://revistes.ub.edu/index.php/ScriptaNova/article/view/553)
Vives-Miró, S., Rullan, O., & González Pérez, J. M. (2018). Geografías de la desposesión de vivienda a través de la crisis. Los desahucios Marca Palma. Barcelona: Icaria Editorial.

Wehrhahn, R. (2019). Contentious urban housing politics in European metropolises between financialisation, dispossession and re-possession. In Housing and Housing Politics in European Metropolises (pp. 3-20). Springer VS, Wiesbaden.

Yrigoy, I. (2017). Airbnb en Menorca: ¿Una nueva gentrificación turística? Localización de la vivienda turística, agentes e impactos sobre el alquiler residencial. Scripta Nova, XXI(580). Retrieved from https://revistes.ub.edu/index.php/ScriptaNova/article/view/18573

Zunzunegui, F. (2013). Sobreendeudamiento y prácticas hipotecarias de las entidades bancarias (Over-Indebtedness and Mortgage Lending). Revista de Derecho Bancario y Bursátil (Journal of Banking and Securities Law), 32(129), 35-76.