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Mortgages, immigrants and discrimination: An analysis of the interest rates in Spain

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ABSTRACT

In this paper, we use a unique data set on granted mortgages to investigate whether immigrant and native borrowers are treated differently by lenders in the Spanish mortgage market. We observe that immigrant borrowers are charged substantially higher interest rates in their mortgages than their native counterparts. These differentials remain high and significant even after controlling for differences in creditworthiness and other factors. Further analyses based on the decomposition of the native–immigrant interest rate gap reveal that the differences in observable factors only account for 12% of the gap. The empirical evidence we find here suggests that these differentials are due to discrimination.

1. Introduction

During the first decade of this century, Spain experienced an economic and housing boom that coincided with the most important immigration wave in recent Spanish history. During this period, many of these immigrants became homeowners. This situation led the lending industry to expand through the mortgage market. The high competition among lenders, lack of regulation and supervision from the Spanish Central Bank and lenders' myopia in anticipating a potential economic downturn caused a dramatic lowering of credit standards. During that period, it was not unusual for a significant number of borrowers to devote almost two-thirds of their monthly earnings to paying their mortgage, to hold mortgages with a loan-to-value above 100% or to be granted a mortgage despite having an unstable job situation. Some statistics produced by the Central Bank of Spain reveal that in 2012 there were more than 220 billion dollars in doubtful mortgage loans in Spain. This constitutes 27% of the total mortgage portfolio in Spain. Nowadays, many analysts indicate this phenomenon as the main reason for the actual financial crisis in Spain.

In such a competitive context, with decreasing interest rates also boosting the demand for mortgages it is not unusual to charge higher mortgage interest rates and fees to minorities compared to white homebuyers with similar characteristics.[1] Another potential consequence is that minority borrowers are shifted into mortgages with conditions in which the a priori probability of foreclosure is high. This dramatic decline in the credit standards in the Spanish mortgage industry has led to an epidemic of foreclosures. In this situation, immigrants are in a weaker position than natives. According to raw statistics produced by the Central Bank of Spain, in 2008, just after the burst of the housing bubble, 12.5% of immigrant borrowers were unable to meet their monthly mortgage payments, while this share was only 1.6% for natives (Banco de España, 2009). As a consequence of this, segregation

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[1] As we will discuss in the next section, the mortgage interest rate in Spain is composed of a benchmark interest rate (EURIBOR), which is determined exogenously (European Central Bank), and a differential interest rate (ADIR), which is determined by the lender. Therefore, it is in the ADIR where lenders may discriminate against minorities. During the housing boom, the EURIBOR followed a decreasing trend month after month; from 5.2 percentage points in 2000 to 2.2 in 2005.This circumstance was also one of the determinants that boosted the demand for housing during that period.

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can be exacerbated. Displaced families relocate to more racially isolated neighborhoods with less access to or lower quality of services. Racial segregation also has consequences in urban housing markets, i.e., neighborhoods of growing immigrant settlement become less desirable to natives. This causes changes in how natives perceive the quality of their local amenities, which in turn has a negative impact on the house value appreciation of the enclaves where immigrants tend to settle. Saiz and Wachter (2011) and Accetturo et al. (2012) find evidence of this in the US and Italy, respectively.

In this paper, using unusually rich Spanish data on granted loans, we test whether: i) immigrants are systematically charged larger interest rates on their mortgages; and ii) whether the gap in mortgage interest rates between immigrants and natives can be explained by observables (i.e. differences in borrower and mortgage characteristics). We find that, on average, immigrants are charged almost 0.18 percentage points more for their mortgages than their native counterparts. An obvious explanation for this result could be that immigrants are riskier borrowers. However, we observe that after controlling for the set of variables determining the risk profile and creditworthiness of a borrower, the gap remains significant and practically unaltered. Indeed, a further analysis based on the decomposition of the mortgage interest rate gap between immigrants and natives using the Oaxaca-Blinder decomposition method reveals that only 12% of this gap can be attributed to differences in observable individual and mortgage characteristics.[2]

A potential explanation for this gap in the mortgage interest rates between immigrants and natives is that lenders discriminate against immigrants. In the context of an economic and housing boom, with lenders competing to attract new borrowers, banks have a lower incentive to acquire information on their potential borrowers, which causes a tendency to rank them as risky, charging higher interest rates (Petersen and Rajan, 1995; Degryse and Ongena, 2007). If immigrant borrowers are perceived as riskier borrowers, lenders might use statistical discrimination as a shield against the lack of information (Canner, 1981; Stiglitz and Weiss, 1981). Although lenders may argue that for the sake of business this behavior is not unfair, according to article 23 of the Spanish Immigration Law, it is illegal.[3]

In this context, detecting whether the immigrant–native mortgage interest rate gap is driven by market factors or statistical discrimination sis a puzzle that is not easy to disentangle.[4] Although we control for a large number of variables determining borrowers' risk and creditworthiness, we must admit that factors determining this gap that are not observable to the researcher may always exist. Therefore, we cannot rule out the possibility that our results might be affected by this omission. However, as we will see in the empirical section, we think that in our case the room left for potential omitted variable bias is fairly small. The empirical evidence obtained here suggests that the gap in mortgage interest rates between immigrants and natives might be due to discrimination.

In this paper, we analyze for the first time the existence of mortgage price differentials between minority and non-minority borrowers outside the US. As in the previous literature based on US data, we observe that immigrants/minorities are charged higher mortgage interest rates. However, in contrast to the US evidence, we find that the role borrower characteristics play in explaining this gap is quite limited. These differences might be explained by two reasons. First of all, migratory flows in Spain are quite recent, so the composition of immigrants groups is different and they are less financially integrated with respect to the US. Second, the mortgage market in Spain is much less mature than that in the US. This circumstance implies that, in contrast to the US, there is a lack of regulation in Spain regarding mortgage markets and the protection of borrowers, especially minorities.[5]

It is important to remark that the Spanish mortgage system is extremely lender-friendly, which for lenders facilitated the use of abusive mortgage contracts during the housing boom. We consider that this could be the main reason why borrower characteristics play such a poor role in explaining the mortgage price differentials between immigrants and natives. In 2013, following the epidemic of foreclosures that has affected the Spanish economy, and once an important share of mortgage contracts had been declared as illegal by the Court of Justice of the EU, the Government has initiated a reform of the mortgage law in order to protect borrowers a little more from the predatory behavior of lenders.

With the aim mentioned above, the paper is structured as follows. In Section 2, we explain how mortgages are priced in the Spanish lending market. Section 3 describes the data. In Section 4, we carry out the empirical analysis. In Section 5, we conduct some robustness checks and discuss the potential shortcomings of our analysis. Finally, in Section 6, we summarize and conclude.

2. Mortgage pricing in Spain

The price of a mortgage in Spain is made up of the *annual interest rate* (hereafter AIR) and the *opening fee*, which is a percentage (around 1%) of the total loan amount and is paid to the lending institution at the moment when the mortgage contract is signed. The AIR comprises a *benchmark interest rate* (hereafter BIR) and the *annual differential interest rate* (hereafter ADIR). For a mortgage indexed with a variable interest rate, the BIR is updated yearly. The BIR is determined exogenously and is fixed for all mortgages signed during the same month; therefore, it is in the ADIR that mortgage price differentials are likely to appear. The Spanish mortgage legislation does not set upper bounds for the ADIR.[6] Thus, each lender is free to set its own maximum differentials. Additionally, borrowers can be charged a cancelation fee if they pay off their mortgage early, either partially or totally. The cancelation fee varies depending on whether the early pay-off is made over all or a fraction of the outstanding mortgage. The total cancelation fee is the only one for which the Central Bank of Spain sets a maximum.

In this paper, we will focus on analyzing the gap in the ADIR between immigrants and natives. The size of the ADIR depends, among other factors, on the BIR used to price the mortgage. In Spain, the two main BIRs used by lenders are the reference interest for mortgage loans (hereafter RIML) and the Euribor. The RIML may also vary depending on whether the loan is granted by a *savings bank* (Caja de ahorros) or a *conventional bank*. At the beginning of the housing boom, both types of BIR were used indistinctively by lending institutions. However, as the mortgage market became more competitive and interest rates fell month after month, the Euribor became the most commonly used type of BIR, since in this scenario it was more attractive for borrowers. Statistics produced by the National Statistics Bureau (INE) reveal that in 2005 almost 80% of the mortgages were priced using the Euribor, while only 9% used

[2] As we will explain in Section 3, our data is provided by a real estate company that operates in a specific segment of the Spanish housing market (medium-low and low profile dwellings). All the data refer to borrowers that have bought the dwelling from the listings of this company. This circumstance means that our results might not be generalized to the whole housing market, but just to the specific segment where this company operates.

[3] Article 23 of the Spanish Immigration Law explicitly prohibits: "… imposing more expensive (tax/fee) conditions on foreigners than on Spaniards, or the act of refusing to facilitate goods or services to foreigners, just because they pertain to a specific race, religion, ethnicity or nationality."

[4] Some studies have successfully analyzed discrimination in the housing rental market using an Internet field experiment (e.g. Hanson and Hawley, 2011). However, this methodology is unfeasible in the context of our research.

[5] US legislators have tried to protect minorities and disadvantaged households from unfair lending in the mortgage and housing markets by means of certain statutes. These are the Fair Housing Act (1968), the Equal Credits Opportunity Act (1974), the Home Mortgage Disclosure Act (1975), the Community Reinvestment Act (1977) and the Financial Institutions Reform, Reregulation and Enforcement Act (1989).

[6] The only limitation aimed at preventing abusive interest rates, which is not usually respected in mortgage contracts in Spain, can be found in the Anti-Usury Law of 1908. Indeed, recently the EU Court of Justice declared that most of the mortgage contracts were illegal because they included a number of abusive clauses. Indeed, an immigrant residing in Spain won this case against his lender at the EU Court of Justice.