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PERSONAL LOAN RATES AND HOUSEHOLD
CHARACTERISTICS: SPAIN COMPARED WITH OTHER
EURO AREA COUNTRIES

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ABSTRACT

Interest rates on new lending to households for purposes other than house purchase are generally higher in Spain than in other euro area countries. This may be because borrowers have different characteristics, or because Spanish households pay higher interest rates than similar households in other countries, owing to regulatory aspects, different competition levels or other factors.

Data from the Eurosystem's Household Finance and Consumption Survey, which compiles data on household wealth, debts and income in each euro area country, show that borrowers in Spain have fewer assets and are more likely to be unemployed than those in the other countries analysed. However, these differences between borrowers explain only a small part of the difference between Spanish personal loan rates and those applied in the other euro area countries. In consequence, most of the difference is due to the different way in which Spanish financial institutions assess household characteristics. One possible explanation for the higher interest rates in Spain is that, even when comparing employed persons with similar characteristics, Spanish households have a higher risk of job loss than German and French households and, for the same income level, greater income instability than German households. The survey data also show that Spanish indebted households that pay higher interest rates are also more likely subsequently to fall behind in their debt payments and to experience income declines. In Spain, therefore, high interest rates reflect this greater future income instability.

Keywords: interest rates, consumer loans, probability of job loss.

JEL classification: D12, E21, G21.

PERSONAL LOAN RATES AND HOUSEHOLD CHARACTERISTICS: SPAIN COMPARED WITH OTHER EURO AREA COUNTRIES

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Introduction

In Spain, interest rates on new lending to households for purposes other than house purchase stood at 8% in July 2020. This is high compared with the level of these interest rates in other euro area countries.¹

Why are these interest rates so high? Possibly because the Spanish households that access this form of credit have a comparatively high risk profile. Or because Spanish financial institutions apply different interest rates to households with the same characteristics. The disaggregated data of households responding to the Eurosystem's Household Finance and Consumption Survey (HFCS) allow us to distinguish between these two hypotheses. This article comprises two types of analysis.

First, the characteristics of Spanish indebted households are compared with those of indebted households in other euro area countries. This analysis shows that in 23% of Spanish households with outstanding debts, the reference person is economically inactive or unemployed. This is at least six percentage points (pp) higher than in the other countries analysed. However, these differences, and other differences associated with the level of assets, explain only a small part of the gap between the interest rates paid by Spanish households and those paid, for example, by French households. In consequence, the reason for the different interest rates is that Spanish financial institutions apply higher rates to households with the same characteristics.

Second, income instability plays a potentially key role in interest rate setting. In 2017 (the latest year for which figures are available), Spanish households' perceived probability of job loss or closure of their business was between 2 pp and 17 pp higher than that reported by German and French households. In addition, the probability of experiencing a fall in income between 2011 and 2014 was higher for Spanish than for German households. Financial institutions take this instability into account when setting credit conditions, since interest rates predict higher future income instability and debt payment delays. In consequence, households' greater

¹ See Banco de España (2020).

Table 1

PERSONAL LOAN RATES, BY EMPLOYMENT STATUS OF REFERENCE PERSON

Spanish households with outstanding personal loans pay higher interest rates than German, French and Italian households. Only Portuguese households pay higher interest rates.

	Germany (%)	Spain (%)	France (%)	Italy (%)	Portugal (%)
Total population (a)	3.9	6.5	4.3	5.6	7.4
Employment status of reference person					
Permanent employment contract	3.9	6.4	5.5	5.5	7.7
Temporary employment contract	4.0	7.0	5.8	6.1	6.6
Self-employed	4.4	5.8	4.8	5.5	4.8
Retired	4.7	6.5	5.9	5.4	8.1
Other economically inactive or unemployed	2.8	6.8	5.7	6.1	7.3

SOURCE: Second wave of the Eurosystem's HFCS 2014.

a The loans considered, as per the HFCS, are unsecured loans, including personal loans, credit lines, advances and private loans and excluding finance leasing and credit cards.

income instability helps to explain the difference in interest rates between Spain and other euro area countries.

Differences in household characteristics

According to the HFCS, in 2014 the interest rate paid by Spanish households on their outstanding personal loans (i.e. not only on new loans) was around 6.5%.² This is higher than the personal loan rate applied to German, French and Italian households (below 5.6% in all cases), and is exceeded only by the rate (7.4%) paid by Portuguese households (see Table 1).

A comparison of the characteristics of indebted households in Spain and France shows that, in both countries, households whose reference person has a less favourable employment status pay higher interest rates.³ Accordingly, workers with temporary employment contracts pay higher loan rates than those with permanent employment contracts, both in Spain (7% compared with 6.4%) and France (5.83% compared with 5.47%) (see Chart 1).

On average, Spanish households with personal loans differ from those of other countries, as regards the employment status of the reference person and household

2 In this analytical article, "personal loans" are, as per the HFCS, unsecured loans, including personal loans, credit lines, advances and private loans and excluding finance leasing and credit cards.

3 The response rate to the question on consumer loan rates is one of the lowest in the HFCS. Only Spain makes imputations for these data to avoid non-response bias. In consequence, many of the interest rate comparisons are made with France, which has a large sample size that partly mitigates the non-response issue.

Chart 1

PERSONAL LOAN RATES, BY EMPLOYMENT STATUS OF HOUSEHOLD REFERENCE PERSON

The chart depicts the average interest rate on unsecured loans in France and Spain by employment status of the household reference person. In both countries, households whose reference person has a temporary employment contract or is economically inactive or unemployed pay higher interest rates than those whose reference person has a permanent employment contract.



SOURCE: Banco de España, drawing on data from the second wave of the HFCS 2014.



wealth (see Charts 2 and 3). Spanish households with personal loans have a higher incidence of unemployment and inactivity (23.3%; 8-10 pp more than in Germany, Italy and Portugal and 20 pp more than in France) and a lower incidence of permanent paid employment (see Chart 2).

Also, according to the HFCS, Spanish households with personal loans have a higher level of assets (financial and non-financial) than German households, although a lower level than Italian households. Thus, in 2014 a quarter (25.8%) of Spanish households with personal loans were in the bottom quartile of the distribution of total assets, while 40% of German households with personal loans (14 pp more) had a similarly low level of wealth (in the bottom quartile) (see Chart 3).⁴ The difference between the level of assets of indebted Spanish and Italian households is less pronounced.

When we calculate what the average interest rate would be in Spain if households with personal loans had the same employment status, total wealth and size as indebted households in France, we conclude that around 20-35 basis points (bp) of the almost 220 bp difference between these countries can be explained by household characteristics (see Chart 3).⁵

4 As regards financial wealth, the percentages are similar. In 2014, a quarter of Spanish households with consumer credit (25%) were in the bottom quartile of the wealth distribution, while in Germany 38% of such households were.

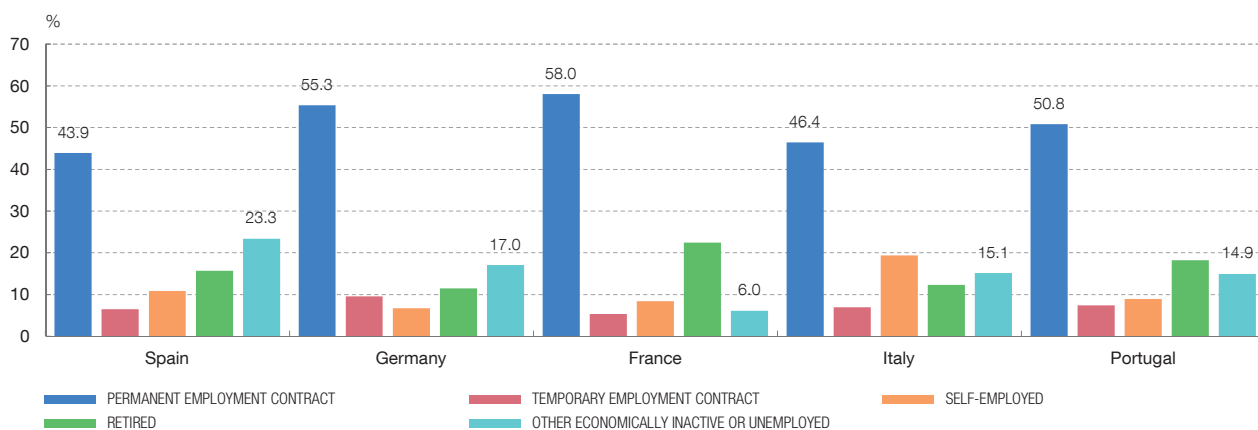
5 For similar evidence on the relationship between employment status and debt arrears, see Aller and Grant (2018).

Chart 2

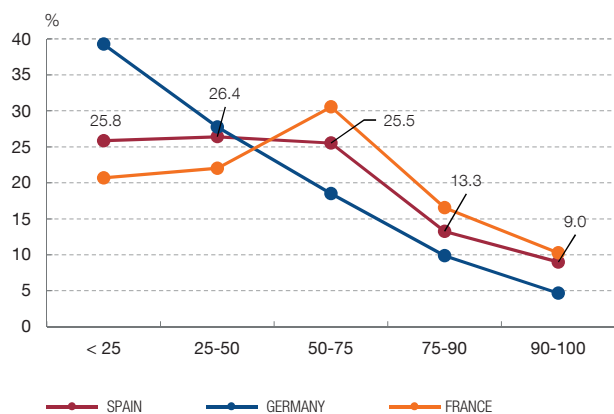
CHARACTERISTICS OF HOUSEHOLDS WITH PERSONAL LOANS

Spain has the highest proportion of households with personal loans whose reference person is economically inactive or unemployed, and the lowest proportion whose reference person has a permanent employment contract. Charts 2.2 and 2.3 depict the wealth distribution of households with personal loans in five European countries. A quarter of Spanish indebted households (25.8%) are in the bottom quartile of the wealth distribution; this is less than Germany, where the figure is 40%. By contrast, the percentage of households with personal loans and assets in the bottom quartile of the distribution is higher than in Italy, where 20% of households with personal loans are in the bottom quartile of the wealth distribution.

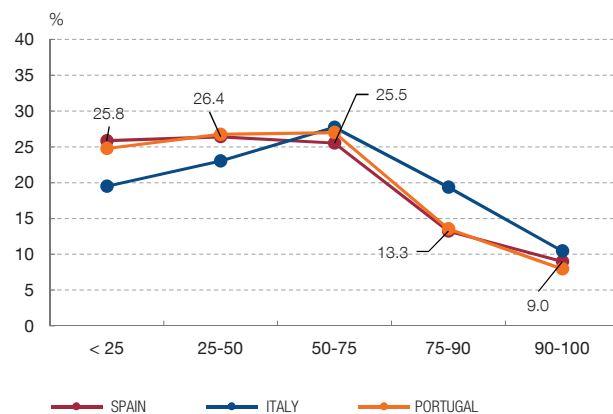
1 EMPLOYMENT STATUS OF REFERENCE PERSON IN HOUSEHOLDS WITH PERSONAL LOANS



2 GROSS WEALTH DISTRIBUTION BETWEEN HOUSEHOLDS WITH PERSONAL LOANS



3 GROSS WEALTH DISTRIBUTION BETWEEN HOUSEHOLDS WITH PERSONAL LOANS



SOURCE: Banco de España, drawing on data from the second wave of the HFCS 2014.



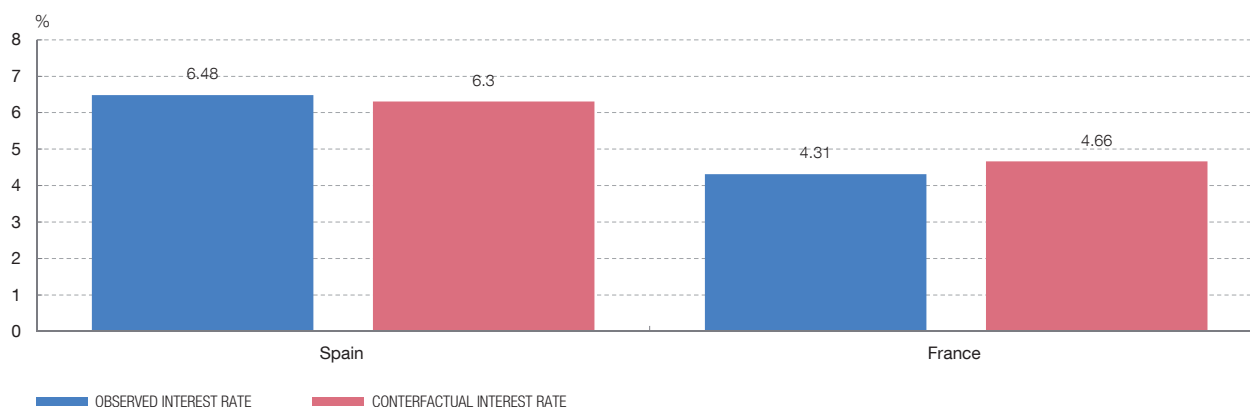
The fact that the characteristics of indebted households, such as the employment status of the reference person and the level of assets, explain only a small part of the interest rate differential between Spain and other euro area countries suggests that other factors are in play. Among these, a significant difference is that the Spanish labour market, as compared with the German or French markets, is characterised by high labour turnover and high income instability. Thus, in 2017, Spanish self-employed workers perceived the probability of losing their employment in the following 12 months as around 20%, which was 10 pp higher than the probability perceived by

Chart 3

PERSONAL LOAN RATES (OBSERVED AND COUNTERFACTUAL)

The chart shows, for each country, the observed average interest rates on personal loans (in blue) and an interest rate with the household characteristics of the other country (in red). The average interest rate was 6.48% in Spain and 4.31% in France. If households with personal loans in Spain had the same characteristics as those in France in terms of employment status of reference person, total assets and household size, they would pay an interest rate of 6.30% (18 bp lower than the observed rate). In the opposite case, French households with Spanish households' characteristics would pay 35 bp more.

PERSONAL LOAN RATE (OBSERVED AND COUNTERFACTUAL, WITH CHARACTERISTICS OF OTHER COUNTRY)



SOURCE: Banco de España, drawing on data from the second wave of the HFCS 2014.



German and French households, and 5 pp higher than that perceived by Italian households (see Table 2). In the same year, the probability of losing their employment in the following 12 months perceived by Spanish households with temporary employment contracts was 9 pp higher than the probability perceived by French households, 16 pp higher than that perceived by German households, and similar to that perceived by Italian households (see panel A in Table 2).

Likewise, for Spanish households with personal loans the probability between 2011 and 2014 of suffering a fall in income that entailed moving down an income quartile was 4.4 pp higher than for German households, although it was 3 pp lower than for Italian households.

In short, even when compared with German or French households with a similar employment status, indebted Spanish households face greater instability in their employment or business (see Table 2). Since job losses and business failures may lead to debt payment delays, we examine below the extent to which high interest rates may reflect income instability.

Differences in the assessment of risk

Ideally, in order to evaluate possible differences in the assessment of risk, we would compare the formulae used by each bank to assign the interest rate to each loan.

Table 2

MEASURES OF INCOME UNCERTAINTY

Spanish households with personal loans perceive a 17% probability of job loss over the next 12 months; this is 6.6 pp higher than for German households and 4.8 pp higher than for French households. Regarding income variability, the probability for Spanish households with personal loans of experiencing a fall in income that entails moving down to a lower quartile is 4.4 pp higher than for German households and 3 pp lower than for Italian households.

	Germany (%)	Spain (%)	France (%)	Italy (%)
Panel A: Perceived probability of job loss over next 12 months, by employment status (a)				
Employed or self-employed	10.4	17.0	12.2	18.1
1 Permanent employment contract	7.5	10.7	8.0	15.1
2 Temporary employment contract	27.2	43.5	33.8	45.8
3 Self-employed	10.2	20.2	10.4	15.3
Panel B: Probability that household income changes quartile between 2011 and 2014 (b)				
Income quartile in 2011 higher than in 2014	15.6	20.0	—	23.0
Income quartile in 2011 same as in 2014	55.1	54.0	—	54.3
Income quartile in 2011 lower than in 2014	29.3	26.0	—	22.6

SOURCE: Banco de España.

- a** Third wave of the HFCS 2017 (the first with subjective measures of job loss) and EFF 2017. Sample of households with some kind of personal loan. Perceived probability of job loss of household reference person. For Spain the EFF 2017 is used, which includes no imputation of the perceived probability of job loss.
- b** Panel B includes only panel households. The French sample has no panel component. The weights used in Germany and Italy are cross-section weights.

Drawing on the weightings established by financial institutions for the various characteristics of indebted households in each country, it would be possible to infer if different institutions assign different risks to households with the same characteristics. However, this information is not available.

Alternatively, if the interest rates reported by households predict events that lead to default, it may be inferred that financial institutions have information that allows them to predict default and to incorporate the risk into their loan assessment.⁶

The subset of households interviewed for the Spanish Survey of Household Finances (EFF) in consecutive waves between 2002 and 2014 can be used to analyse the relationship between changes in income and the probability of default. For households experiencing an increase in income that puts them in a higher quartile of the distribution, the probability of default is 1.7 pp lower than for those whose income remains in the same quartile from one wave to another (see Table 3).⁷ For their part, households experiencing a fall in income entailing moving down to a lower quartile

⁶ If financial market agents have rational expectations, the loan rate should reflect the risk of default and, therefore, have predictive content for the path of household income and future defaults (see Gerardi et al. (2010) or Becker et al. (2020)). Edelberg (2006) and Magri and Pico (2011) use disaggregated data to show that interest rates are higher among population groups with a higher risk of default.

⁷ See Casado and Villanueva (2018).

Table 3

HOW CHANGES IN HOUSEHOLD INCOME AFFECT THE PROBABILITY OF DEFAULT AND THE PERSONAL LOAN RATE

Personal loan rates are higher among households with greater income instability. Where a fall in household income between two consecutive waves of the survey entails moving down to a lower quartile, the probability of default rises by 4.6 pp. Before the decline in income, these households paid personal loan rates that were 0.45 pp higher than those paid by other households.

Dependent variable	Default between t and t+3	Interest rate in t (pp)
Estimation method	<i>Logit</i> (a)	OLS (b)
1 Income moves to higher quartile between t-1 and t+2	-1.7 (0.91)	-0.54 (0.224)
2 Income moves to lower quartile between t-1 and t+2	4.6 (1.9)	0.45 (0.218)
3 No change in quartile	5.4 (1.58)	7.47 (0.50)
Observations	3,744	1,734

SOURCE: Banco de España, drawing on a sample of indebted households (EFF 2002-2014).

- a** Marginal effects in percentage points, calculated in a logit model where the dependent variable is dichotomous and takes the value of 1 when a household defaults between one wave and the next. Other regressors include the income quartile in the initial wave, household size in the previous wave and changes between waves, the educational level of the household reference person, the survey year and the age group. Row 3 shows the level of probability of default in 2015 for a household whose income quartile does not change between waves and whose level of employment and household size remain the same.
- b** Mean regression model coefficients in which the dependent variable is the average interest rate of all the loans in percentage points (pp). If a household has more than one loan, the average weighted by the outstanding amount of each loan is calculated. The explanatory variables are the same as in the first column.

have a 4.6 pp higher probability of default than those that remain in the same income quartile (see column 1, row 2 of Table 3).

The personal loan rate set by financial institutions predicts this type of event (default), which, in principle, is not observable *ex ante*. The interest rates are 45 bp higher for households that subsequently suffer a fall in income between waves (see column 2, row 2 of Table 3) and 54 bp lower for those whose income subsequently increases (see column 2, row 1 of Table 3).

Insofar as personal loan rates predict falls in income for indebted households and such falls are more significant in Spain than in other euro area countries, we may conclude that part of the interest rate differential is attributable to the greater instability of income and employment in Spain.

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