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REGULATION, FORMAL AND INFORMAL ENFORCEMENT AND THE DEVELOPMENT OF THE HOUSEHOLD LOAN MARKET. LESSONS FROM ITALY

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Abstract

Regulation and contract enforcement may be important determinants of the development of the household loan market, as much as they are of the supply of corporate loans on which the literature has focused. This paper draws on the Italian experience to provide evidence that formal and informal institutions and banking regulation are crucial determinants of availability and cost of the household credit. Historically the Italian household credit market has been very small by international standards and its degree of development differs considerably across local markets. It has grown very fast over the last decade. This paper argues that the traditional small size reflects the joint operation of more limited legal and informal enforcement and tight financial regulation. Differences within Italy in the efficiency of the courts, in social trust and in exposure to regulation explain the geographical differences, while massive deregulation of market entry during the 1990s spurred supply and led to fast lending growth. This evidence, together with marked differences in the quality of legal enforcement, endowment of social capital and tightness of financial regulation across countries, implies that the forces found in Italy are likely to be a major explanation for the international differences in the size of the household loan market.

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1. Introduction[1]

The Italian household loan market has three significant features. First, it is much smaller than those of other countries at a comparable stage of economic development. In 2000 in Italy total household debt amounted to 43 percent of disposable income, about half the average of the euro-area countries and much smaller than the US figure of 107 percent.

Second, over the past decade lending to households has been growing very fast, at rates higher than those in the other main European countries. Setting the stock of outstanding loans to households in 1997 equal to 100, the index jumps to 183 in 2003 in Italy, compared with 152 in the euro area. The difference also holds when consumer credit and mortgages are considered separately. However, the Italian growth was not fast enough to close the gap in market size, and the Italian market remains small by international standards.

The third relevant feature is that households' ease in obtaining credit differs greatly and systematically across local markets. Guiso, Sapienza and Zingales (2004a), use data from the Italian Survey of Household Income and Wealth (SHIW) to construct an index of households' access to the credit market across Italian regions. Controlling for individual characteristics and for market risk, the probability to obtain a loan in Marche, the region with easiest access, is 50 per cent higher than in Calabria, where access is most difficult. Put differently, there is considerable dispersion across Italian regions in the degree of development of the market for household loans, as measured by this gauge.

In this paper we use these features to examine the determinants of the size of the household loan market. Geographical dispersion within Italy in the size of the market and time variation it is about the same as we observe in a cross-section of countries; this is a major advantage because by focusing on a single country, we can look at the determinants of the development of the household loan market in an environment where a large number of potentially relevant factors - which in a cross section of nations cannot be controlled for owing to lack of degrees of

freedom - are naturally held constant. This way we have a better chance of identifying the variables that are most likely to affect the development of the consumption loan market, shedding light on why it differs so much across countries.

First we document the three features that characterize Italy's household loan market and explain them in a unified framework. Needless to say, the size of the market may be small either because demand for loans is small or because supply is limited. With reference to Italy, in the 1980s and the 1990s, Jappelli and Pagano (1989) and Guiso, Jappelli and Terlizzese (1998) have concluded that small size is not due to a low propensity of Italian households to incur debt, but rather to a backwardness in the development of credit supply, as reflected in the traditionally wide interest rate spreads in the mortgage and consumer credit markets and the large down-payment required to obtain a mortgage.

These papers, however, have not inquired into the causes of the limited supply of loans or explained its rapid recent growth. Interest rate spreads and credit availability, in fact, are endogenous variables that reflect the structure and functioning of markets. This is what we focus on in this paper. Our contention is that the sharp increase in lending to households over the past decade (at annual rates above 10 per cent) was spurred by financial liberalization starting in the early 1990s. Competition has substantially boosted the supply of loans to households in local markets, reducing the cost of debt and making credit more easily available. A household's probability of having a loan application accepted was much higher at the end (and the cost of the loan much lower) than at the beginning of 1990s. The share of consumers refused and that of discouraged borrowers (households that did not apply because they expected rejection) diminished by four and two times respectively. The interest rate spread on mortgages has narrowed significantly accounting for almost half the reduction in mortgage rates in the second half of the 1990s.

In spite of the fast growth of recent years, the Italian household loan market remains small by international standards. We argue, and simple correlations support our thesis, that the main factor that has limited the market's development is inadequacies in formal and informal loan contract enforcement, which have substantially impaired supply. The Italian judicial system is much less efficient than other countries. The time to decision in a trial or to recovery of funds following default is much longer than elsewhere which discourages lending. Differences in

informal enforcement have analogous effect. Several indicators show that Italy has a smaller average endowment of social capital, defined as the set of relationships that tie people together in a community and bind them to obey to rules of conduct, above all honoring informal commitments. These correlations suggest that the lesser protection of lenders' rights has been an effective impediment to the development of the supply of credit to households in Italy.

Fortunately, the wide geographical variation in the degree of development of the market across Italian regions makes it possible to highlight the role of these variables while holding many others constant, such as the level of taxation and debt subsidies, the laws, religious beliefs and history that may affect individuals' preferences for debt. Judicial efficiency differs substantially across provinces and is closely correlated with access to credit. It is easier and less costly to obtain a loan in regions where courts are more efficient than where they function less well. Similarly, social capital and trust differ markedly across Italian provinces and the areas better endowed with social capital and generalized trust have more highly developed markets for household loans. Nor is inefficient legal enforcement countered by stronger informal enforcement, in fact, areas with better functioning courts have also more social capital, so that lack of both formal and informal enforcement combine to limit the incentives to extend credit. Countries differ considerably in their endowment of social capital and the working of the judicial system, and our analysis suggests that these factors should be of prime importance in explaining international differences in the size of the household loan market.

While appropriate reforms could improve judicial efficiency (see Marchesi, 2002), the endowment of social capital cannot be easily modified. It evolves only slowly over time and may remain dormant for centuries. As is argued by Williamson (2000), social capital is one of the constraints on a reform program, not an objective. Moreover, as Putnam et al. (1993) suggest and Djankov et al. (2003) formalize, social capital may be an ingredient of well functioning institutions, including courts, and its absence may jeopardize any reform. If this is so, the underdevelopment of the household loan market in Italy could constitute a comparatively persistent feature.

The rest of the paper is structured as follows. Section 2 documents the small size, fast growth in the second half of 1990s and interregional heterogeneity of the household credit market in Italy. Section 3 discusses the factors that could potentially account for its smallness,

drawing on the existing literature. Section 4 focuses on the effect of supply factors and exploits the variability of local credit markets to identify some determinants. Section 5 examines the growth of the market in the 1990s and argues that much of the expansion was due to financial liberalization. Section 6 concludes.

2. The features of the household loan market in Italy: small size, fast recent growth and geographical heterogeneity

Fast growth but small size

Figure 1 shows household lending as a share of GDP in Italy over the past 20 years for various types of loans and for the total. There are three noteworthy features. First total lending tripled between 1984 and 2003, reaching 17.4 per cent from 5.6 per cent in 1984. Second, most of the increase came after 1995, following moderate growth in the first half of the 1990s. After 1997, loans to households grew on average at 11 per cent per year, much faster than in the past. Finally, more than two thirds of the expansion was accounted for by mortgage lending, whose share of GDP increased from less than 4 per cent in 1984 to 13 per cent at the end of 2003. In this case too, growth was concentrated after the 1995.

As is shown in Figure 2, the growth in lending to households has been faster in Italy than in the euro area.[2] Setting the volume of loans outstanding in 1997 to 100, in 2003 it was 183 in Italy, compared to 152 in the euro area, 141 in France and 120 in Germany. Only Spain showed faster growth than Italy. If we consider the ratio of household loans to GDP the results are similar.

Yet despite this fast growth, the household loan market in Italy remains small by international standards. As a ratio to disposable income, the volume of household liabilities in Italy in 2000 was 43 percent, half the figure recorded in France and a third of that in Germany or the United Kingdom (Table 1, panel *A*). At the beginning of the 1990s, before financial

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[2] We focus on the 1997-2003, for which comparable data for the euro area countries is available. Comparability, however, is obtained for the set of households that includes "producer households" (sole proprietorships and partnerships with fewer than 20 employees); in Italy this last category accounts for 25 per cent of total lending to households and almost 10 per cent of mortgages.

liberalization, households' liabilities in Italy came to just 29 percent of disposable income, between a quarter and a third of the figures registered in the other G7 countries; most of the gap was and still is due to the different size of the mortgage market, equal to about 26 percent of disposable income in Italy, compared with values ranging between 55 and 108 percent in the other G7 countries. Data on the various components available for the euro-area countries show that as a share of GDP the Italian consumer credit is less than a third as large as in the euro area, while other credit components are on a par with the rest of Europe (Table 1, panel B).

To conclude, the size of the household credit market in Italy has been historically small; it grew fast in the second half of the 1990s, partly narrowing the gap with the other euro area countries, but it remains comparatively small.

Heterogeneity in development of the local markets

The second relevant feature of the household loan market in Italy is its remarkable geographical heterogeneity across provinces. Figure 3 shows the variation across Italian provinces in the volume of households' mortgages (the main component of household loans) as a share of provincial GDP in 1995. The size of the market can be taken as a proxy of its development. The figure shows great dispersion: the ratio ranges from a low of 1.22 percent in the province of Vibo Valentia to a high of 9.49 percent in the province of Genoa. This dispersion, which is about the same as one finds in a cross-section of countries, allows us to inquire into the determinants in an environment where a large number of relevant factors that in a cross-section of countries cannot be controlled owing to lack of degrees of freedom are naturally held constant, as they are national characteristics. These include taxation, banking regulation, culture, etc. Dispersion has also a clear pattern: provinces in the Center and even more those in the North tend to have larger markets than those in the South. However, there is also variation across provinces within the same areas, suggesting that the differences do not simply reflect a North-South divide. A similar conclusion is reached using an alternative indicator proposed by Guiso, Sapienza and Zingales (2004a) based on data on households' access to the credit market collected in the Bank of Italy Survey of Household Income and Wealth (SHIW). The indicator relies on the idea that in a more developed credit market it will be easier to get a loan. The SHIW allows one to identify consumers who are credit-rationed because they have failed to get

a loan or failed even to apply, though they would like credit (discouraged borrowers). With these data Guiso et. al. (2004a) estimate the probability of credit rationing as a function of a series of observable household characteristics, seemingly correlated with the quality of borrowers; the regression included regional dummies that capture the level of financial development. The values of the coefficients on the regional dummies, after being transformed into a financial development index, are reported in Figure 4. The picture again shows strong geographical dispersion in access to credit, with the Southern regions typically lagging behind those in the Center and in the North, but with significant differences even within these areas.

3. Can demand factors explain the size and the dynamics of lending to households?

The differences in the size and growth of the household loan market between Italy and other European countries could theoretically be due to differences in the demand for loans. Following this interpretation, one could argue that Italian households have traditionally relied little on the loan market, but recently, due to some shifting factor, households' demand for credit has increased faster than in other countries, where the level of demand has held constant (or moved less). In other words, if we plot a country's demand for household loans in the interest rate-loan demand space (adjusting for the size of the country), then household demand for loans in Italy up to the early 1990s would - the story goes - be closer to the origin than the Europe average but would shift considerably upward to the right in the second half of 1990s.

In what follows, we review some of the factors that could possibly explain the low level of household demand for credit in Italy. All in all, this thesis finds scarce empirical support.

<u>Propensity to incur debt.</u> One possibility is that in the past Italian households were strongly debt-averse and that this aversion has declined in recent years, boosting the demand for loans. A partial test of this hypothesis can be performed using the *World Value Survey* (WVS), which contains information on how consumers view saving and frugality in many countries, including Italy and the rest of the EU. Presumably, an individual who views savings and frugality as important will be more debt-averse. To gauge this we use the responses to a question concerning the importance of instilling the "virtue" of thrift in children. The question reads: "*Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important?* We code a 1 if the respondent lists as important "*Thrift, saving money*

and objects".[3] We pool data for the 1981 and 1990 waves and compute the share of individuals in each country who regard saving as important. In Italy, it is 23 per cent, no different from the rest of Europe (24 per cent). Moreover, between the 1981 and the 1990 survey the share of individuals who answer positively rose from 20 to 27 per cent (in the 1995 survey – the latest available to us – the question was not asked) suggesting, if anything, an increase in debt-aversion, which is hardly consistent with the upward trend in indebtedness. In sum, the WVS data suggest that the smaller size of the Italian household loan market is just not a reflection of debt-aversion. These data, though not available for more recent years, also suggest that the increased size of the market is unlikely to be due to an increased preference for debt.

A related explanation for the 1980s and the early 1990s is the thesis that the small market depends on Italian households practice of "saving to buy", which discouraged consumer credit and mortgages and boosted the propensity to save. As Figure 5 shows, there is a clear negative correlation between the aggregate propensity to save and the size of the consumer credit market. However, as is argued by Jappelli and Pagano (1994) and Guiso, Jappelli and Terlizzese (1994), the causality runs the other way: it is the difficulty of getting a loan – measured by the small size of the market - that causes the high saving rate. Countries where households find obstacles in accessing the credit market naturally have a lower level of debt and a higher saving rate.[4]

Welfare State. In Italy the government provides some education and health services that could affect households' demand for credit. In countries with a mainly private higher education system, such as the United States, households incur debt to finance investment in education. Similarly, the loan market can be used to smooth health shocks when the state provides only partial healthcare, again as in the US. More generally, government provision of education and health services crowds out private insurance and credit markets. But while this explanation could account for the gap in the size of the household loan market vis-a-vis the US, it cannot explain why the market is small relative to other European countries, such as Sweden, where the welfare state is definitely larger than in Italy.

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[3] The person interviewed is given eleven alternatives, ranging from imagination to obedience, and can select five as important.

[4] The implication is that a financial liberalization, relaxing financial constraints, reduces the household saving rate. In Section 6 we show that this implication is consistent with the drop in the saving rate that has taken place in Italy following financial liberalization.

Age-income profile and individual's discount rate. Following the life cycle theory, households borrow to smooth expenses when facing an upward-sloping age-income profile. In addition, their subjective discount rate will affect how much of their lifetime resources they prefer to consume in the current period and how much in the future. Accordingly, other things being equal, the demand for loans is greater, the steeper the age-income profile and the higher (for given level of the market interest rate) the rate of time preference. Guiso, Jappelli and Terlizzese (1994) show that the income profile of households in Italy does not differ from that in other countries, while the *World Values Survey* data show no significant differences in preferences for saving, suggesting that this route too cannot account for the small size of the Italian household loan market. A related channel is earnings uncertainty. The more variable earnings are, the more likely households are to need the credit market to smooth consumption. Thus, if earnings uncertainty is substantially lower in Italy, this could help explain the smaller size of the market. Dominitz and Manski (1997) and Das and Donkers (1999), using responses to questions on expected household income, show that perceived income uncertainty is much higher in the United States than in Europe, represented by Italy and the Netherlands; this might explain why the household loan market is larger in the US, but cannot explain why it is smaller in Italy than in the Netherlands, where earnings uncertainty is similar.

Informal lending and intergenerational transfers. Intergenerational transfers and informal loans from relatives and friends could crowd out formal household credit. If informal markets were deeper in Italy than in other countries, they might impede the development of formal markets. However, the data reveal that Italy is not exceptional in this respect compared to other countries. According to the 1989 SHIW, 2.7 per cent of households had loans from relatives and friends, about the same as in the US.[5] Again, in fact, reliance on informal loans could well be an effect rather than a cause of the underdevelopment of the household loan market. Informal loans and intergenerational transfers may be a way of overcoming impediments to market lending. Consistent with this interpretation, Guiso and Jappelli (1991) find that households that were turned down for loans or discouraged from applying for one, were more likely to receive a transfer or a loan from a relative or a friend. And Guiso, Sapienza and Zingales (2004b) show

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[5] The figure for Italy may be somewhat biased downwards due to the high incidence of families with working-age live-in children, and transfers within the family are not picked up in the survey.

that informal loans are more likely to develop in areas were there is less social capital – itself an important ingredient for the development of the credit market as we argue in Section 4. Additional evidence for this interpretation is the decline in the share of households receiving loans from friends or relatives during the 1990s (down to 1.5 per cent in 2000), consistent with the easier credit access in the second half of the 1990s, as we argue in Section 5.

Taxation. The fast expansion of lending to households in the second half of the nineties could also have been triggered by fiscal changes. In Italy, as in other countries, households can deduct home mortgage interest;[6] recently, tax incentives for house renovation (Law 449/1997) and for first-time home buyers (Law 448/1998) have been passed; these changes could have affected households' demand for housing and the demand for mortgages: between 1998 and 2002 the volume of real-estate transactions increased by 18 per cent and the share of mortgages in total outstanding household credit jumped from 32 to 46 per cent. It seems, however, that this effect - which is also found in other countries such as the UK and the Netherlands (Banks and Tanner, 2002; Rob, Hochguertel and Van Soest, 2002) – can explain only a small part of the growth in mortgages. Casolaro and Gambacorta (2005) find that the contribution of tax incentives to the growth of household loans between 1998 and 2003 is no more than one tenth. Concerning consumer credit, in Italy as in the other major countries, no tax deduction is allowed.[7]

In short, while in theory such factors, such as the extensiveness welfare state programs and of informal lending can affect households' demand for loans, on closer scrutiny they are unable to explain the relatively smaller size of the consumer credit market in Italy. Moreover, these factors do not seem to have changed significantly in recent years and so cannot account for the rapid growth in lending to households especially after 1997.

4. Why is the household loan market small and why does size vary across regions?

Now let us turn our attention to the other side of the market and focus on the factors that may restrain or shift the supply of credit. In particular, we focus on three factors that have been responsible for the smallness of the Italian market (the third, also for its recent growth): 1) the

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[6] For a survey of tax treatment of interest rate payments across nations, see Poterba (2002).

[7] The only exception is the Netherlands, where tax deduction for consumer credit is allowed but subject to a cap.

cost and the inefficiency of judicial system; 2) the limited endowment of social capital (resources that are available to individuals via their social linkages); 3) the tight regulation of the credit market and subsequent deregulation. Here we focus on the first two factors, postponing the discussion of financial regulation and liberalization to Section 5.

The cost and efficiency of the judicial system. Since a loan is an exchange of an amount of money today against the *promise* of more money at a specified date in the future, a crucial requirement is that the lender attaches sufficiently high probability to the borrower's keeping the promise. The credibility of the promise, or the probability of its being honored, depends on the formal institutions that enforce contracts – typically the courts – as well as on informal mechanisms for the enforcement of promises based on the punishment that members of a community receive from other members when they breach a promise (e.g., forms of social ostracism). Compared to other European countries, Italy is deficient on both accounts: formal and informal institutions for enforcing contracts, including credit contracts, are much weaker than in other countries at a similar stage of economic development. Table 2 reports four indicators of the degree of legal protection, and the cost and efficiency of the judicial system for a number of European and non-European countries. The first indicator is a synthetic measure of legal protection of creditors' rights, constructed by La Porta et al. (1998). The second is an index of court efficiency, as measured by the number of days it takes to recoup a bounced check, taken from Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2003). The third is an indicator of the cost of judicial proceedings, gauged by the cost of the judicial system as a percent of the country's GDP, drawn from the World Bank Doing Business Indicators.[8] The fourth is a measure of "*rule of law*", which is an "evaluation of the law and order tradition in the country"; the variable ranges from 1 (weak) to 10 (strong) and is published by the International Country Risk Guide (ICRG). We use the average of the 1982-95 values. In the international comparison, Italian laws in principle grant creditors a degree of legal protection that, though on the low side, is higher than in such countries as the US and France, suggesting that the problem is not one of weak regulation. In terms of the cost of judicial proceedings and rule of law, too, Italy is no different from the average European country. Where the difference is dramatic is in the actual functioning of the judicial system, i.e. the time needed to retrieve a loan: while in the EU as a

whole averages 240 days to collect a bounced check, in Italy it takes 645 days, the longest in Europe, nearly three times the average and half again as long as even the second most inefficient country, Austria.[9]

Social capital. Table 3 compares two indicators of the level of trust in the EU countries computed by Guiso, Sapienza and Zingales (2004c) using various waves of the Eurobarometer survey. The first indicator (shown in the first column) is the share of individuals that report they fully trust their fellow citizens; the second (second column) is the average share of citizens of other countries that report they fully trust the citizens of a specific country. Both measures indicate Italy as the country with the lowest level of social trust, with a huge difference with respect to the other European countries: only 19 per cent of Italians fully trust other Italians, compared to a European average of 48 percent. Moreover, only 11 per cent of the individuals from other EU countries report they fully trust Italians, half as many as the average for other EU citizens.

To strengthen the argument that limited formal and informal enforcement is important in explaining the development of the household loan market, we can exploit the marked differences in Italian local markets and correlate them with measures of court efficiency and social capital. Interestingly, the efficiency of the judicial system and the endowment of social capital, however measured, differ considerably across provinces with a pattern similar to that of the size of the household loan market and the accessibility of credit. Figure 6 shows the average number of years it takes to complete a lower-court trial in the province, using data released by the Ministry of Justice. Darker areas correspond to provinces with a less efficient judicial system. There is wide variation, ranging from 1.4 to 9.7 years, with a mean of 3.6 and a standard deviation of 1.25. Figure 7 shows an outcome-based index of social capital across provinces as measured by the volume of blood donation (number of blood bags per inhabitant) computed by Guiso, Sapienza and Zingales (2004b). Darker provinces are those better endowed with social

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[8] This is available on the web at: http://rru.worldbank.org/DoingBusiness/TopicReports.

[9] A survey run by the Bank of Italy on a sample composed of 90 major Italian banks reveals that the time required to recoup a loan following default varies from a minimum of two years in the case of private settlements to seven years, if done through a court. The portion recovered is about 38 per cent, with high variation depending on the characteristics and the conditions of the loan, such as the existence of collateral (Bank of Italy, Economic Bullettin, n. 34 and Generale and Gobbi, 1996).

capital. In this case too there is great geographical variation; the average level of donation is three bags per hundred people, but there is a lot of cross-sectional variability. Some provinces have no donations; others as many as 11 bags per hundred inhabitants. Furthermore, formal and informal enforcement measures have a clear pattern: provinces in the North and in the Center have more social capital and more efficient courts. Fabbri and Padula (2001) show that where courts are more efficient, households have easier access to the loan market, and loans can be obtained at lower rates and with less collateral. Guiso et al. (2004b) show that, even after controlling for differences in court efficiency, the endowment of social capital has a strong additional effect on households' access to credit: a household in the province with the highest level of social capital has a probability of being credit-constrained that is three times lower than one in the province with the lowest. Also, in areas with more social capital households are less likely to take loans from friends and relatives, which jibes with the idea that informal loans substitute for poorly working credit markets. In addition Guiso et al. (2004b) show that the effect of social capital does not capture some unobserved local characteristic that is correlated with the availability of credit; in fact, social capital retains its effect on access to credit even when they use the level of social capital in the province of origin for those in the sample who have moved, and add to the regressions dummies for the province of residence to control for unobserved heterogeneity. In sum, poor legal enforcement (length of trials) and limited informal enforcement through social trust independently constrain the supply of loans to households. Furthermore, since areas where the courts are less efficient are also those with little social capital, the two channels of enforcement cumulate to increase inter-regional differences. Since, as Tables 2 and 3 show, countries differ markedly both in quality of creditors' legal protection and in endowment of social capital, the evidence for Italy suggests that these features are likely to be important determinants of the international differences in the degree of development of the household loan market.

5. Financial regulation, financial liberalization and the supply of household loans

The factors listed in the previous section discourage credit supply and help explain the small size of the household loan market in Italy. However, they cannot explain why the Italian market grew faster than that of the euro area in the second half of the nineties. There is no evidence that

the Italian judicial system has become more efficient in the 1990s: the average number of years to obtain a lower-court sentence held constant at 3.45. And the endowment of social capital evolves very slowly, in a secular process. Hence this factor helps us to understand differences in financial development across regions or countries, but it cannot explain swift changes in credit supply, such as those observed in Italy in the past decade.

To fully explain the smallness of the household loan market in Italy and its dynamic recent growth, we must consider the regulation to which the Italian credit markets have long been subjected to and the deregulation of the nineties. Following our interpretation, credit to households in Italy was limited in the past not only by poor enforcement of loan contracts but also by strict regulation that made credit scarce and interest rates high. Prompted by the financial deregulation of the 1990s, increased competition in the banking and financial markets brought a sharp decline in interest rates, greatly easing access for many households. Therefore, in the interest rate-loan demand space Italy experienced a movement *along* the households' demand for loans in the second half of the 1990s without any shift in its location due, say, to a structural change in consumers' preferences. This effect was compounded by the fall in interest rates common to all European countries, which accounts for the upsurge in household loans in the second half of the 1990s even in countries with large and well-developed markets. In other words, financial liberalization in a strictly regulated economy such as Italy before the process began, explains the faster growth of household loans in Italy relatively to the other EU countries.

First we trace the role of strict regulation and the subsequent financial liberalization and then discuss the impact of the latter on the cost and availability of credit to households.

Credit market regulation and financial liberalization. Over the past two decades the Italian credit market has experienced massive deregulation, progressively removing all the restrictions and limits to competition imposed by the 1936 Banking Law. The main feature of that Law were strict regulation of entry, limitations in the geographical span of lending by type of bank and complete separation of short from long-term lending. This had two consequences: first, a severe limitation on competition in local credit markets; second, with specific reference to lending to households, a limited number of mortgage lenders, since only the few banks specialized in long-term lending could extend mortgages.

The 1936 Banking Law essentially froze the opening of new branches; entry regulation ended up having a different impact across regions, which has affected the development of local credit markets. For example, areas with many savings banks were less affected by the limits on branching (hence less influenced by regulatory limits to competition) because savings banks were allowed to open branches in a wider geographical area – the region – than mutual banks, typically operating within the boundaries of a province. Guiso, Sapienza and Zingales (2003) show that these geographical differences in regulation explain a good part of the regional variation in the availability and cost of credit to households (Figure 4). Overall, their results strongly support the notion that the freezing of bank expansion imposed by the 1936 Banking Law was a major institutional bottleneck in the supply of credit, which compounded the poor quality of the judicial system and the limited endowment of social capital to discourage lending to households.

Regulation of entry remained substantially unchanged until the 1980s. The first step toward deregulation was taken only in 1978, when the Bank of Italy approved a plan setting a "desired" number of branches in each province. Authorizations, then, were determined on the basis of this plan. In 1984 the geographical restrictions to lending were broadened so greatly as to become non-binding (Costi, 2001). Then, in 1986, the branching procedure was eased by introducing tacit consent with a 60-day deadline for response. However, it was only in 1990 that authorisations and restrictions on entry and the opening of new branches were formally lifted, giving rise to a massive increase in the number of bank branches. As Figure 8 shows, between 1990 and 2003 the number of branches almost doubled, from 16,000 to 30,000 and, as Guiso et al. (2003) argue, the increase was larger in the regions that had been more exposed to the 1936 regulation. The rise in the number of branches is all the more remarkable as the number of banks decreased by 20 per cent (Figure 8), prompted by the wave of restructuring and mergers and acquisitions in the banking industry. As a consequence, the number of different banks present in each local market has increased in all geographical areas (Figure 9), assuring that the benefits of increased competition spread out geographically. One piece of evidence consistent with this view is reported in Figure 10, which shows a strong positive provincial correlation between the share of households with debt and the number of bank branches per inhabitant over the period 1996-2003.

The second important step in the liberalization process was the 1993 Banking Law, which ended the operational and maturity specialization of Italian banks and adopted universal banking. For our purposes the most important effect is that participation in the mortgage and consumer credit markets was extended to all banks, dramatically sharpening competition and increasing the supply of credit to households. This was made possible by massive privatization, which in a few years put half of the previously State-owned banking industry under private control, providing strong incentives for profit maximization. Table 4 summarizes the main features of the old regulations and of the deregulation process and illustrates the most important changes in the household loan market. The Appendix details the changes introduced by liberalization and its effects on household credit market, as a well as a number of features of household credit contracts in Italy compared to other countries. One noteworthy consequence of liberalization was the entry of foreign intermediaries specialized in mortgage and consumer credit, which increased competitive pressure and improved the "state of the art" of Italian banks in screening loan applicants and monitoring clients by use of advanced credit scoring techniques and warning systems.[10] As a consequence of increased competition credit to households has become more easily available and its cost has been drastically reduced. Now let us discuss the impact of financial liberalization on the rate of interest on household loans and on the availability of credit.

<u>Interest rates on loans.</u> It takes time for financial liberalization to show its effects; this is because entry into new markets, either by opening new branches or by operating a new line of business, such as household mortgages, comes some time after the regulatory impediment has been removed. In fact, the effects of the liberalization on the household loan market are visible after the mid-1990s. Figure 11 shows the evolution of the interest rate on long-term household loans and its spread vis-à-vis the average interest rate on long-term bank funding (CDs and bonds). The nominal interest rate starts dropping after 1995, followed with a lag by the real rate. Over the three year-period 1997-2000 the real interest rate on long-term loans falls from about 8.5 to

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[10] The use of *credit scoring* techniques for extending mortgages and consumer credit has spread greatly in recent years: at the end of 2002 in each Italian province there were, on average, 11 banks that relied upon credit scoring techniques, compared with just 5 in 1999. There is evidence that credit scoring techniques have a positive effect on the supply of loans in local credit markets. For instance, Bofondi and Lotti (2003) find those banks that use credit scoring techniques to screen applicants have increased their mortgage supply by more than other banks.

4 percent. The interest rate spread follows the same pattern, with a sharp decline from around 5 percent in 1996 to 2 percent in 2000. Since then it has held approximately constant. Thus, a sizeable part – between half and two thirds, depending on the reference period - of the fall in the real interest rate on mortgages in the second half of the 1990s is due to the reduction in the spread. This is consistent with our interpretation that increased competition following liberalization brought about a significant drop in households' cost of borrowing and increased the demand for loans. The rest of the fall in the interest rate is due to changes in macroeconomic conditions, and in particular to the decrease in nominal and real interest rates realized to achieve the Maastricht criteria for admission to the single currency and to the worldwide reduction in interest rates during the 1990s.

Credit availability. The positive effect of financial liberalization on the supply of household lending is also supported by evidence on changes in credit availability. Table 5 reports data on households' access to credit collected in the Bank of Italy Survey of Household Income and Wealth for the period 1989-2002. The first column shows the share of households that applied for a loan, either for home purchase or to smooth consumption. This share increases markedly after 1995. The second column shows the share of individuals whose application was rejected, and the third shows the share that was discouraged from applying by expectations of rejection. The fourth column groups together rejected consumers and discouraged borrowers, i.e. all those consumers who can be classified as liquidity-constrained, and reports them as a fraction of the total sample interviewed. The last column shows the share of applicants who have been turned down. Interestingly, after 1995 access to credit becomes much easier. For instance, while about half of those applying for credit were turned down up to 1995 (last column), in 1998 only one applicant out of four was denied, and in 2002 only one out of ten. Furthermore, the share of discouraged borrowers is halved between the early 1990s and 2002 (third column), suggesting that consumers were quick to realize that loans were now easier to get. This result shows that, besides the significant reduction in the cost of debt, competition also made access to the loan market much easier.

To sum up, financial liberalization has benefited consumers because they can borrow at a significantly lower cost and because they can get a loan much more easily that when markets

where tightly regulated. These two features explain the fast growth of household loans that otherwise could be difficult to account for.[11]

6. Implications of financial liberalization for households savings and geographical differences in obtaining loans

To offer additional evidence that financial liberalization was the main force behind the development of the consumer loan market during the 1990s, we focus on two additional events deriving from liberalization: the reduction in households' saving rate and the faster development of credit in the parts of Italy that had been more financially repressed, i.e. where regulation had been more binding.

Financial liberalization and the household saving rate

If before liberalization households were subject to liquidity constraints either through rationing or because of the large *spread* between the lending and borrowing rate, then their consumption plans were constrained by availability of funds, inducing them to save more than they would have wished. Financial regulation thus had the effect of boosting the overall saving rate, which has traditionally been high. Following the same logic, financial liberalization should have lowered the saving rate either because previously credit-constrained households increased current consumption or because they had less need to accumulate funds to purchase a home or a durable good. In both cases, greater availability of consumer or mortgage credit reduces current saving. This is consistent with the sharp reduction in the households' saving rate during the nineties. Figure 12 shows a clear negative trend starting in the second half of the eighties, but after 1996, following liberalization, the saving rate drops by more than 8 percentage points in

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[11] To get a sense of the contribution of financial liberalization to the growth of household loans, Casolaro and Gambacorta (2005) estimate a reduced-form model for household loans using time-series data for the period 1984-2003 and letting the growth in household loans depend on the real interest rate, GDP growth and other controls that affect the demand (tax incentives, the average price of housing, etc.). They capture the effect of financial liberalization on household credit not reflected in a lower interest rate with a dummy variable that is equal to 1 after year 1997. According to the model's estimates, more than a third of the growth of household loans between 1997 and 2003 is due to the reduction in the real interest rate and a quarter is explained by financial liberalization. Thus, if half the drop in the cost of household credit is due to increased competition, financial liberalization alone can explain almost half the growth in lending to households after 1996.

just three years. This is the sharpest fall in the period covered and is consistent with episodes of financial liberalization in other countries, such as the United Kingdom and the United States (see, amongst others, Muellbauer and Murphy, 1997; Follain and Dunsky, 1997; Leece, 2000).

The growth of mortgages and financial liberalization: differences across local markets

If the growth of household debt in the nineties was due mainly to the increased supply of credit thanks to liberalization, then households' debt should have grown most rapidly in the most financially repressed areas, where liquidity constraints were more binding. To check this, we exploit the considerable differences in the degree of development of the household loan market across provinces, which as we have seen, are driven partly by differences in social capital and legal enforcement but partly by differences in the stringency of the 1936 Banking Law, as is shown by Guiso et al. (2003).[12] Financial liberalization should have triggered a process of convergence in the degree of development of the market for household loans because after deregulation the areas most penalized by the 1936 law show more entries implying that, other things equal, the growth rate of loans to households in the years after liberalization should be higher in the more financially repressed provinces. Consistent with the foregoing, we assume that financial liberalization reveals its effects only in the second half of the nineties. We have thus regressed the cumulative growth rate of medium and long-term household loans in a province between 1996 and 2003 on the ratio between the stock of medium and long-term household debt and GDP at the beginning of 1996. Table 5 reports the results of the estimates. There is a significant negative correlation between the growth rate of household loans and the size of the pre-deregulation market (scaled by GDP). This result is robust to the inclusion of the level of GDP per capita in 1995 or the growth rate of provincial GDP; moreover, the effect is also robust and actually increases if we insert a dummy variable for the Southern provinces to account in a simple way for differences in the initial level of development of the market due to differences in social capital and judicial efficiency. Furthermore, the effect is economically

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[12] We focus on the mortgage market because the effects of deregulation have been particularly strong in this market segment, highly limited in the past by restrictions on entry and the opening of new branches. Moreover, the 1993 Consolidated Law on Banking, which ended the operational and maturity specialization of Italian banks, had a greater impact on this market than on the consumer credit segment. For an analysis of the effects on credit loans to firms see Guiso et al.(2003).

relevant: in the provinces with the highest value of the household-debt/GDP ratio prior to liberalization (Genoa and Siena), the volume of lending to households increases by 11.5 percentage points less than in the province with the lowest ratio (Catanzaro), supporting the idea that at the margin financial liberalization has benefited more the most financially repressed areas.[13]

7. Conclusions

This paper has surveyed demand and supply factors to explain three important features of the household credit market in Italy: *i*) small size; *ii*) marked geographical differences in access; *iii*) remarkable growth in the second half of the nineties.

We have argued that the smallness of the market cannot be ascribed to compressed demand, driven either by adverse preferences for borrowing by Italian households, crowding-out by government supply of debt-intensive services or by a large informal market for loans from relatives and friends. We have shown that there are no significant differences in households' propensity for debt between Italy and the other developed countries. We conclude that in the past the size gap depended on supply bottlenecks due to an inefficient judicial system, limited informal enforcement and strict regulations. Italy's geographical heterogeneity in the availability of household credit enables us to test this hypothesis in an environment where a number of potentially important variables that affect demand or supply can be held constant: the efficiency of the courts, the availability of social capital and the strictness of regulation all vary significantly across regions and provinces, and the pattern correlates with the degree of development of the local household credit market.

The remarkable growth of household credit in the second half of the nineties mostly reflects the liberalization process, which got under way in the mid-eighties and was formally completed with the 1993 Banking Law. Financial liberalization spurred the opening of many branches and massive new entries in all local markets, and the shift to the universal banking model produced a

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[13] In order to test the robustness of these results to changes in the initial date of the estimation period, we have regressed the cumulative growth of medium and long-term household loans in a province between 1997 and 2003 on the ratio between the stock of medium and long term household debt and GDP at the beginning of 1997. The results remained unchanged.

significant increase in the number of banks and other intermediaries offering mortgages and consumer credit. This, together with entry of foreign banks, has greatly increased competition, lowered interest rates and made loans much more readily available.

The study focuses on Italy but its conclusions are of a more general validity. The considerable international variation in the degree of protection of creditors, in social capital, and in regulatory strictness strongly suggests that these are likely to be major factors explaining international differences in the development of the consumer credit market.

Appendix: Financial regulation and liberalization in Italy

In Italy, important measures to liberalize and deregulate financial markets began in 1985. Complete liberalization was achieved with the 1993 Banking Law (Testo Unico Bancario, TUB).[14]

At the start of the 1980s the Italian banking system was still strictly regulated. Foreign exchange controls were in place; the establishment of new banks and the opening of new branches were subject to authorization;[15] competition was curbed by mandatory maturity specialization, with special credit institutions operating at medium-long term and commercial banks at short term; the quantity of bank lending was subject to a ceiling.

Between the mid-1980s and the early 1990s all these restrictions were gradually removed (Cottarelli et al. 1995; Passacantando, 1996; Angelini and Cetorelli, 2002). In particular: *i*) the lending ceiling was abolished in practice in 1985; *ii*) foreign exchange controls were gradually lifted between 1987 and 1990; *iii*) branching was liberalized in 1990; *iv*) universal banking was adopted with the 1993 Banking Law, allowing all intermediaries to engage in all forms of banking business, completing operational and maturity de-specialization.[16] The mortgage and consumer credit markets have benefited greatly. The main characteristics of Italian banking deregulation are summarized in Table 4.

Banking structure. The rationalization of the Italian banking system and the more intense competition that followed the 1993 Banking Law resulted in a steady decline in the number of credit institutions. From 1993 to 2003 the number of banks declined from 1,037 to 788, while the number of branches rose from 22,298 to 30,504 (Figure 8).[17] Despite the decline in the total number of banks, the number of different banks present in each local market increased in all geographical areas (Figure 9). Mergers played an important role in this

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[14] Italian financial reforms during the 1980s and early 1990s are discussed in Gambacorta (2003). For an analysis of the main differences between the Italian banking system and the other main countries of the euro area see Gambacorta, Gobbi and Panetta (2001).

[15] Before 1987 the opening of new branches was authorized by the Bank of Italy on the basis of a 4-year plan that established the number of branches in each local market on the basis of estimated local needs for banking services.

[16] For more details on the 1993 Banking Law see the Bank of Italy Annual Report for 1993.

[17] Most of the decrease in the number of banks is accounted for by the decline in the number of mutual banks, which fell from 671 to 456 between 1993 and 2003; in terms of market share, at the end of 2003 mutual banks covered about 6 per cent of total loans, compared with 0.3 in December 1993.

transformation. Between 1996 and 2000, bank mergers accounted for nearly 40 per cent of the total value of merger activity in Italy, compared with 22 percent in the euro area.

Market concentration. At the end of 2000 the five largest Italian banks accounted for 23 per cent of total assets, compared with 39 per cent for the top five banks in the euro area as a whole (ECB, 2002). Considering the largest five banking groups, the degree of concentration (54 per cent of total assets) is closer to that in the euro area. Even from the specific perspective of the mortgage market, concentration in Italy, measured by the Herfindahl index, is now more or less on a par with the main industrialized countries (Mercer Oliver Wyman, 2003).

Market participation and entry. Until the 1993 Banking Law there was mandatory maturity specialization; "special credit institutions" operated at medium-long term and commercial banks at short term. Now all banks can extend mortgages and grant consumer credit.

The Italian mortgage market experienced high mobility in the second half of the 1990s, with sharp changes in market shares and modification of the characteristics of the intermediaries. These changes were more pronounced than in the other European countries, suggesting that, despite M&A activity, the Italian market was experiencing a formidable increase in competition (Mercer Oliver Wyman, 2003). In particular, the entry of British and German mortgage specialists significantly increased competitive pressure and prompted product innovation. As for consumer credit, Law 142/1992 mandated greater transparency in contractual conditions and in the computation of the "actual" interest rate (which includes accessory and administrative expenses). These changes fostered resort to consumer credit on the part of households, which had been particularly averse to this form of debt. The experience of foreign intermediaries (especially French ones) that hold stock in Italian banks and other intermediaries specialized in consumer credit has improved the "state of the art".

Government intervention. Government intervention in the Italian banking system has been steadily declining. The share of total assets held by state–owned banks and groups plunged from 68 per cent in 1992 to 12 per cent in 2000, one of the lowest in Europe. Concerning the mortgage and consumer credit markets, there are few relevant public measures. Subsidized loans or borrower guarantees are very limited; in 2003 only 2 per cent of medium and long-term lending carried subsidized (capped) interest rates. On the ranking proposed by Mercer

Oliver Wyman (2003), together with Spain and the United Kingdom, Italy is one of the countries with the least direct government involvement in the banking sector.

Product choice. Both in the mortgage and in the consumer credit market, the range of products has expanded considerably over the last ten years. The increase in product variety has facilitated households' reliance on mortgages and consumer credit. At the beginning of the nineties mortgages were mainly variable-rate, with a standard 10-year maturity, and were granted only for house purchase. The range of contract characteristics has widened greatly since then. The interest rate can now be fixed, variable, mixed (allowing the borrower to switch from fixed to variable and vice versa at a specified date), capped, balanced (partly fixed-rate and partly indexed). Contracts generally range from 5 to 20 years. Longer maturities are granted but with additional conditions. Mortgages are readily available not only for home sole proprietorship but also for other purposes, in practice allowing the possibility of second mortgages. Additional conditions are generally required for shared ownership. To limit credit risk, mortgages are not granted to consumers who have declared bankruptcy in the past or whose income is not demonstrable.

Product distribution. Distribution of mortgages in Italy is almost completely branch-driven (as in France and Germany). Recent regulations issued by the Bank of Italy allow financial companies to promote and place mortgage loans, by signing agreements with banks. This product distribution system mainly reflects the fact that before extending a loan banks build a deposit relationship with the client. Placement via independent advisor and direct purchase of mortgages via phone or internet still account for a small share of the market, because by law mortgage contracts must be stipulated before a notary. These channels are well developed only in the UK and the Netherlands.

Renegotiability of interest rates. More than three quarters of new credit for house purchase in 2003 in Italy was at variable rates or rates renegotiable in less than one year. This structure is strongly influenced by Italy's long tradition of variable rates, due especially to: i) recent periods of high inflation and ii) a funding model for Italian banks that is mainly based on current accounts and deposits repayable at notice.

As Figure A1 shows, the incidence of variable interest rates in Italy is similar to that in Spain (79 per cent), Ireland (78), Finland (89) and Portugal (99), but much higher than that

in Germany (15 per cent) and in France (22). Except for France, these figures are quite similar to those reported in Borio (1996) for 1993, indicating that the renegotiability of interest rates in mortgage markets follows specific national patterns. In the United States more than three quarters of mortgages are at fixed rates, but this is substantially influenced by the fact that early repayment is generally possible without penalty. Differences in the weight of variable interest rates for consumer credit are less evident: one quarter of total consumer credit in Italy is at variable rate, against 27 per cent in the euro area.

Transaction and switching costs have been rapidly reduced in Italy: down payment and early repayment costs are now in line with those applied in other banking systems.

Down payment. The cost of a loan depends not only on interest rates and commissions but also on collateral requirements. In recent years, in Italy the loan-to-value ratio (LTV) has rapidly increased. In the seventies the maximum LTV for a mortgage was set by regulation at 50 per cent; in the eighties regulation progressively eased and the maximum LTV ratio reached an average value of 56 per cent (Jappelli and Pagano, 1994). In 1995 the maximum LTV ratio was raised at 80 per cent (Interministerial Credit Committee resolution of 22 April 1995). Currently, this requirement is often accommodated in such a way that LTV can exceed 80 per cent and be as high as the market value of the house. In this case additional guarantees are requested.

In spite of these changes, down payments in Italy still remain relatively large by international standards (Mercer Oliver Wyman, 2003). In 2001, the typical LTV ratio ranged from a low of 55 percent in Italy to a high of 90 percent in the Netherlands (Figure A2); in Germany, the United Kingdom and Spain it was intermediate (67 to 70 per cent). The high Dutch LTV partly reflects tax incentives. It is worth noting that in Denmark and Germany, though LTV is relatively low, the constraint can often be accommodated by using a secondary loan, so that cap lending can be as high as 80 to100 per cent of the market value of the house. The typical mortgage maturity is positively correlated with the loan-to-value ratio, averaging 15 years in Italy, for example, and 30 years in the Netherlands.

Early repayments. In Italy early repayment of a mortgage is possible but at a high cost, so that in practice few consumers exercise the option. Borio (1996) argues that this feature is shared by the vast majority of industrialized countries. At the two extremes are Austria, where early repayment is virtually impossible, and Denmark and United States, where it is

cost-free. This means that the relatively high share of long-term and fixed-rate financing in the United States (respectively 85 and 75 per cent of the total) overstates the effective maturity of the contracts and understates the freedom to adjust terms.

Figures and tables

Figure 1. Loans to households as a percentage of GDP

The figure shows the evolution of household loans as a share of GDP by type of loan. Data are from the national statistical institute (Istat) and the Bank of Italy. The right-hand axis refers to consumer credit and other loans.
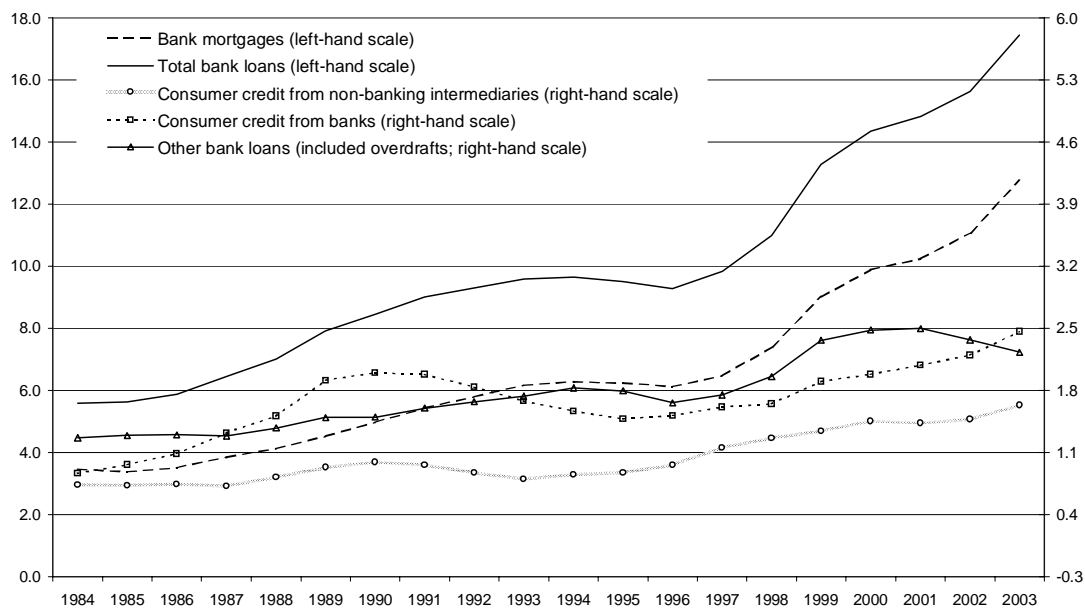
Figure 2. Credit to households in the main euro area countries

The figure shows the trend in household loans in the main countries of the Euro area after the mid-nineties. Data on consumer credit are end-of-period stocks; 1997=100. Source: our computations on ECB and National statistics.
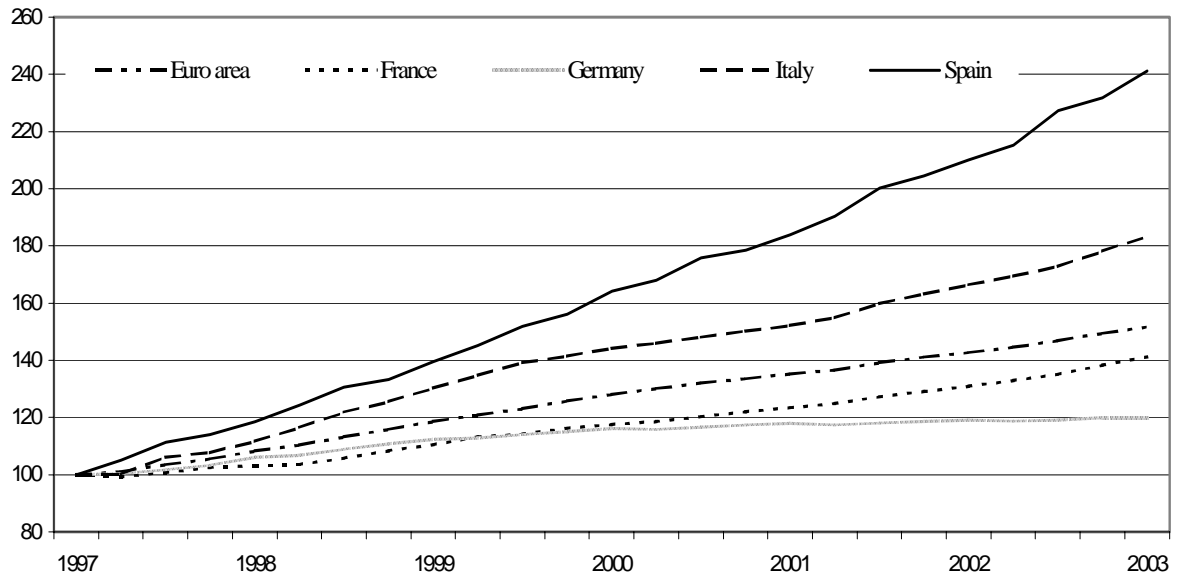
Figure 3. The size of the households loans market across province

The figure illustrates the differences in the development of lending to households across Italian provinces in 1995. It shows the end-of-period stock of medium and long-term loans to households as a percentage of GDP in the province. Medium and long-term data are from the Bank of Italy while data on provincial GDP are computed from Istituto Tagliacarne. Darker shaded provinces are those with higher loan/GDP ratio.

Percentage values per province

- 7.49 to 9.49 (19)
- 6.48 to 7.49 (20)
- 5.19 to 6.48 (21)
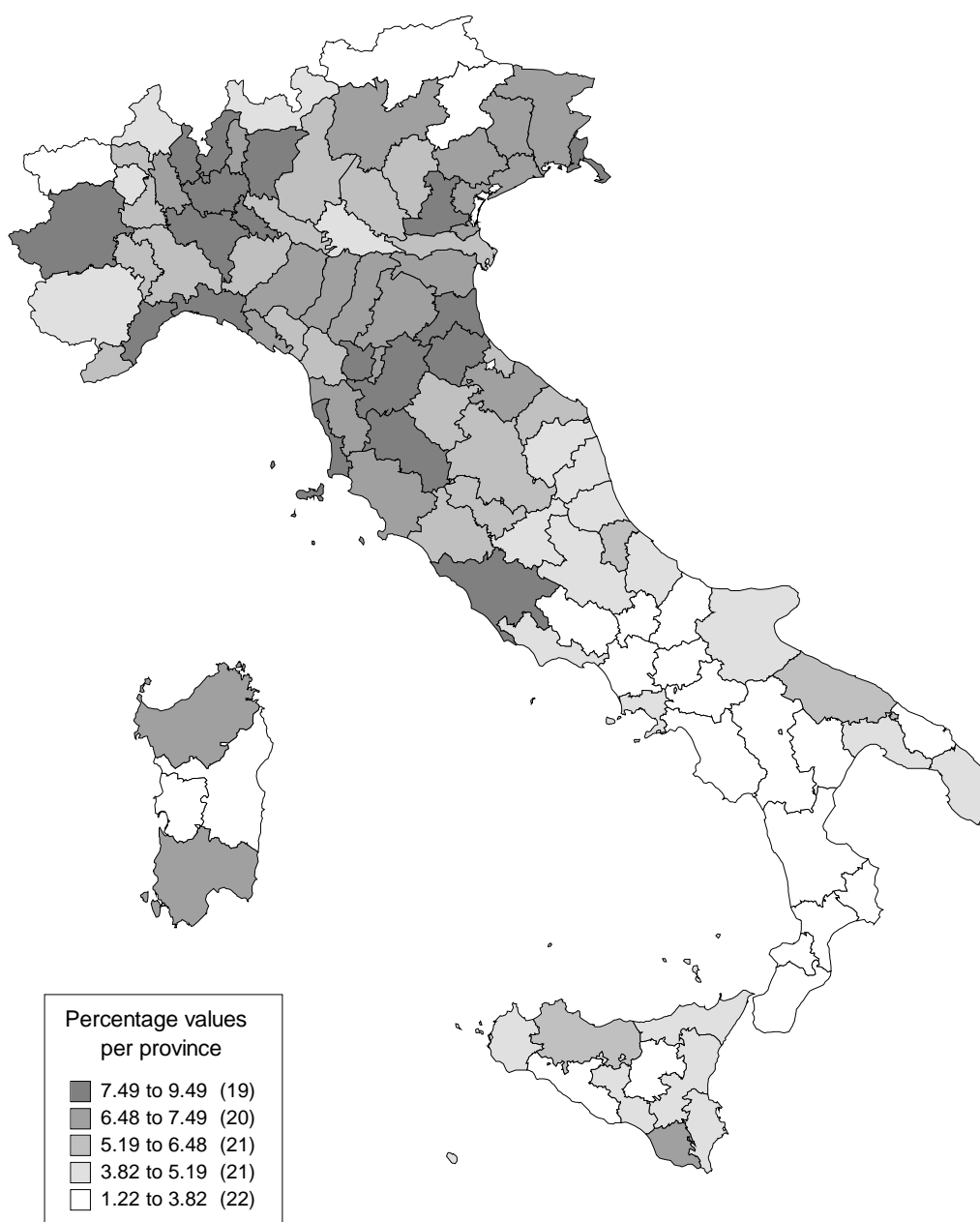- 3.82 to 5.19 (21)
- 1.22 to 3.82 (22)

Figure 4. Ease of access to the household credit market by region

The figure shows an indicator of the ease with which a household obtains a loan across regions. It was produced by Guiso et al. (2004a) regressing an indicator for whether a consumer was rejected for a loan or discouraged from applying on a number of personal characteristics and regional dummies. The coefficients of the regional dummies are then used to obtain the indicator, computed as 1 – (value of the coefficient on the regional dummy)/(largest regional dummy coefficient). Access to credit is easier in darker regions.
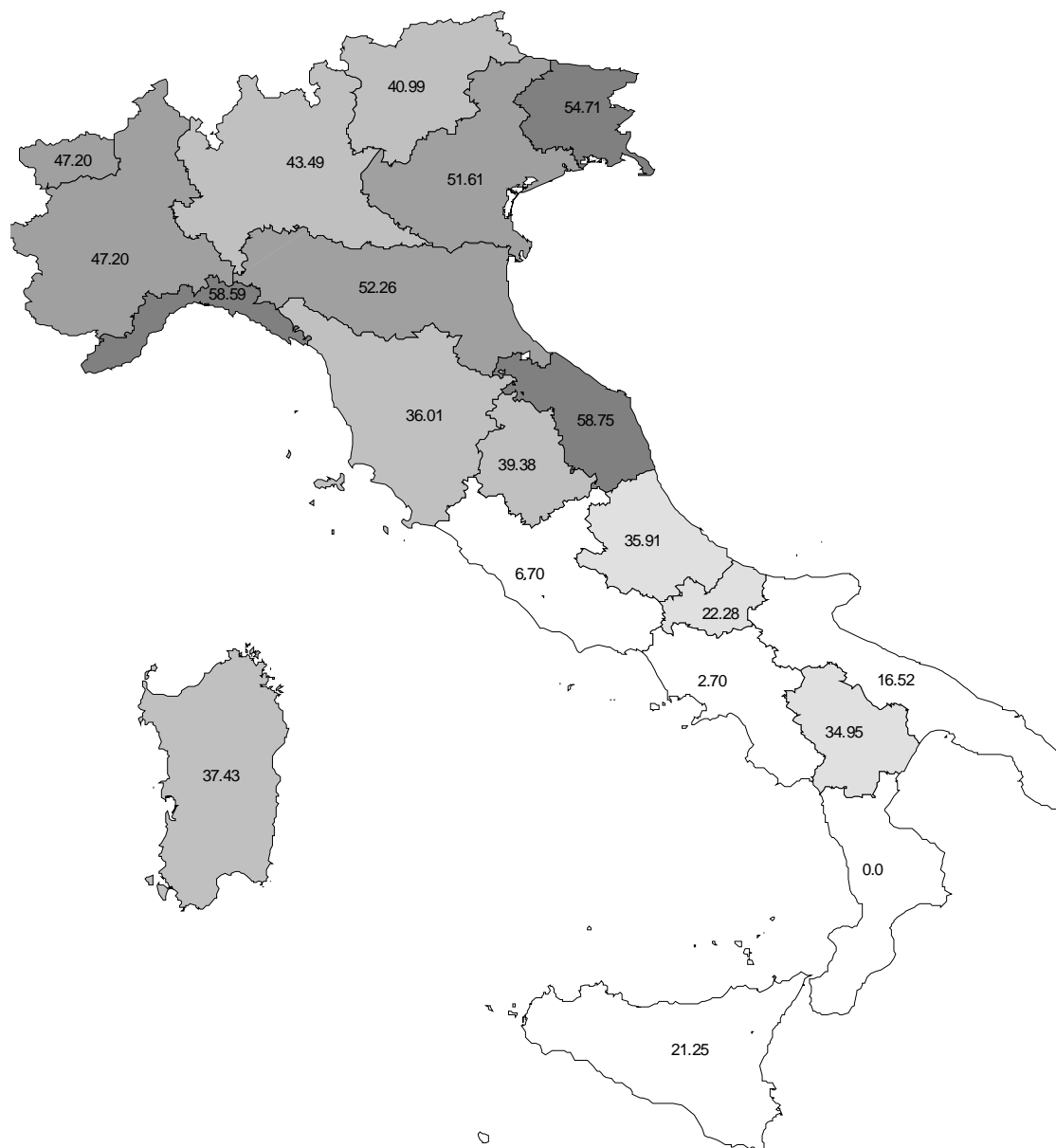
Figure 5. Households' propensity to save and consumer credit

The figure shows the relation between households' saving rate and the size of the consumer credit market. Data on consumer credit are from the ECB; data on households' propensity to save are from ISTAT. The coefficient of correlation is –0.70**.

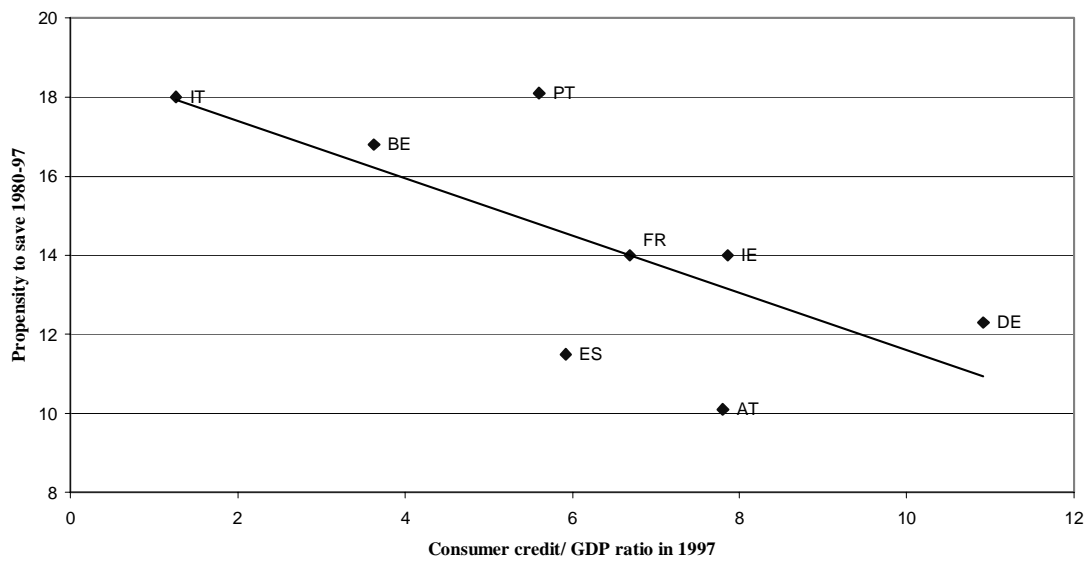# Figure 6. Average length of trials by province

The figure shows the number of years it takes to obtain a judgment in a civil suit in Italian provinces. Darker areas correspond to less efficient courts. Data are obtained from the Ministry of Justice.

Length of trials by province
average length in years

- 4.8 - 9.67 (19)
- 3.87 - 4.8 (19)
- 3.21 - 3.87 (21)
- 2.61 - 3.21 (21)
- 1.44 - 2.61 (22)
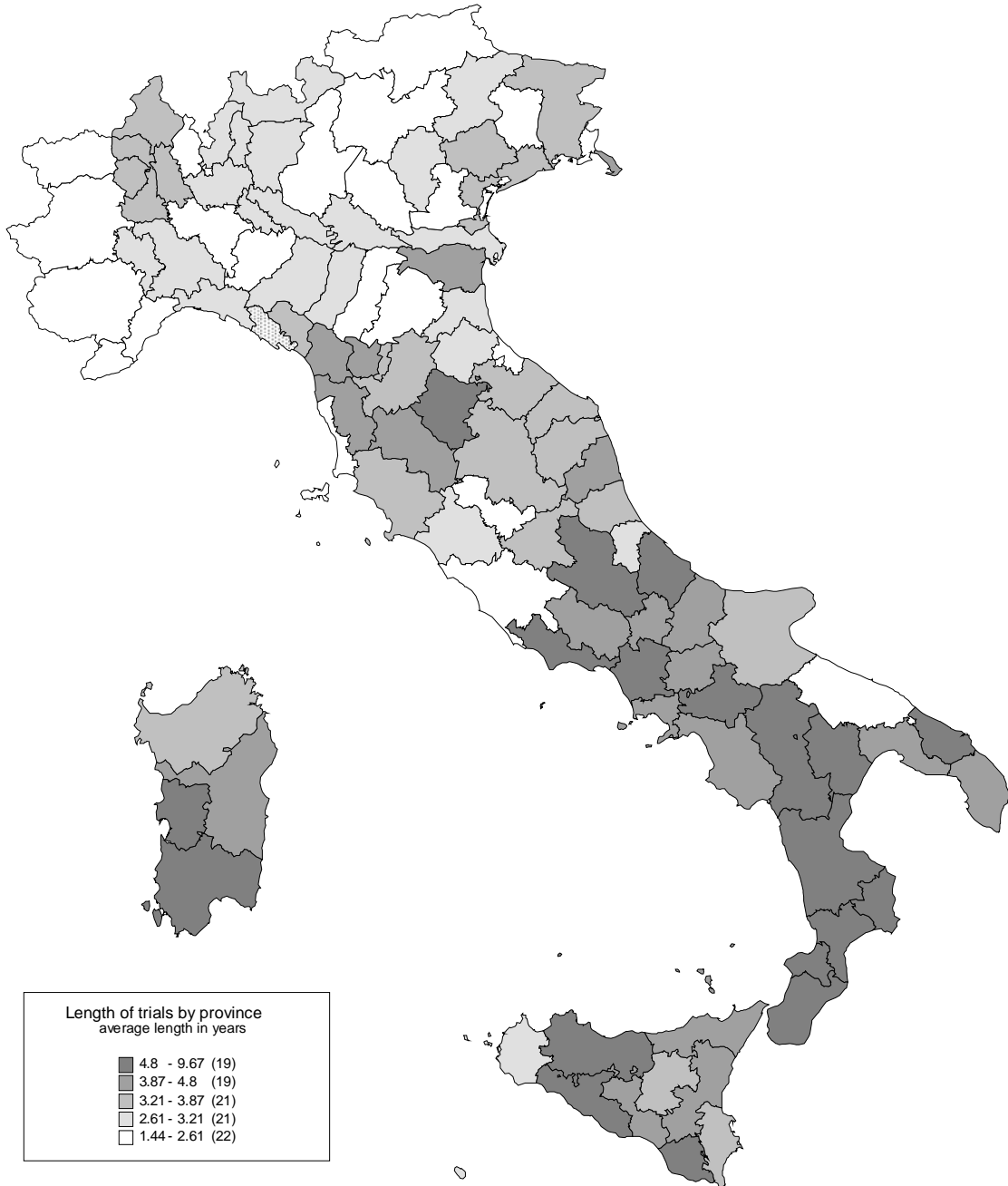
Figure 7. Social capital by province

The figure shows an outcome-based measure of social capital given by the number of bags of blood donated per million inhabitants in a province. Darker areas correspond to provinces with more social capital, based on data collected by Guiso et. al (2004a).

Blood donation
N. of bags per million inhabitants

50 a 106 (19)
36 a 50 (20)
18 a 36 (21)
 9 a 18 (21)
 0 a   9 (21)
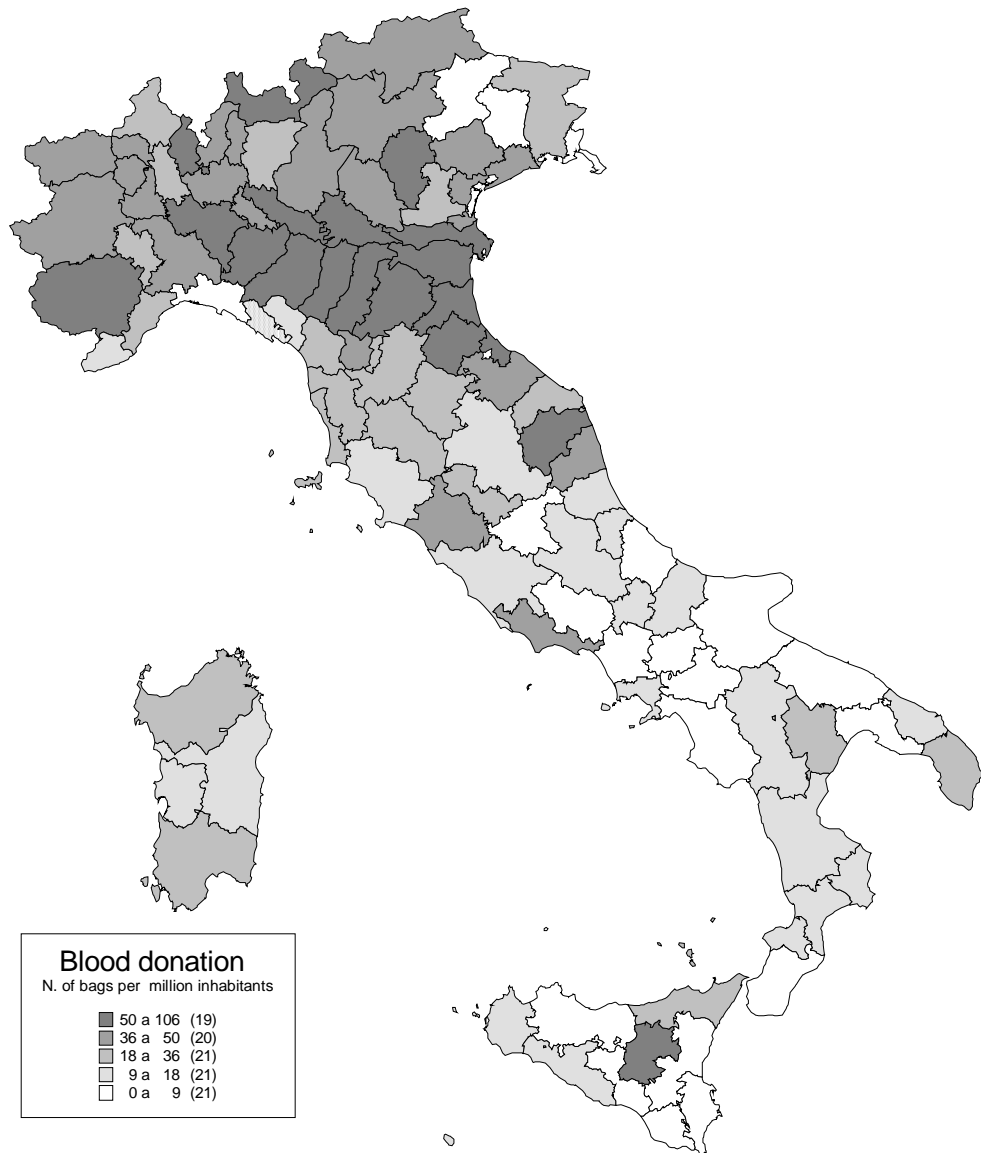
Figure 8. Banks and branches in Italy

The figure shows the evolution during the 1990s in the number of banks (right-hand scale) and in the number of bank branches in Italy. Data are from the Bank of Italy.
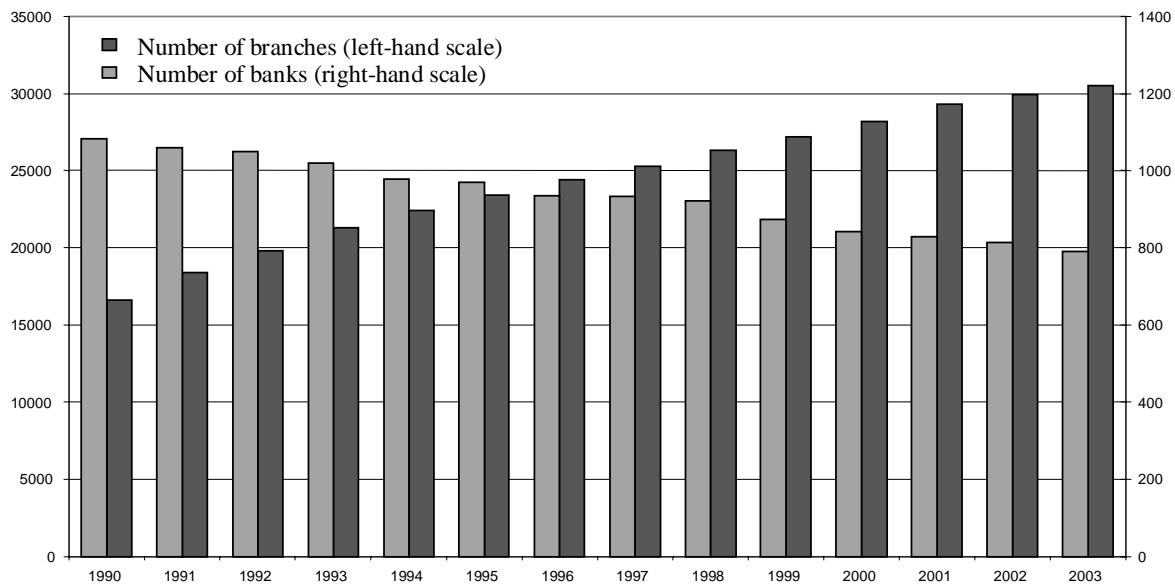
Figure 9. Number of banks in local bank markets

The figure shows the average number of different and independent banks that are present in each local market by geographical area in Italy at the introduction of the Consolidated Law on Banking (1993) and 10 years later. Source: our computations on Bank of Italy data.
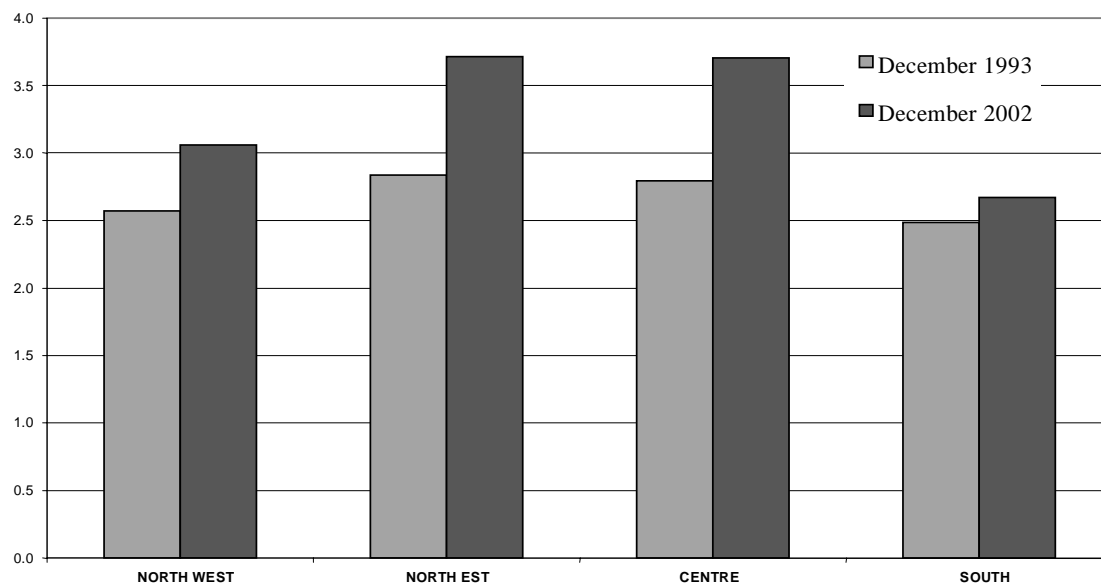
Figure 10. Households' debt and degree of banking development

The figure shows the correlation between the share of households with debt and the number of bank branches per thousand inhabitants across provinces over the period 1996-2003. Source: our computations on Bank of Italy data. Data for inhabitants for 2003 is estimated.

1996

Correlation = 0,82*

2003

Correlation = 0,83*
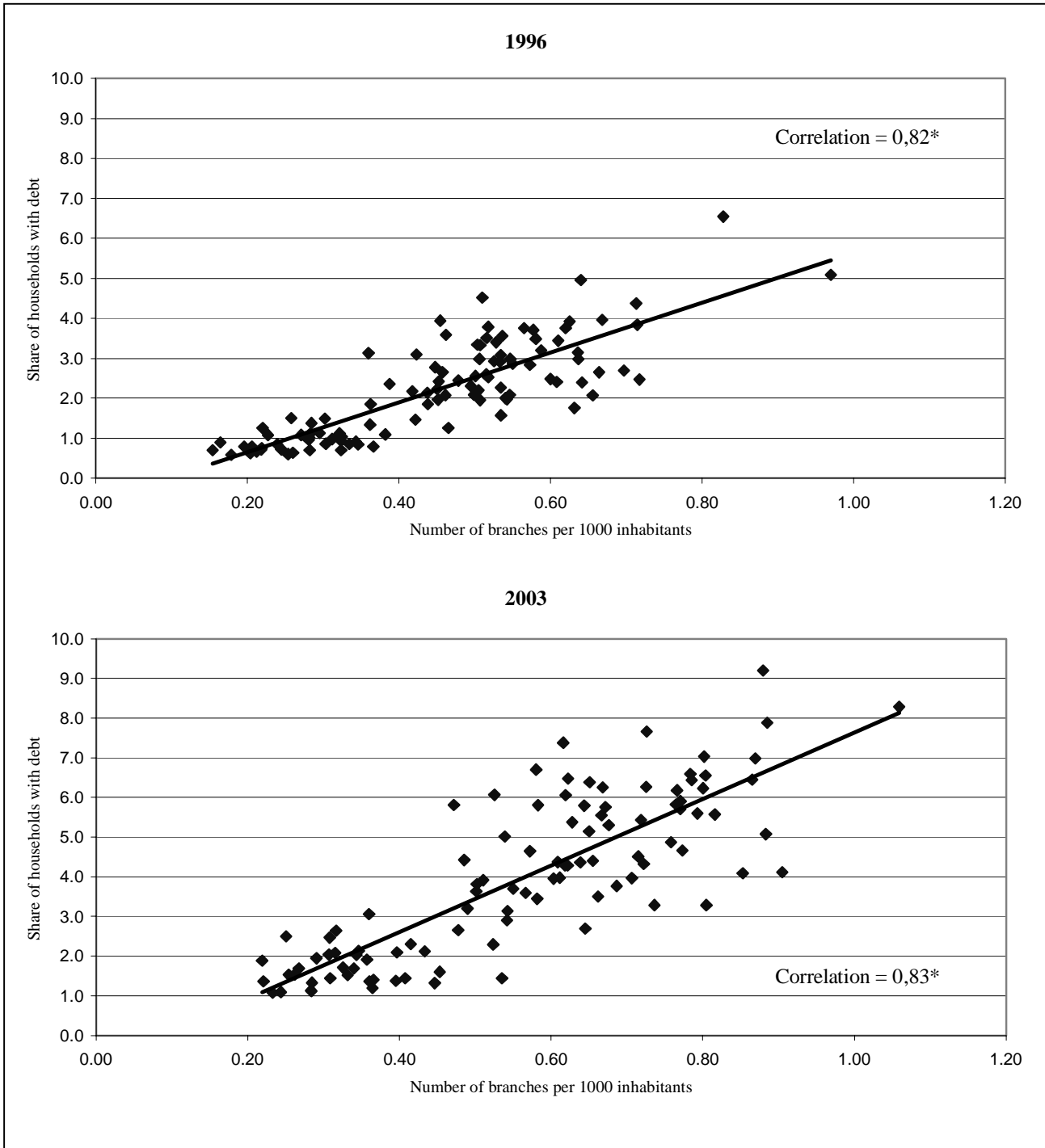
Figure 11. Interest rates on medium and long-term loans to households

The figure shows the nominal interest rate, the real interest rate and the spread on medium and long-term loans to households. The spread is computed with respect to banks' cost of medium and long-term funds. This measure is available on a comparable basis only since 1995.

Sources: Bank of Italy; ISTAT.
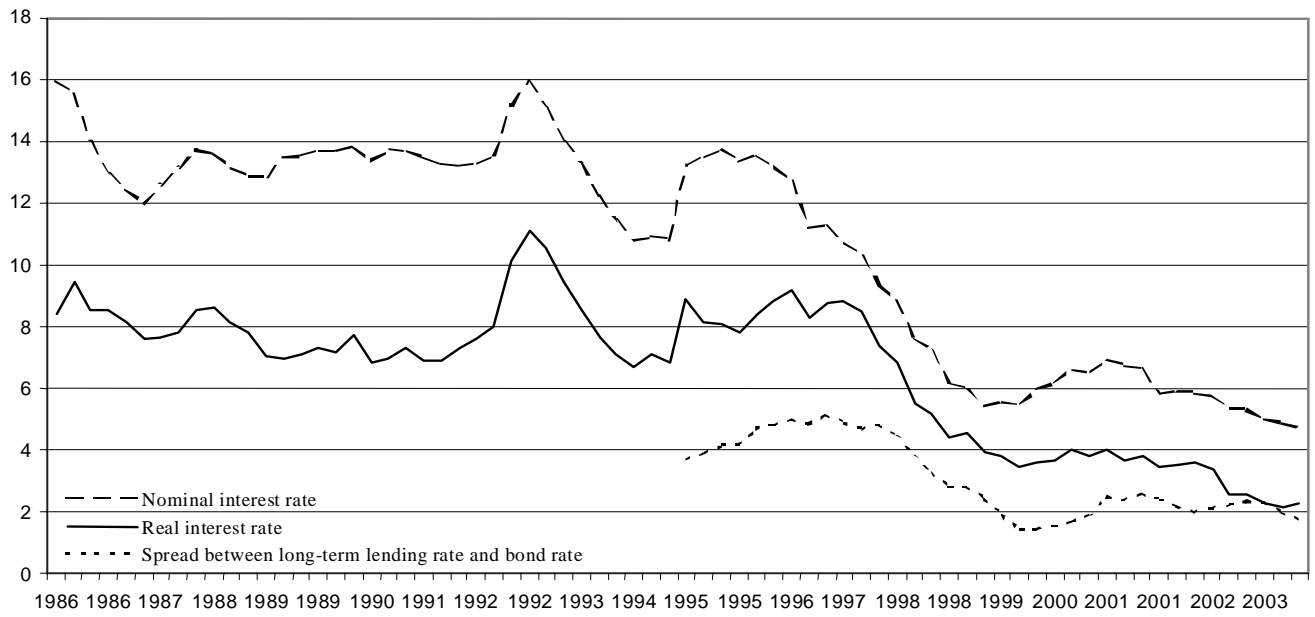
Figure 12. Household Saving Rate in Italy

The figure shows Italian household saving as a percent of disposable income since 1985. Data are from Istat.
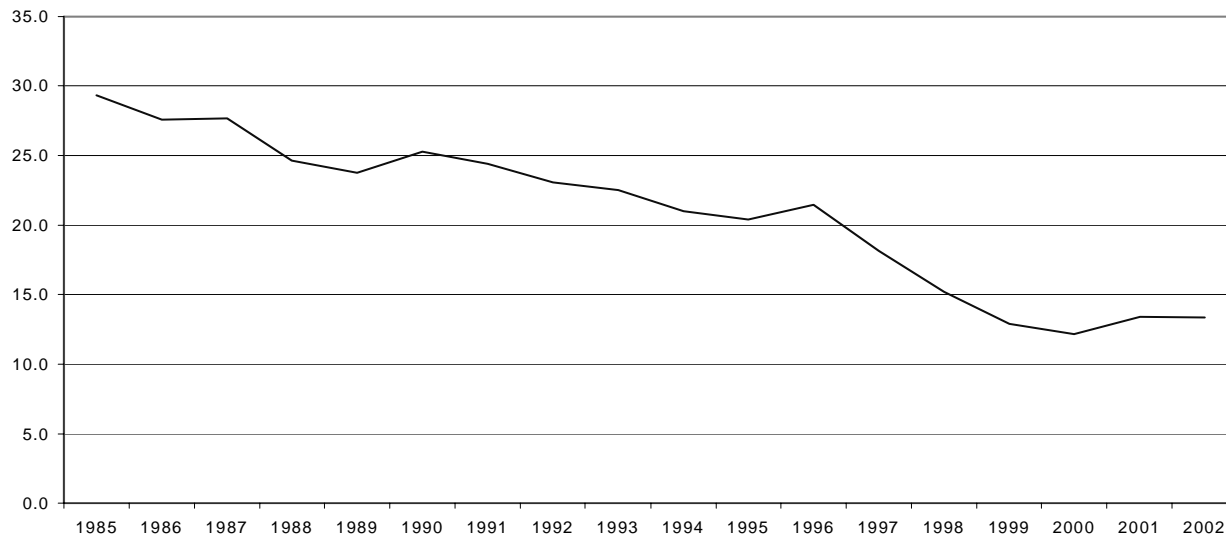
Figure A1. Distribution of household loans by type of interest rate

The figure shows the composition of household lending in various European countries by type of interest rate arrangement (fixed-rate, variable-rate) for mortgages (panel A) and consumer credit (panel B). Data are from the ECB and the Bank of Italy.

(a) loans for house purchase
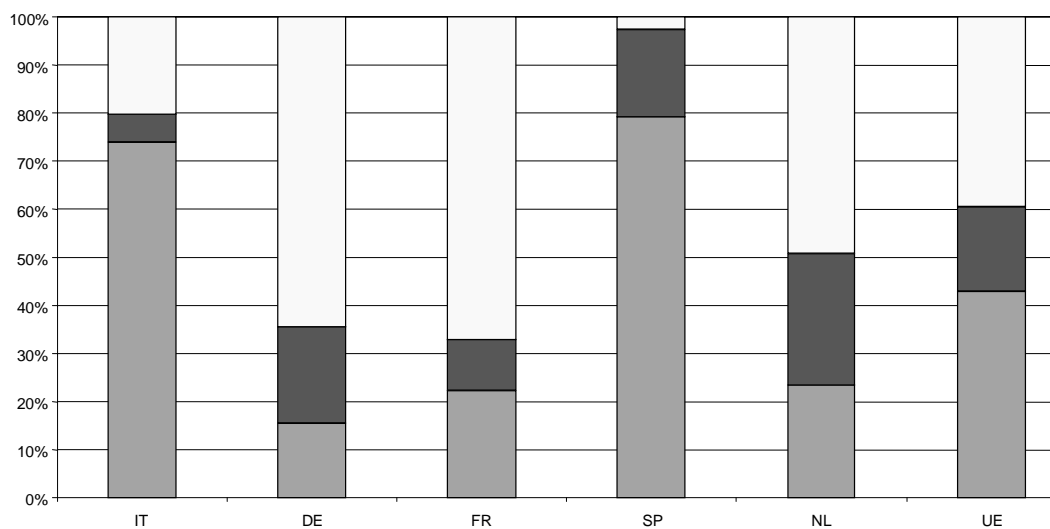
(b) consumer credit
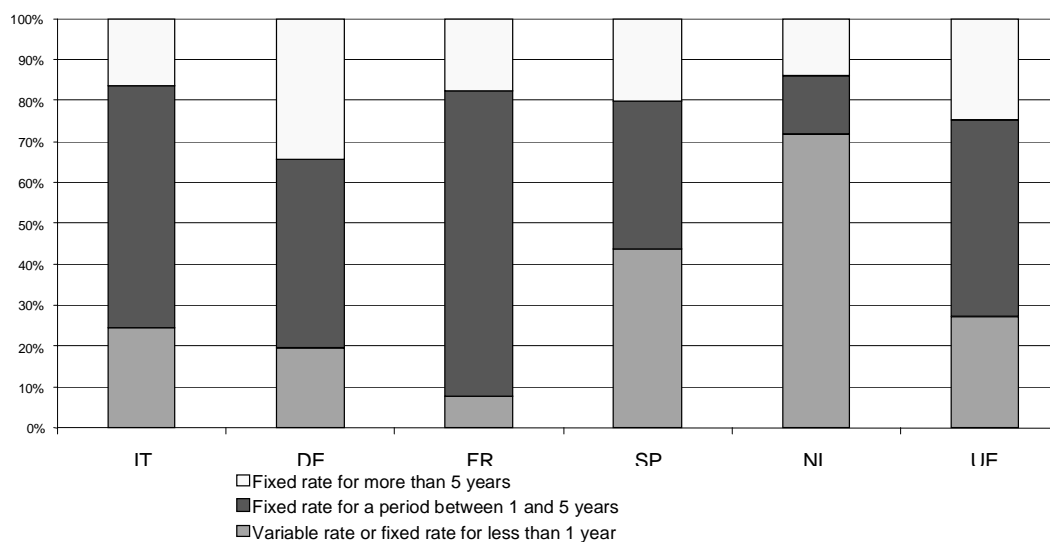
☐ Fixed rate for more than 5 years
■ Fixed rate for a period between 1 and 5 years
▨ Variable rate or fixed rate for less than 1 year

Figure A2. Loan-to-value ratio and maturity of mortgage contracts

The figure shows the typical loan-to-value ratio, its maximum value and the typical maturity of a mortgage for several European countries. LTV ratios are in percent, maturity in number of years. Source: Oliver Wyman (2003).
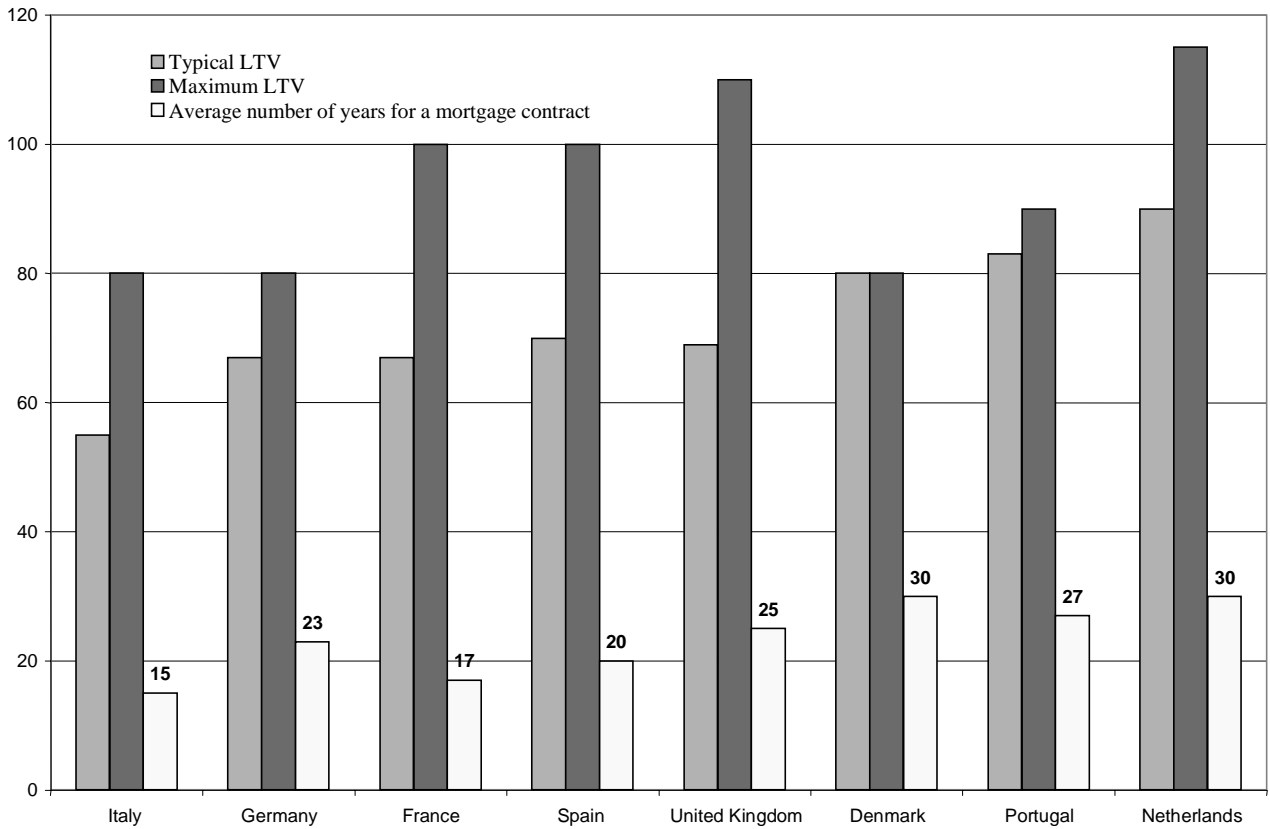
Table 1. Household indebtedness

Panel A shows household indebtedness outstanding at the end of the period as a percentage of disposable income. Households include non-profit institutions serving households. For France, mortgages are defined as long-term loans; for Italy, as medium and long-term loans. Source: OECD Economic Outlook, n.71, 2002. Panel B refers to loans from banks as a percentage of GDP for different types of loans, and the data are available for the euro area countries on a comparable basis since 1997. Source: ECB and National statistics.

A. Total indebtedness in the G7

|	CANADA	FRANCE	GERMANY	ITALY	JAPAN	UK	US
1990							
Liabilities	92.6	88.3	70.0	29.1	131.5	115.7	87.3
of which: mortgages	59.0	51.9	53.6	13.7	50.7	104.7	60.9
1997							
Liabilities	108.2	64.9	107.6	33.8	136.4	105.0	97.6
of which: mortgages	71.2	52.0	66.5	20.0	54.4	95.5	65.6
2000							
Liabilities	112.0	70.8	115.1	42.9	133.1	117.3	106.8
of which: mortgages	70.5	54.7	71.3	25.6	58.5	107.7	71.9
Growth rate: 2000/1997	3.51	9.09	6.97	26.92	-2.42	11.71	9.42
Growth rate: 2000/1990	20.95	-19.81	64.43	47.42	1.22	1.38	22.47

B. Loans from banks by type of loan in the Euro area

	ITALY	FRANCE	GERMANY	SPAIN	EURO AREA
1997					
House purchase	5.2	20.3	37.3	21.2	23.9
Consumer credit	1.3	6.7	10.9	5.9	6.6
Other	9.7	5.6	14.9	7.2	9.5
Total	16.2	32.5	63.1	34.2	39.9
2003					
House purchase	11.8	24.3	43.6	37.1	31.4
Consumer credit	2.5	8.1	8.1	7.4	6.4
Other	9.0	4.5	14.9	10.4	9.0
Total	23.3	36.9	66.6	54.9	46.8

Table 2. Cost and efficiency of judicial systems and lenders' legal protection

The table reports various indicators of lenders' legal protection in a number of countries. "Creditors' rights" is a synthetic measure of the protection of lenders' rights as guaranteed by law, obtained from La Porta et al. (1998). "Length of trials" is an index of courts' efficiency, measured by the number of days to recoup a bounced check, computed by Djankov et. at. (2003). "Cost of trials" is an indicator of the cost of a civil action, given by the cost of justice divided by GDP, computed from the World Bank. "*Rule of law*", is an indicator of the law and order tradition in the country; the variable ranges from 1 (weak) to 10 (strong) and is published by the International Country Risk Guide. The table reports the average value of the period 1982-95.

Country	Creditors' rights	Length of trials (number of days)	Cost of trials	Rule of law
Austria	3	434	1	6
Belgium	2	365	9.1	6
Denmark	3	83	3.8	6
Finland	1	240	15.8	6
France	0	210	3.8	5.39
Germany	3	154	6	5.53
Greece	1	315	8.2	3.71
Ireland	1	183	7.2	4.68
Italy	**2**	**645**	**3.9**	**5**
Netherlands	2	39	0.5	6
Norway	2	87	10.4	6
Portugal	1	420	4.9	5.21
Spain	2	147	10.7	4.68
Sweden	2	190	7.6	6
UK	4	101	0.5	5.14
EU	1.93	240.8	6.23	5.42
Euro area	1.63	286.9	5.89	5.44
US	1	365	0.4	6

Table 3. Social trust and reliability of Italians and EU citizens

The table shows two measures of social trust in the European countries. Data are obtained from various waves of the Eurobarometer survey. Individuals are asked to indicate how much they trust their fellow citizens and the citizens of each of the other EU countries. They can answer in one of four possible ways: "not at all", "a little", "enough", "fully". The first indicator – "Trust toward own citizens" is the percentage of individuals in each country that report they trust their fellow citizens fully. The second indicator - "Trustworthiness according to other EU nationals " – is the average share of respondents in the other EU countries who declare they fully trust the citizens of the given country. Thus, for example, 24 percent of EU citizens, excluding Austria, say they fully trust the Austrians.

Country	Trust towards own citizens	Trustworthiness according to other EU nationals
Austria	65	24
Belgium	40	23
Denmark	46	29
Finland	72	25
France	33	20
Germany	57	24
Greece	51	15
Ireland	43	20
Italy	**19**	**11**
Netherlands	37	26
Norvey	61	29
Portugal	44	15
Spain	49	16
Sweden	64	27
UK	39	20
EU	48	21.6
Euro area	41.25	18.75

Table 4. The effects of the liberalization process in Italy

	Major changes introduced by financial liberalization
Competition and market structure	
Structure of the banking system	Between 1993 and 2003 the number of banks in Italy declined from 1,019 to 788. Most of the decrease is accounted for by the drop in the number of mutual banks. Mergers & acquisitions also played an important role. Over the same period the number of bank branches increased from 22,298 to 30,504 and the number of different banks present in each local market also increased.
Market concentration	At the end of 2000 the five largest banks accounted for 23 per cent of total assets in Italy, against 39 per cent in the euro area. Considering the first five banking groups the degree of concentration (54 per cent of total assets) is closer to that in the euro area. Concentration of the household mortgage market, measured by the Herfindahl index, is no different in Italy from the main industrialized countries.
Market participation and market entry	Before the 1993 Banking Law there was mandatory maturity specialization, with special credit institutions operating at medium-long term and commercial banks at short-term. Under the 1993 Banking Law all intermediaries can operate on all maturities. Since the mid-nineties both the mortgage and the consumer credit markets have experienced mobility in market shares and rapid changes in the characteristics of the banks operating in the market, consistent with massive entry of new intermediaries; entry of foreign banks has increased competitive pressure and prompted adoption of frontier screening and monitoring techniques and product innovation.
Role of Government	In the nineties the government essentially left the financial intermediation industry. The share of total assets held by state-owned banks declined from 68 per cent in 1992 to 12 per cent in 2000, one of the lowest levels in Europe.
Product variety and contract flexibility	
Product choice	Product variety has increased greatly in the last ten years. The interest rate on mortgages can be fixed, variable, mixed, capped, balanced. Mortgages are offered on a menu of maturities varying between 5 and 20 years. Longer maturities are also offered but require additional conditions. Mortgages are readily available not only for home sole proprietorship but also for other purposes.
Product distribution	Distribution of mortgages in Italy is almost completely branch-driven (as in France and Germany). Independent advisors or direct purchase of mortgages via phone or the internet is thus far a small share of the market.
Renegotiability of interest rates	The share of variable-rate mortgages or with rates renegotiable in less than one year remained quite stable in the period 1993-2003 in all the countries of the euro area. In Italy it is around 75 per cent, a figure similar to that in Spain (79 per cent) but much higher than in Germany (15) and in France (22). Differences in the incidence of variable interest rates for consumer credit are much smaller: in 2003 one fourth of total consumer credit in Italy was variable-rate, against 27 per cent in the euro area.
Down-payment and transaction costs	
Down payment	In recent years the loan-to-value ratio (LTV) in Italy has risen from 50 to 80 per cent, reaching a level close to that in the other industrialized countries. Now down-payment constraints, when binding, can often be accommodated in such a way that LTV can exceed 80 per cent of market value. In this case additional guarantees are required.
Early payments	Early repayment on mortgages is possible but quite costly, so that in practice the option is rarely exercised. This is true in the vast majority of industrialized countries. The only countries where early repayments are costless are Denmark and the United States.

Table 5. Access to credit for Italian households

The table shows various indicators of a household's ease of access to the loans market. They are obtained from various waves of the Bank of Italy Survey of Household Income and Wealth (composed of around 8,000 household units each). The indicators are constructed on the following two questions: "During the year did you or a member of the household think of applying for a loan or a mortgage to a bank or other financial intermediary, but then changed your mind on the expectation that the application would be rejected?" We classify "yes" as "discouraged borrowers". The survey also asked "During the year did you or a member of the household apply for a loan or a mortgage to a bank or other financial intermediary and have the application totally or partially rejected?" We classify answers "yes totally" and "yes partially" as "rejected consumers." In the first four columns the shares are computed with respect to the whole sample of households; in the last column the share of rejections is relative only to loan applicants.

Year	Share of households applying for a loan	Share of households rejected	Discouraged borrowers	Share of credit-constrained households	Share of rejected households among those applying for a loan
	(1)	(2)	(3)	(4)	(5)
1991	-	.0117	.031	.0427	-
1993	.0219	.0100	.022	.0320	.457
1995	.0145	.0079	.015	.0219	.545
1998	.0256	.0062	.026	.0322	.242
2000	.0490	.0029	.014	.0169	.059
2002	.0386	.0037	.0166	.0203	.099

Table 6. Liberalization and convergence in households' access to credit

The table tests whether financial liberalization has fostered loan supply more in the areas with a smaller household loan market. The left-hand side variable is the rate of growth of mortgages in a province between 1996 and 2003; outstanding loans/GDP is the value of the stock of medium and long-term loans to households at the end of 1995. t statistics in parenthesis. *** coefficient significant at the 1% level.

Variable	(1)	(2)	(3)
Outstanding loans/GDP $_{1995}$	-29.884***	-42.049***	-42.654***
	(-4.770)	(-7.110)	(-7.160)
GDP per capita $_{1995}$			3.92e-06
			(0.52)
GDP growth $_{1996-2003}$			0.713
			(1.380)
South dummy		-0.936	-0.893
		(-5.450)	(-5.570)
R^2	0.197	0.393	0.470
Number of observations	95	95	95

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