

The amount and risk of loans in Italy. An outline of the Italian districts.

La dimensione e il rischio dei finanziamenti in Italia. Una mappatura delle province.

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Riassunto: Il presente lavoro intende delineare, secondo la duplice veste dimensionale e di rischio, l'andamento dei finanziamenti nelle singole province italiane, al fine di evidenziare possibili elementi di comunanza, nonché eventuali implicazioni sul funzionamento del mercato del credito a livello nazionale. L'analisi è effettuata mediante la raccolta e la rielaborazione dei dati pubblicati dalla Banca d'Italia nel periodo 2000-2006. Lo studio svolto utilizza un approccio multidisciplinare ed è condotto attraverso una Analisi in Componenti Principali (ACP), idonea a sintetizzare le relazioni fra le diverse dimensioni del fenomeno indagato, e tramite una Cluster Analysis che, nello specifico, evidenzia l'esistenza di sei tipologie di province italiane rispetto alle caratteristiche finanziarie rilevate.

Keywords: Financial Risk, Default rates, Bad debts, Loans, Principal Component Analysis, Cluster Analysis.

1. Introduction

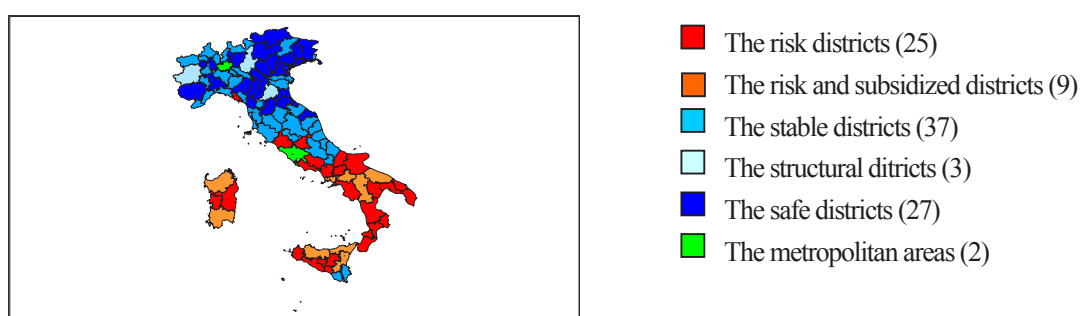
The aim of this paper is to present the loans trend in the Italian districts, by drawing on the amount and risk of the loans. The purpose is to emphasise possible common elements and possible implications for the functioning of the credit market at national level. The analysis has been carried out by collecting and analysing data published on the Statistical Bulletin of the Bank of Italy, from the first quarter of 2000 to the second quarter of 2006. The statistical approach is necessary as regards the relationships between the different dimensions considered. The Principal Component Analysis application is used to analyse the relations between the loans dimension and risk by the indicators utilised. Finally, the Cluster Analysis highlights some typologies of districts as compared to the examined characteristics.

2. The principal statistical issues

The Principal Component Analysis shows the existence of three factors which explain about the 83% of the total variability. The first factor is defined as "amount of loans"; the second one is

defined “risk of loans”. On the contrary, the third dimension is called the “loans quality”. The Cluster Analysis carries out six typologies of districts (figure 1). Cluster 1 “*The risk districts*”: is formed by the southern districts. A particular case is represented by the La Spezia district. Cluster 2 “*The risk and subsidized districts*”: is made up by some districts of the South of Italy. Cluster 3 “*The stable districts*”: is composed by the middle-northern Italian districts, even if Ragusa and Siracusa are included too. Cluster 4 “*The structural districts*”: the group includes Bologna, Brescia and Torino. Cluster 5 “*The safe districts*”: is mainly made up by northern Italian districts which present a good financial position. Cluster 6 “*The metropolitan areas*”: is an independent group with multi-faceted characteristics in the amount and risk of loans, formed by Milano and Roma districts.

Figure 1: *The typologies of districts in Italy as concerns the amount and risk of loans*



3. Conclusions

The Multivaried Analysis put on evidence the peculiar characteristics as regards some Italian districts. The district of La Spezia presents a higher risk of loans and a low productivity. On the contrary, the districts of Ragusa and Siracusa present the same characteristics of the middle-northern Italian districts, as they are characterized by a low risk. Besides, the analysis shows that the districts of Roma and Milano, characterized by a significantly developed economy, have the highest values as far as dimension and quality of loans. Finally, this study explains that a very close relation between amount and risk does not exist. Infact, more than a third of the Italian districts present a good amount of loans and more than half of them have a low risk.

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