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**THE DETERMINANTS AND DISTRIBUTION
OF REGIONAL LENDING RATES IN ITALY**

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SUMMARY

Credit undoubtedly plays an important role in the development of local economies, and most of the economic literature considers it of primary importance in the growth processes of the territory. As the analysis of the local development models is articulated and peculiar to the territory it refers to, so the local credit system is also expressed to reflect interest rates at provincial level which are greatly different. A certain vicious/virtuous circle is initiated which, according to the type of case, considers levels of development, overdue payments and formation of interest rates: this paper reveals existing relationships between these variables at provincial level.

1. CREDIT AS THE BASIS OF LOCAL DEVELOPMENT

The economic literature does not reveal unanimous opinions on the analysis of cause and effect of the relationship between the credit system and economic development. In that there is no consensus on what the direction of the cause should be: whether from the credit sector to the production enterprise, based on a standpoint centred on the supply of financial funds. or vice versa. as consequence of greater emphasis placed on the demand of funds¹.

In the post-industrial economy the idea is catching on that the transformations of the financial structures represent an aftermath compared to the transformations of the economy, in that the financial intermediaries are believed to adjust their supply of credit instruments to the increased demand coming from economic growth.

Considering the teaching of the great economists of the past. it is our view that the development of financial structures seems to constitute a presupposition that affects the same growth trend. Our conviction is such that, in the developed areas and especially in the depressed areas (delayed development and in industrial decline) an efficient financial structure constitutes an indispensable premise for economic development to take off.

In general, however, the relationship between credit and economic development starting from the contribution of Schumpeter and then of Keynes in the Treaty on Money (1930)², Fisher (1933) on the causes of the Great Depression, and Modigliani-Miller (1956)² have all been in a central position of specific and systematic analyses.

One line of economic research that was affected firstly by neo-classical thought and then by the Hicksian synthesis led to the formulation of “theorem of the irrelevance of credit”: inside a perfect competitive market the theorem hypothesises the non-existence of credit, conceived as a bridge between the present and the future.

In fact, according to the neo-classical framework, even though credit facilitates economic activity, it does not determine it automatically because it always originates from savings.

In more recent years, the unrealistic assumptions of neo-classical thought have been overcome, and there has been a reassessment of the role of credit in development. even at

¹ In reference to this see: Tota Pierfrancesco, “Credito bancario e sviluppo economico”: an analysis of regional disparity in Italy, in the financial and economic Observatory of Sardegna”, Banco di Sardegna, Report 1998.

² The Keynesian paradigm mentioned in the Treaty gives credit an important role in development.

² Paper Econometric Society, December 1956.

local level³, especially from the New Keynesian Macroeconomics (Stiglitz, 1987). According to the New Keynesian Macroeconomics, it is mainly the restrictions on credit that are responsible for economic instability and the persistence of economic crises.

When the focus of the cause-effect relationships between credit and growth shift from the national level to the local level, the scenario becomes more complicated. If, in the case of a closed economy, one can reasonably maintain that the growth of the local credit system is a condition for the development of enterprises, the picture is somewhat different when the region in question consists of a small open economy that is part of a unified monetary area. In this last case, the connection between the elements in question is less evident.

If we assume that a local credit system is indispensable for the selection of enterprises and for their growth. in theory, however, it would not be necessary for the financial institutions to be actually physically present in the region. The region could exist without its own credit system located in its territory. In reality, the existence of financial activities that rely on information that can be found only on location, is the basis of relationships between fund lenders and borrowers that can arise only at local level and which is indispensable for the development of the territory.

There is empirical evidence that supports the existence of a positive relationship between the development of the banking system and economic growth at local level⁴, which creates a sort of “circular cumulative cause” that is capable of creating a virtuous or vicious circle depending on the degree of efficiency found in the local and national financial sector.

The conclusions of our analysis contradict the neo-classical picture and emphasises the concept that the banking system is not neutral in regional development⁵, and place an important role on the territorial aspects of the financial phenomena by following the literature from August Lösch (1954)⁶ onwards, who places the emphasis on these themes.

³With regards to this and starting from the work of Tobin (1965) there is an evident attempt to include money and hence credit in the models of neo-classical development.

⁴With regards to this and starting from the work of Tobin (1965) there is an evident attempt to include money and hence credit in the models of neo-classical development.

⁵According to the neo-classical thinkers, money can influence the general level of prices without having any effect on production.

⁶August Lösch highlighted the importance of the spatial aspects of money through the exam of geographical elements connected to the variations of interest rates of credit and price of domestic consumption of the United States.

2. ECONOMIC DEVELOPMENT. LEVEL OF OVERDUE PAYMENTS AND INTEREST RATES IN THE TERRITORY

According to one of our studies based on provincial data (presented in the graphs), a clear relationship emerges between the level of per capita Gdp (related to the development reached in the territory), overdue payments and interest rates and between overdue payment and interest rates: the higher the level of development, fewer are the overdue payments, lower are the interest rates, higher the level of development, etc.

It is clear how the Italian provinces with a per capita Gdp level higher or above a certain threshold (around 80% of the median national value), reveal a lower percentage of overdue payments compared to the total credit issued. contributing to a lower cost of money compared to the national average (medium and short-term interest rates). Another interesting point which emerges from the analyses of the data is that, starting from the threshold level of the per capita Gdp, we notice an acceleration in the percentage reduction of the overdue payments compared to the total credits awarded (making the overdue payments virtually nil).

This leads to support the belief that to determine the level of interest rates in a given territory. besides the level of overdue payments. a fundamental role is played by the level of per capita Gdp, intended as proxy for an economic environment that is favourable to the local business community.

Table I - Coefficients of regression and variability explained

	Coefficients
Intercept	9.21
Gdp per capita	- 0.02
Overdue payments	0.05
Explained variability of interest rate ⁷	74.8%

Source: own elaboration based on data from Istituto Tagliacarne – Banca d’Italia

There is empirical evidence to support this line of thinking: the joint action of the provincial performance of per capita Gdp and the overdue account for about 75% (Tab. 1) of the causes that determine the short-term interest rates at local level.

This is the general outline, however there are numerous cases arising from the empirical analyses which are particular in nature. In fact, by analysing in greater depth the provincial

⁷ The term “explained variability of interest rate” means the determination coefficient (R^2) which, as all are aware, measures the trend of the line of regression of data. This coefficient shows what part of the total variability of an element (interest rate) is explained by the model (in our case the joint coefficient of the per capita Gdp and the overdue).

data it is noted that 75%, which is the value of the variability of the interest rate explained by the level of per capita Gdp and overdue payments, in a few provinces this is not representative because the recorded percentages are much lower. This stands to mean that the structure of the interest rates in a few local realities is influenced also and above all by other factors, as well as the per capita Gdp level and overdue payments and, further, the level of the latter factors do not always determine interest rate levels.

Which leads to the conclusion that the factors that are responsible for the determination of interest rate levels at territorial level can be grouped in “credit” factors and “extra-credit” factors.

The first group include all those factors that are directly or indirectly connected to the sphere of “credit”, like for example, the size of the credit companies found in the provincial territory, the number of window outlets present, the volume of deposits and investment, level of overdue payments, profitability of managing the credit company, the presence of credit syndicates, etc.

The other factors that can be defined as “extra-credit” refer, instead, to the local economic structure (for example, the level of Gdp, the composition of the productive structure in different sectors and size, etc.) as well as connected to the political and entrepreneurial sphere found in the territory.

In reference to this, the case of Imperia, for example, shows that although the overdue payments are only 8.27% of the investment and only 77,3.% of overdue payments over Gdp (Italy=100), the median interest rate is equal to 7.96%, placing it 25th on the scale among the provinces with the highest interest rates.

The province of Frosinone illustrates another case.

In this case, if we consider the relationship between the overdue payments/investment (22.9%), Frosinone positions itself in first place among the Italian provinces. Regardless of the high level of overdue payments, the province of Frosinone has the benefit of a “bonus” that cuts the cost of money and which places it in 47th position among the Italian provinces with the highest interest rates. Certainly an unjustified position considering its high level of overdue payments matured at local level. Such a result leads to the belief that an economic system can undergo development even though it “accepts” a certain level of overdue payments (that can be considered ‘physiological’) which can, in the long term, present a strong critical problem for local economic growth.

This is partly justified by using the paradigm illustrated previously, with the inclusion of the “credit” and “extra-credit” factors in the province of Frosinone: size of credits above the median and significant weight borne by the industrial sector on the total local economy (36% in Frosinone compared to 28.2% at national level).

In addition, regarding the first point, it is interesting to underline how the median rates at both regional and provincial level referring to the industrial sector are generally lower by about two points (in Lazio the gap for the agricultural sector is equal to approximately 2.5%) compared to median values.

The result of our analysis leads to a further local step: the existing gaps between the applied interest rates at provincial level (Tab. 2), although they have undergone a general reduction in recent years, persist and, in a few cases, in a significant manner. Furthermore, there is still a strong difference between the territorial realities of North Italy and the Mezzogiorno (South) (the difference between the interest rate of the Milan province – 5.05% and that of Reggio Calabria – 9.60% is equal to 4.55 percentile points), which is, as previously demonstrated, not always justified by the high overdue payments. In fact, we have revealed that provinces with higher overdue payments show lower rates (which is the case of Frosinone and Pavia) compared to other provinces with lower overdue payments (see the case of Imperia or Isernia).

The conclusion that can be drawn from our reasoning is that the credit system intended as a local development factor and strongly integrated with the same development, contributes to improve the economic performance in terms of Gdp which, in turn, benefits the same banks owing to a reduction of “receivable” credits of the total credits granted, consequently fostering, in many cases, the formation of lower interest rates. On the contrary, the existence of an “unbalanced” credit system at territorial level generates distortions on the local capital market, which results in a negative effect on the dynamics of growth of each provincial reality and increases regional imbalance.

Table II - Overdue payments of Italian provinces (2001)

Rating	Province	Short-term interest rates (december 2001)	% Overdue payments over investments	Overdue payments over Gdp (Italy=100)
1	REGGIO CALABRIA	9,60	20,25	164,13
2	VIBO VALENTIA	9,45	18,84	132,95
3	COSENZA	9,44	21,54	216,51
4	CROTONE	9,44	15,13	163,59
5	CATANZARO	8,94	15,67	159,00
6	ORISTANO	8,70	14,39	136,77
7	NUORO	8,69	14,93	124,45
8	BENEVENTO	8,53	15,56	111,82
9	SALERNO	8,47	12,84	121,93
10	AVELLINO	8,39	13,92	99,11
11	MATERA	8,39	16,03	158,94
12	ENNA	8,39	14,05	93,09
13	CALTANISSETTA	8,36	15,46	125,93
14	CASERTA	8,36	11,11	81,30
15	AGRIGENTO	8,27	16,11	119,81
16	POTENZA	8,24	19,14	247,81
17	CAMPOBASSO	8,23	10,46	111,05
18	RAGUSA	8,23	16,04	162,56
19	ISERNIA	8,14	5,49	95,89
20	TRAPANI	8,13	20,44	210,69
21	FOGGIA	8,10	16,13	179,98
22	LECCE	8,10	13,46	136,63
23	BRINDISI	8,01	15,70	144,35
24	L'AQUILA	8,00	13,98	121,46
25	IMPERIA	7,96	8,27	77,30
26	TARANTO	7,96	15,27	153,54
27	VITERBO	7,93	15,15	208,45
28	MESSINA	7,91	20,65	182,67
29	SASSARI	7,88	16,93	254,22
30	AOSTA	7,82	3,68	59,24
31	GROSSETO	7,82	2,97	50,28
32	RIETI	7,79	9,17	81,46
33	NAPOLI	7,73	9,10	120,36
34	MASSA CARRARA	7,71	7,42	113,21
35	TERNI	7,67	4,76	84,44
36	CAGLIARI	7,67	10,65	162,71
37	BARI	7,66	12,58	208,86
38	PESCARA	7,65	7,66	117,22
39	LA SPEZIA	7,62	7,86	101,09
40	SAVONA	7,61	8,44	109,43
41	SIRACUSA	7,61	12,07	150,37
42	CATANIA	7,58	18,77	167,27
43	LATINA	7,55	16,47	198,39
44	GORIZIA	7,55	3,69	55,63
45	ROVIGO	7,54	4,89	80,56
46	ASTI	7,52	5,06	82,35

Rating	Province	Short-term interest rates (december 2001)	% Overdue payments over investments	Overdue payments over Gdp (Italy=100)
47	FROSINONE	7,49	22,90	251,03
48	TERAMO	7,47	6,61	108,14
49	PISTOIA	7,46	3,38	77,28
50	LIVORNO	7,45	3,25	54,09
51	PERUGIA	7,44	5,03	94,21
52	BELLUNO	7,28	2,79	37,23
53	SIENA	7,28	2,62	66,06
54	CHIETI	7,27	6,91	78,17
55	VERCELLI	7,27	5,39	69,09
56	VERBANIA	7,21	5,48	95,56
57	CUNEO	7,12	2,76	44,76
58	AREZZO	7,08	3,07	66,26
59	PALERMO	6,99	19,92	242,70
60	ALESSANDRIA	6,99	4,42	79,92
61	NOVARA	6,97	3,88	76,53
62	UDINE	6,92	2,83	53,77
63	PISA	6,92	3,74	76,87
64	PORDENONE	6,87	2,10	41,05
65	VERONA	6,85	3,16	62,89
66	LUCCA	6,83	3,49	82,17
67	PADOVA	6,78	2,66	62,80
68	CREMONA	6,71	3,93	76,57
69	PAVIA	6,71	6,05	87,24
70	VICENZA	6,68	1,92	48,84
71	TREVISO	6,65	1,78	49,52
72	BIELLA	6,63	3,23	62,69
73	PRATO	6,63	1,64	55,33
74	VENEZIA	6,61	2,55	46,47
75	SONDRIO	6,56	6,14	107,48
76	ASCOLI PICENO	6,55	6,88	105,04
77	MACERATA	6,53	4,26	77,03
78	GENOVA	6,51	4,35	64,85
79	MANTOVA	6,48	3,03	87,96
80	TRENTO	6,47	1,73	32,08
81	LODI	6,47	3,10	52,40
82	COMO	6,46	4,50	83,30
83	VARESE	6,46	4,16	64,82
84	LECCO	6,43	4,63	92,45
85	FERRARA	6,43	4,42	67,46
86	BOLZANO	6,40	1,48	38,13
87	PIACENZA	6,36	5,76	93,40
88	PESARO E URBINO	6,28	3,65	79,30
89	TRIESTE	6,28	2,14	49,88
90	RAVENNA	6,27	2,09	43,98
91	BERGAMO	6,24	2,34	88,82
92	RIMINI	6,16	2,33	51,36
93	FORLI'	6,07	2,03	58,91

Rating	Province	Short-term interest rates (december 2001)	% Overdue payments over investments	Overdue payments over Gdp (Italy=100)
94	ROMA	6,07	4,92	175,41
95	MODENA	5,96	2,82	62,71
96	ANCONA	5,95	2,55	67,89
97	BRESCIA	5,92	1,72	63,60
98	REGGIO EMILIA	5,88	2,51	56,00
99	PARMA	5,85	3,09	81,02
100	TORINO	5,64	2,00	47,22
101	FIRENZE	5,50	3,37	71,16
102	BOLOGNA	5,39	2,35	62,82
103	MILANO	5,05	1,91	76,18
	ITALIA	6,1	6,1	100,0

Source: own elaboration on data of Banca d'Italia

Figure I

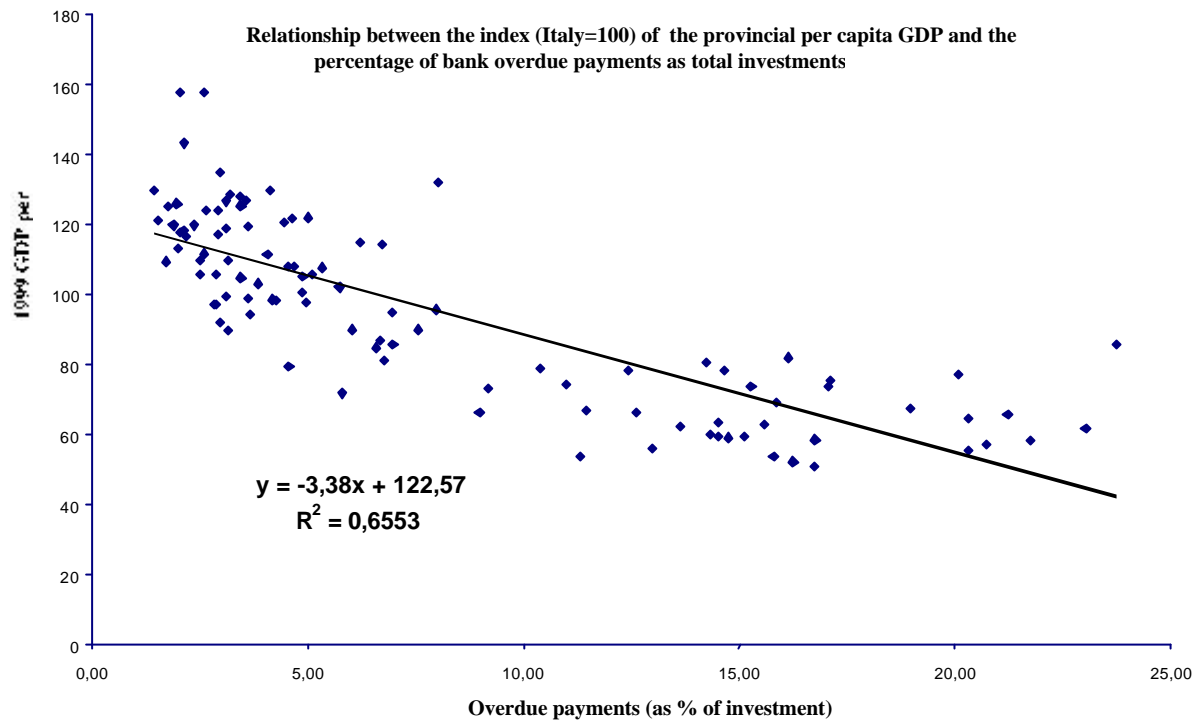


Figure II

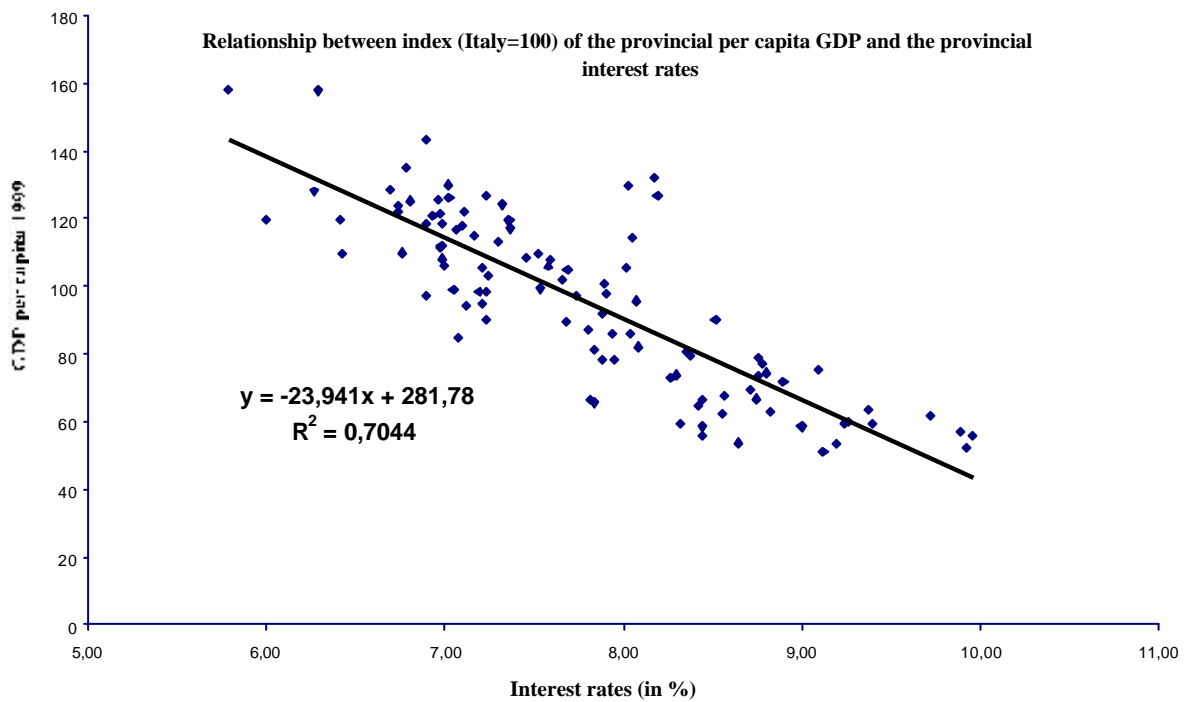


Figure III

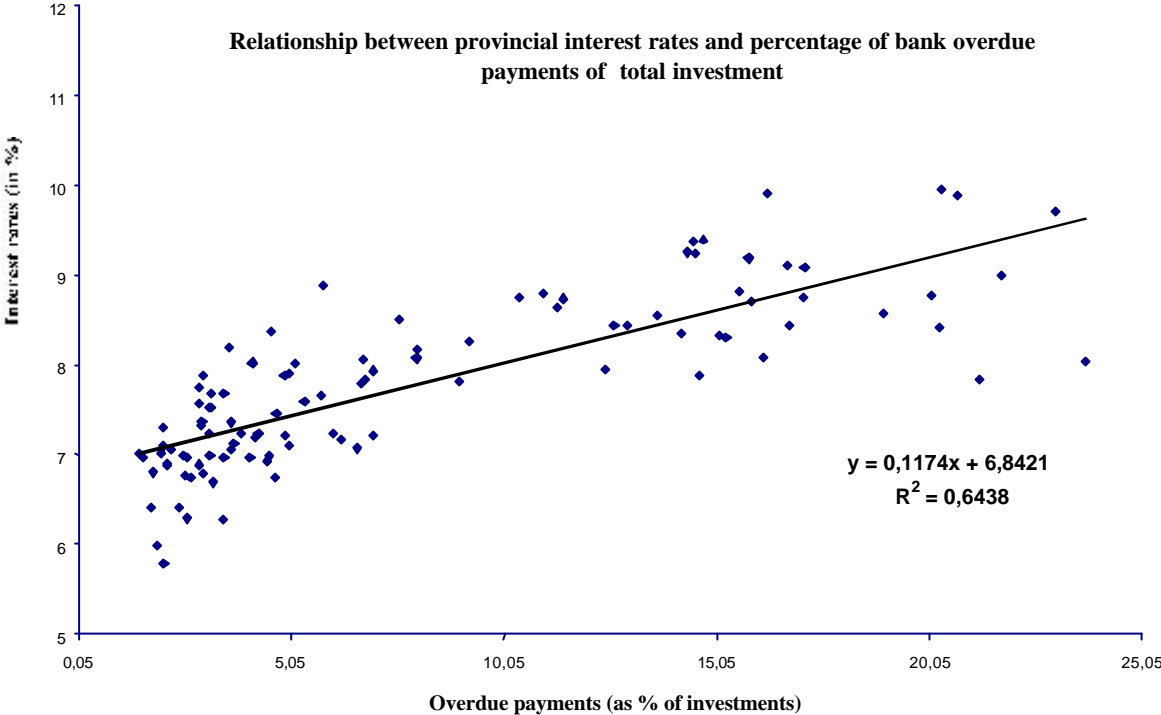
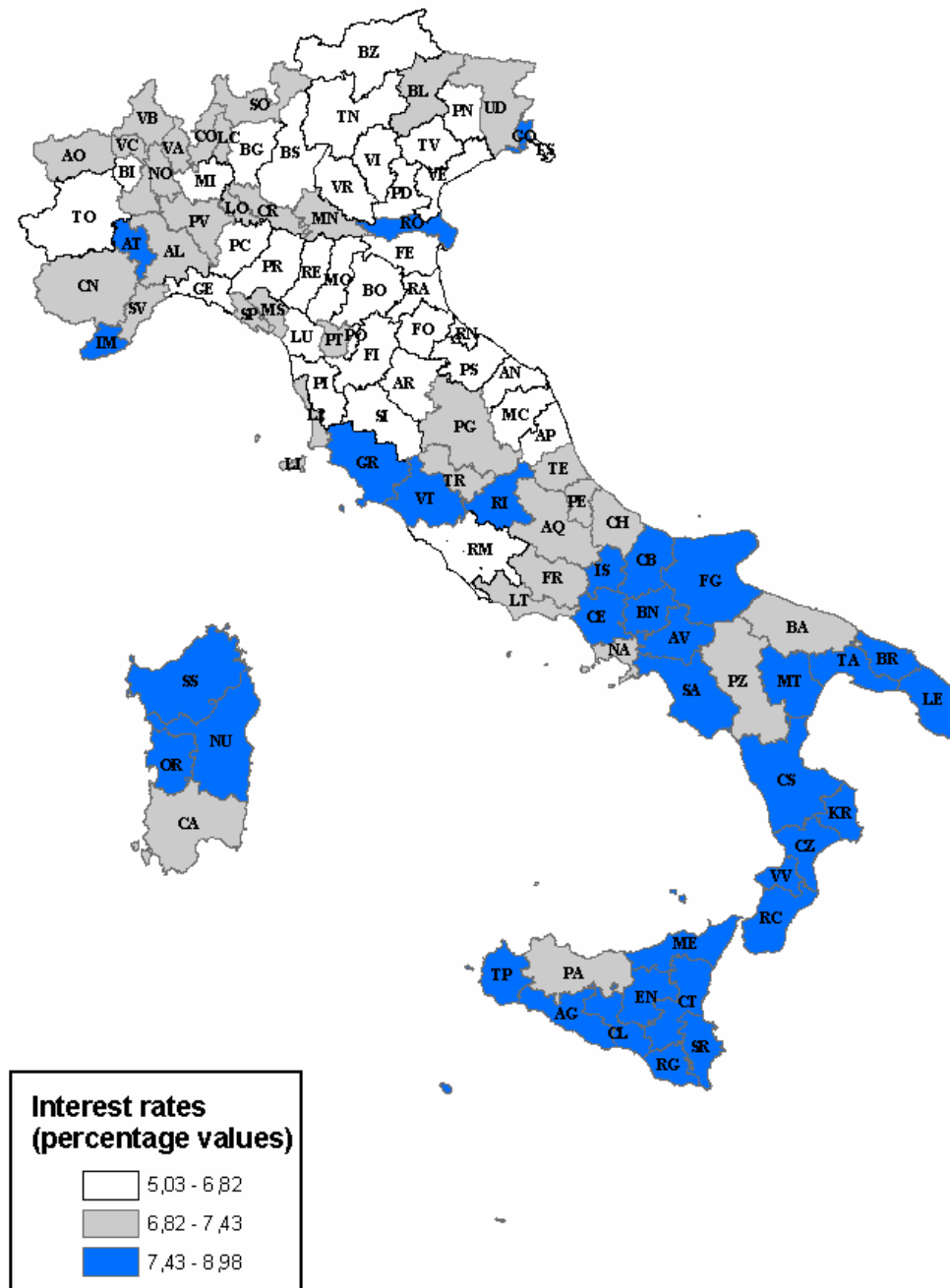


Figure V

Territorial distribution of interest rates

(30 June 2002)



3. NOTES ON METHODOLOGY

As can be seen, the only source one can accede to obtain information on the active interest rates applied by the banks is the record published every quarter by the Banca d'Italia.

The record in question refers to the short-term active interest rates on cash financing obtained from a sample of representative banks at regional level. The data are supplied with the following sector analysis, which is the same for which the Banca d'Italia supplies the data on the consistency of total investments per region:

- Public administration
- Financial companies
- Financial companies and enterprises
 - Agriculture
 - Industries in the strict sense
 - Construction
 - Services
- Families
 - Producers
 - Consumers (including non-profit social organisations)
- Total.

The Institute is committed to carrying out a more intensive territorial analysis, aimed at achieving the interest rates of each province starting from those grouped at the level cited above.

The experimental estimate was obtained on the following criteria:

1. Considered that the interest rates of the regions differ from sector to sector the first operation was based on the procurement of provincial tables on the same investment to those available at provincial level;
2. Supposing, hence, that on the parity of the sectors the interest rates of each province were identical to those recorded at regional level, the latter were applied to the consistency of investments of the provinces (employed in the weighting) so as to obtain differentiated rates for each of them;
3. Weighing again the median rates so obtained against the total value of investment slightly different regional values were reached to those obtained by Banca d'Italia. In order to get their median value to coincide with the regional data of the cited source, a simple proportioning procedure was not resorted to, on the other hand efforts were made to consider the rate of overdue payments, calculated as percentage of credit of overdue payments recorded by "Centrale dei Rischi" of the total resulting investment of "Vigilanza". The small corrections made through the use of different rates of overdue payments are justified as these are among the principal variables, which explain the interest rates.

ANNEXE

Interest rates and overdue payments of Italian provinces (*)

Rating	Province	Short-term interest rates (30 June 2001)	% Overdue payments over investments (30 June 2001)	Short-term interest rates (30 June 2002)	% Overdue payments over investments (30 June 2002)
1	Vibo Valentia	9,96	18,84	8,99	17,65
2	Reggio Calabria	9,88	20,69	8,98	19,06
3	Crotone	9,92	14,84	8,79	11,25
4	Nuoro	9,39	14,02	8,56	12,97
5	Oristano	9,37	14,09	8,55	12,87
6	Benevento	8,82	14,48	8,52	13,37
7	Caltanissetta	9,19	12,92	8,49	12,62
8	Enna	9,26	10,16	8,45	9,93
9	Agrigento	9,12	13,12	8,38	12,67
10	Ragusa	9,09	12,97	8,37	12,36
11	Salerno	8,74	11,65	8,36	12,06
12	Trapani	9,00	17,40	8,31	17,04
13	Caserta	8,65	10,50	8,30	9,93
14	Catanzaro	9,24	13,64	8,29	14,03
15	Cosenza	9,71	22,61	8,28	19,92
16	Isernia	8,89	7,09	8,14	7,14
17	Avellino	8,55	8,17	8,07	8,46
18	Campobasso	8,75	10,53	8,01	9,90
19	Messina	8,77	18,15	7,94	16,70
20	Siracusa	8,44	9,90	7,84	10,02
21	Matera	8,71	13,70	7,74	14,22
22	Catania	8,42	14,74	7,73	14,43
23	Imperia	8,51	8,39	7,71	8,12
24	Asti	7,91	5,43	7,68	5,05
25	Sassari	8,76	16,15	7,66	15,12
26	Viterbo	8,35	16,37	7,62	15,73
27	Foggia	8,44	16,06	7,61	15,26
28	Lecce	8,44	13,73	7,61	13,11
29	Gorizia	8,03	3,51	7,57	3,35
30	Grosseto	7,88	3,24	7,57	3,09
31	Brindisi	8,32	15,60	7,55	15,54
32	Taranto	8,30	16,13	7,54	14,95
33	Rieti	8,27	9,55	7,48	8,84
34	Rovigo	8,01	5,53	7,47	5,06
35	Terni	8,38	5,22	7,44	4,98
36	Cagliari	8,80	10,68	7,43	9,75
37	Savona	8,05	8,40	7,41	8,35
38	Pavia	7,23	6,35	7,37	5,97
39	Vercelli	7,59	4,80	7,37	4,93
40	Verbania	7,66	5,91	7,33	5,40
41	Cremona	7,19	4,35	7,31	3,97
42	Massa Carrara	7,84	7,32	7,31	6,84
43	Pescara	8,07	7,87	7,30	7,30
44	Cuneo	7,52	3,03	7,27	2,46

Rating	Province	Short-term interest rates (30 June 2001)	% Overdue payments over investments (30 June 2001)	Short-term interest rates (30 June 2002)	% Overdue payments over investments (30 June 2002)
45	Latina	8,08	17,05	7,26	16,57
46	La Spezia	8,17	8,94	7,25	7,97
47	Alessandria	7,45	4,77	7,23	4,42
48	Frosinone	8,04	27,23	7,19	26,52
49	Novara	7,36	4,07	7,19	3,98
50	Palermo	7,83	16,95	7,17	16,95
51	Teramo	7,94	6,67	7,15	6,08
52	Belluno	7,74	2,97	7,14	2,60
53	Sondrio	7,07	6,49	7,11	6,13
54	Pistoia	7,69	3,97	7,07	3,74
55	Bari	7,95	13,58	7,04	12,97
56	Napoli	7,82	8,43	7,04	8,18
57	Perugia	7,89	5,29	7,02	4,94
58	Aosta	8,19	3,55	7,01	3,32
59	Chieti	7,80	5,68	7,00	5,63
60	Varese	6,97	4,32	7,00	4,08
61	Mantova	6,99	4,00	6,99	3,85
62	Como	6,98	4,73	6,98	4,48
63	Potenza	8,56	18,56	6,96	18,70
64	Lecco	6,93	5,33	6,93	5,16
65	Livorno	7,68	3,54	6,91	3,19
66	L'aquila	7,88	9,83	6,84	9,08
67	Lodi	6,89	2,76	6,83	2,35
68	Udine	7,36	3,26	6,83	3,00
69	Pordenone	7,30	2,22	6,82	2,20
70	Arezzo	7,53	3,68	6,80	3,55
71	Verona	7,23	3,29	6,73	3,21
72	Padova	7,32	3,33	6,70	3,05
73	Bergamo	6,76	4,10	6,69	3,86
74	Biella	6,96	3,12	6,68	2,95
75	Siena	7,58	3,32	6,68	2,82
76	Torino	6,00	1,93	6,56	2,02
77	Venezia	6,98	2,65	6,50	2,47
78	Pisa	7,25	4,14	6,47	3,97
79	Ferrara	7,21	4,59	6,41	4,29
80	Macerata	7,23	4,55	6,41	4,19
81	Ascoli Piceno	7,21	6,92	6,39	6,34
82	Vicenza	7,02	2,28	6,39	2,05
83	Piacenza	7,16	5,73	6,34	5,29
84	Brescia	6,42	2,02	6,31	2,05
85	Treviso	6,80	1,94	6,30	1,84
86	Ravenna	7,06	2,16	6,26	2,04
87	Genova	6,74	4,21	6,24	3,93
88	Lucca	7,05	3,74	6,18	3,50
89	Pesaro e Urbino	7,12	4,00	6,12	3,63
90	Rimini	7,00	2,54	6,10	2,23

Rating	Province	Short-term interest rates (30 June 2001)	% Overdue payments over investments (30 June 2001)	Short-term interest rates (30 June 2002)	% Overdue payments over investments (30 June 2002)
91	Trieste	6,90	2,13	6,02	2,10
92	Trento	7,09	1,72	6,01	1,60
93	Bolzano	7,02	1,86	5,99	1,67
94	Forli'	6,89	2,45	5,99	2,24
95	Modena	6,79	3,04	5,84	2,82
96	Prato	6,98	2,19	5,84	1,90
97	Roma	7,11	5,09	5,84	4,86
98	Reggio Emilia	6,74	2,58	5,78	2,43
99	Parma	6,69	3,05	5,77	2,97
100	Milano	5,79	2,08	5,53	1,89
101	Ancona	6,42	2,82	5,46	2,57
102	Bologna	6,29	2,43	5,21	2,29
103	Firenze	6,27	3,50	5,03	3,44
	ITALIA	6,76	4,79	5,90	4,53

(*) Updated on 30/06/2002

Source: own elaboration on data of Banca d'Italia

BIBLIOGRAPHICAL REFERENCES

Alessandrini P. (2001). (a cura di). *Il sistema finanziario italiano tra globalizzazione e localismo*. Il Mulino.

Beccattini G. (1989). (a cura di). *Modelli locali di sviluppo*. Il Mulino. Bologna.

Commission of the European Communities (1988). *The creation of a european financial area: liberalisation of capital movements and financial integration*. in "European Economy" n. 36.

Commission of the European Communities (1990). *One market. one money: an evaluation of the potential benefits and costs of forming an UEM*. in "European Economy" n. 44.

Fisher I. (1933). "The debt-deflation theory of great depression". *Econometrica*. n.1.

Giannola A., Pagani E., Sarno D. (1998). "Le imprese del Mezzogiorno negli anni Novanta". in Quaderni di politica industriale. Mediocredito Centrale. N. 24.

Jossa B. (1992). *Credito e sviluppo economico: considerazioni introduttive*. in D'Antonio (a cura di). (1992).

Keynes. J.M. (1930). *Il trattato della moneta*.

Lösch, A. (1954), *The Economics of Location*, New Haven.

Porzio C. (1998). "Le strutture creditizie nel Mezzogiorno". in Ruozi R. (a cura di). *Quali banche per il Sud*. Giuffré. Milano.

Signorini. L.F. (2000). (a cura di). *Lo sviluppo locale*. Roma. Meridiana Libri. Donzelli.

Stiglitz J.E., Weiss A. (1987). "Credit rationing with many borrowers". *The American Economic Review*, marzo.

Tobin J. (1965). "Money and economic growth". *Econometrica*. pp.671-684.