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THE GHOST OF CREDIT CRUNCH

FINANCIAL CRISIS AND THE MICRO AND SMEs

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The purpose of this study is to investigate:

- the roots and the development of the crisis in Italy and its impact on SMEs;
- the so-called “differential effect” or, in other words, if SMEs size matters in fighting against the crisis;
- the existence of credit crunch in Italy, but taking into account both the shift in credit demand and a shift in credit supply

Hard data provide many answers on the financial crisis (although a definite and thorough story is still to be written), some clues on the “differential effect” and some evidence on credit crunch.

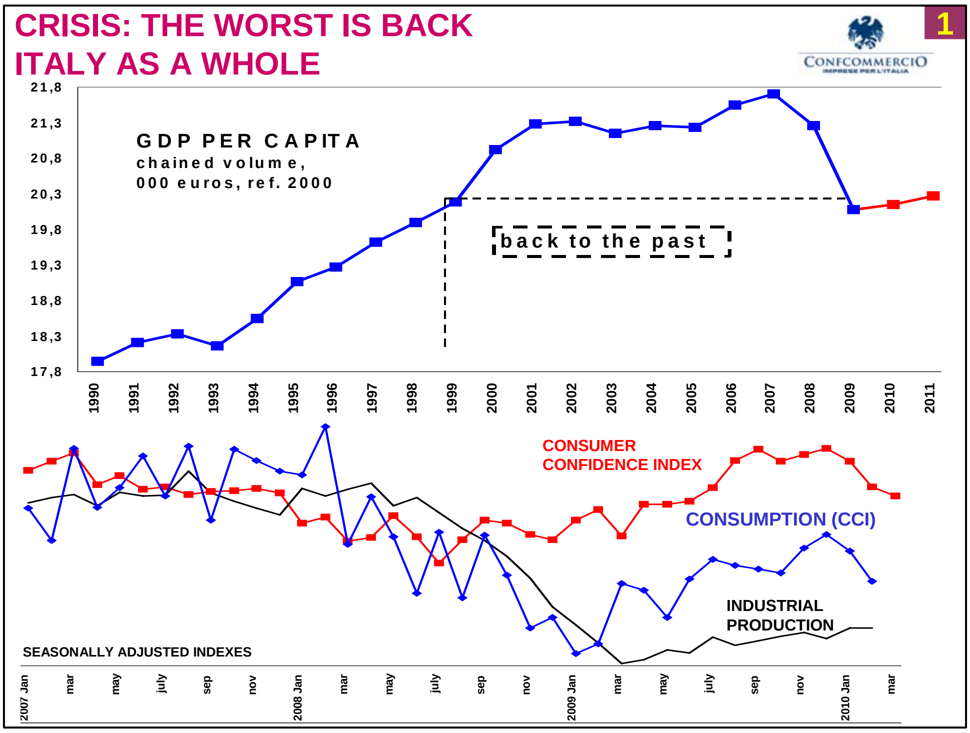
We then decided to further investigate the latter subjects building on the results of the Confcommercio Credit Outlook, a four-monthly survey on 11.000 SMEs representing Confcommercio membership and we found evidence of both differential effect and credit crunch.

The crisis emphasized the long-term Italian disease: a slow growth disease rooted in structural deficits. The list is well known and there’s no point in discussing it here. In any case, Italy’s GDP decreased about 5% in 2009, following a consistent reduction of 1,3% in 2008, implying that Italy’s recession was more severe than in the rest of Europe.

In terms of GDP per capita, we suffered a dramatic fall-back at the end of the nineties (*slide 1*). So, ten years of very slow growth were cancelled out by the recession. In terms of household consumption per capita, the figures are only slightly better.

The forecast offered by the main research institutes, both public and private, converge in signaling a very weak recovery (*slide 1, graph above*).

Short term information (*slide 1, graph below*) fails to give us a clear indication of what’s going on. The industrial production index decreased in march by 0,1%, against an expected increase of 0,8%. The consumer confidence index fluctuates without an evident positive trend. Its variance is increasing due to an unusual uncertainty about employment, future disposable income and the stance on fiscal policy.



Uncertain expectations imply a lot of difficulties in the planning of the consumption process. The Confcommercio Consumption Index - a synthesis of all the available monthly statistics about household expenditure - shows a contrasted profile where positive and negative variations alternate constantly.

This evidence is consistent with the moderate GDP growth in the first quarter of 2010 (0,6% on an annual basis).

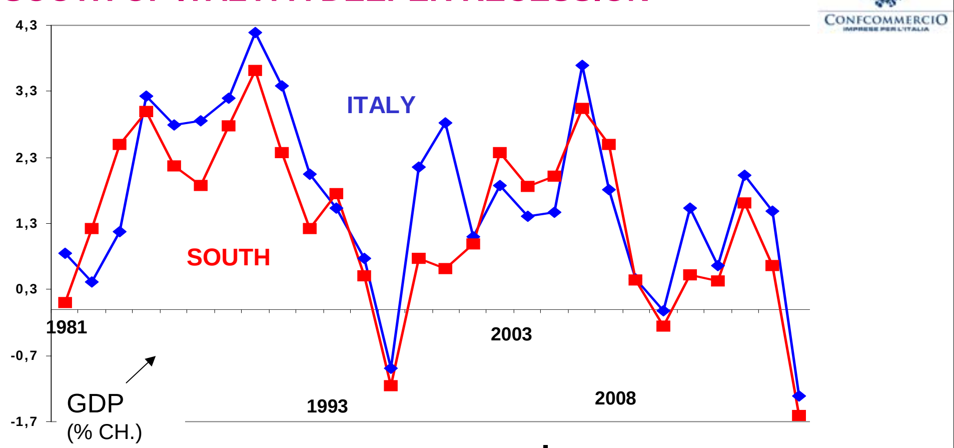
Short term models to forecast GDP, fed with this information, suggest a very slow growth for the current year and the next one: 0,7% and 1% are our last figures for 2010 and 2011; similar figures are expected for the growth of household consumption in real terms.

At this pace, we will reach the pre-crisis levels of GDP and consumption per capita only after several years.

We cannot expect relevant help from public spending. The debt and the current deficit need to be cut. The stance of fiscal policy will very likely become more strict.

Moreover, the recession in the South of Italy could have been more severe than in the rest of the country. Historically, when the GDP decreased on average, the economic activity in the South suffered more, despite a larger share of non-market value added (*slide 2*). We suggest that, during the 2008-2009 recession both regular and irregular employment decreased in the South of Italy and firm productivity moved along a negative trend. This implies that a GDP reduction around 7% could have happened. Given the weak export-orientation of firms and the likely public expenditure cuts, as recently suggested by the Italian Government, we can expect that the recovery could also be weaker in this area.

SOUTH OF ITALY: A DEEPER RECESSION



	2002-2007	2008	2009	2010	2011
North-West	1,0	-1,5	-4,5	0,7	1,1
North-East	1,2	-1,1	-3,8	0,7	0,8
Centre	1,5	-1,0	-5,0	1,1	1,2
South	**0,5**	**-1,6**	**-7,0**	**0,7**	**0,9**
ITALY	1,0	**-1,3**	**-5,0**	0,8	1,0

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This is one of the most important reasons why we think that the Italian economic conditions are particularly difficult to deal with.

We don't know very much about the differential impact of the crisis on firms of different sizes, due to lack of data. We know the crisis first hit manufacturing, especially those firms involved in export (*slide 3*).

SECTORS AND SMEs: CONJECTURES ABOUT DIFFERENTIAL IMPACT OF THE CRISIS

Gross added value by branches
chained volumes, % changes

		2008	2009
INDUSTRY	I	-3,6	-15,1
SERVICES		-0,4	-2,6
Area Confcommercio		*-0,8*	*-3,8*
Wholesales trade	II	*-3,0*	*-11,9*
Retail trade	III	*-0,6*	*-5,5*
Hotels and restaurants	IV	*0,8*	*-2,0*
Other NF market services		*-0,5*	*-1,9*
TOTAL		-1,2	-5,5

time lag effect

Production: % distribution of firms, employment and turnover by number of employees

	1-9	micro		10-249	s&m		250 and more	large	
	firms	employee	turnover	firms	employee	turnover	firms	employee	turnover
INDUSTRY	89,1	36,1	16,5	10,8	46,5	48,0	0,14	17,4	35,5
CONFCOMMERCIO area	96,6	54,6	36,5	3,3	25,3	39,5	0,06	20,1	24,0
TOTAL (1)	94,8	47,4	27,1	5,2	34,1	43,4	0,08	18,5	29,4

(1) Net of agricolture and finacial services

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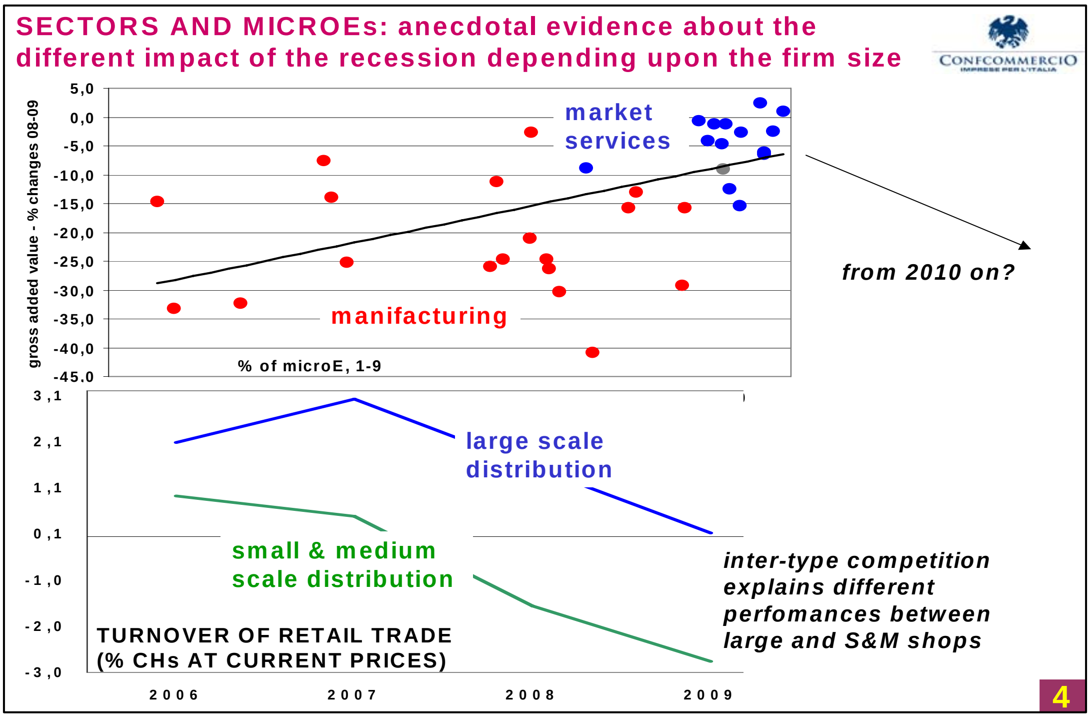

Data reveal that the recession moved from industry - manufacturing and buildings - to services with some time lag, going from wholesale to retail trade, arriving at the sector closest to the final consumer. Knowing that the percentage of micro and small and medium enterprises has been greater in services than in manufacturing or, in other words, that it increases moving from sectors with a larger share of intermediate inputs to the ones where labour input is predominant, we can put this information together for conjecturing that, at least up to the end of 2009, the smallest firms suffered less during the recession. This supports the hypothesis that the bias toward smaller firms of the Italian productive structure might have limited the impact of the crisis on the unemployment rate.

The regression of the percentage of micro enterprises, sector by sector, on the percentage variation of the value added in real terms during the recession, even controlling for a general sectoral effect, confirms this relationship (*slide 4, graph above*): the higher the percentage of small firms in a sector, the better the performance of that sector. At least, up to date.

One of the few reliable statistics on this subject are the retail trade indexes by shop size (*slide 4, graph below*). Nevertheless, in correcting the indexes for inflation, it becomes evident that the better performance of large scale distribution firms compared to the smaller firms, is connected to a sort of inter-type competition: so these patterns are not caused by any differential effects of the recession.

The bad news is that the same lag effect of the crisis will still last. This means that micro enterprises and, at some extent, also medium enterprises could suffer the recession longer from now on. In fact, the service sector, in which we have the largest proportion of micro and small and medium enterprises, couldn't benefit from the international recovery, at least during the current year. The uncertainty we have already seen regarding household consumption is a symptom of this phenomenon.

The recent attention paid by the media and institutions to the role of domestic demand in pushing the recovery, has been due to worries about the weakness of consumption (and of the investments).

Without an impulse for domestic demand, the non-export led micro and small and medium enterprises - those operating in the service sector - could end their activity, resulting in the firing of many workers without social security support.

In turn, this will increase the difficulties for the whole economic system.

In this scenario, the credit restriction could worsen the performance of the economic system as a whole but, even if credit is decreasing in level and as a ratio to GDP, it is difficult to separate the role of the supply effect from the one's of demand: we don't know if it is the demand curve or the supply one that moves to the left. As to the hypothesis of credit crunch, the Bank of Italy (F. Panetta, F. M. Signoretti, 2010, Questioni di Economia e Finanza, Occasional Papers, n. 63) says:

first) the whole amount of credit to non financial institutions has been decreasing in absolute value since the end of 2009, and, more importantly, as a ratio of GDP, since the second quarter of 2008 (if we take into account the structural trend that, ceteris paribus, increase the amount of credit to the economic system despite the changes in the economic cycle);

second) liquidity of bank assets are increasing; both these results signal effects of the credit crunch. Nonetheless, the demand factors causing the credit restrictions are prevailing with respect to the supply factors, which should be blamed for generating a genuine credit crunch.

We share the view that credit crunch is a significant move to the left of the supply credit curve, with the same merit of credit of borrowers and the same risk free interest rate (I mean, having taken into account the risk linked to the quality of the borrowers).

More importantly, in Italy, due to lack of alternative tools of financing, for example, the corporate bond, just a small credit crunch could generate a very deep effect on the level of economic activity. So, we face another problem of market inefficiencies.

Given some credit restriction, at this point we must deal with the question of credit discrimination against small enterprises, a relevant issue linked both to the time lag of crisis on services and, more generally, to the pace of the potential recovery.

COST OF CREDIT AND CREDIT CONDITIONS
DO BANKS DISCRIMINATE AGAINST MSMEs? (1/2)

Regression analysis on a new database on micro and small enterprises (Confcommercio-SEAC)
About 100.000 firms observerd in 2007 and 2008 (turnover, employment, equity, taxes…)
Sample filters: Turnover < 5.000.000 euros, interest expenses to bank debt ratio < 0,3 (=Lending rates)
Sample: 4500 companies observed in 2 years (total number of observations=9000)
Model:

$$\mathbf{LR = \kappa + \beta_1\, D_B/E + \beta_2\, ROE + \zeta\, lnTURNOVER + \lambda\, I_f}$$

+ dummy variables for the legal form of the companies (3), geographical area (3), absolute equity size (4), sectors (10)

LR (lending rates) = interest expenses to bank debt ratio, D_B/E=(bank) debt to equity ratio, ROE=after-tax-income (profit or loss) to equity ratio

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The most part of the empirical evidence available at the moment has been based on survey or data referring to medium or large enterprises. On the contrary, we have an interesting data base on micro and small enterprises. SEAC, a company partly owned by Confcommercio, gathers data on balance sheets, employment, wages and salaries and fiscal account of about one hundred thousand companies which use various types of services offered by the Confcommercio system.

We selected a sample of 5200 companies with complete balance accounts, observed in two years, 2007 and 2008, with a turnover of less than five million euros. We tried to understand the determinants of the cost of the credit, measured by the ratio between financial burden and the total amount of debt toward banks. The dataset has been censored by cutting data referred to firms with a cost of credit larger than thirty per cent, to avoid errors and outliers, losing seven hundred firms each year. The data set employed in the regression has about nine thousand observations, 4500 per year.

The model for the regression analysis (*slide 5*) poses that the cost of credit for any euro borrowed by the bank system depends negatively on the merit of credit of the borrowers. We expect that beta 1 turns out to be positive because a high debt to equity ratio means more risk of the loan, thus implying a higher cost for each euro borrowed; on the contrary, beta2 should be negative because the more the after-tax-income to equity ratio is, the less the risk of the loan and the cost of credit. Taken into account the risk free interest rate, in this context, any other parameters should be statistically non-significant. Possibly, zeta different from zero suggests some sort of discrimination, like other non-random effects.

The regression analysis suggests that the cost of credit is independent from the debt to equity ratio, at least in this small firm sample. There was no way to get a positive coefficient on this variable.

It also seems that banks only superficially look to return on equity - we got very weak evidence of a negative relationship between ROE and lending rates.

The only variables influencing the cost of credit is the firm size, which is measured by the turnover and/or by the absolute value of the equity, or by the absolute value of the debt: of course, the relationship is negative. This suggests some kind of discrimination against micro and small enterprises with less market power in front of the bank system (this result is coherent with P. Finaldi Russo, P. Rossi, 1999, Temi di Discussione, n, 360, Bank of Italy).

So, the lending rate appears to be independent from the merit of credit of the borrowers, referring to this sample of micro and small enterprises. On average, taking into account the equity size, moving from the equity class from 0-75.000 euros to the 75.000-150.000 one, the lending rates decrease of about 60 basis points (for example from 10% to 9,4%); over 150.000 euros of equity, the cost of credit decreases of about 130 basis points (in the example from 9.4% to 8,1%).

Thus, this evidence should be entirely due to better relationships between banks and borrowers moving toward larger size companies.

Despite the common feelings, the legal form of the company does not matter, neither does the sector of activity.

Dummy variables show high statistical significance only for the geographic effects: other things being equal, firms in the South of Italy bear, on average, more expensive lending rates of about 1,2% in absolute terms (7,0% in 2008 in the North of Italy versus 8,2% in the South).

Till now, that's about all the hard information we have in Confcommercio on the credit relationship between the bank system and micro and small enterprises. Not enough, we know, though some evidence has emerged in a clear shape.

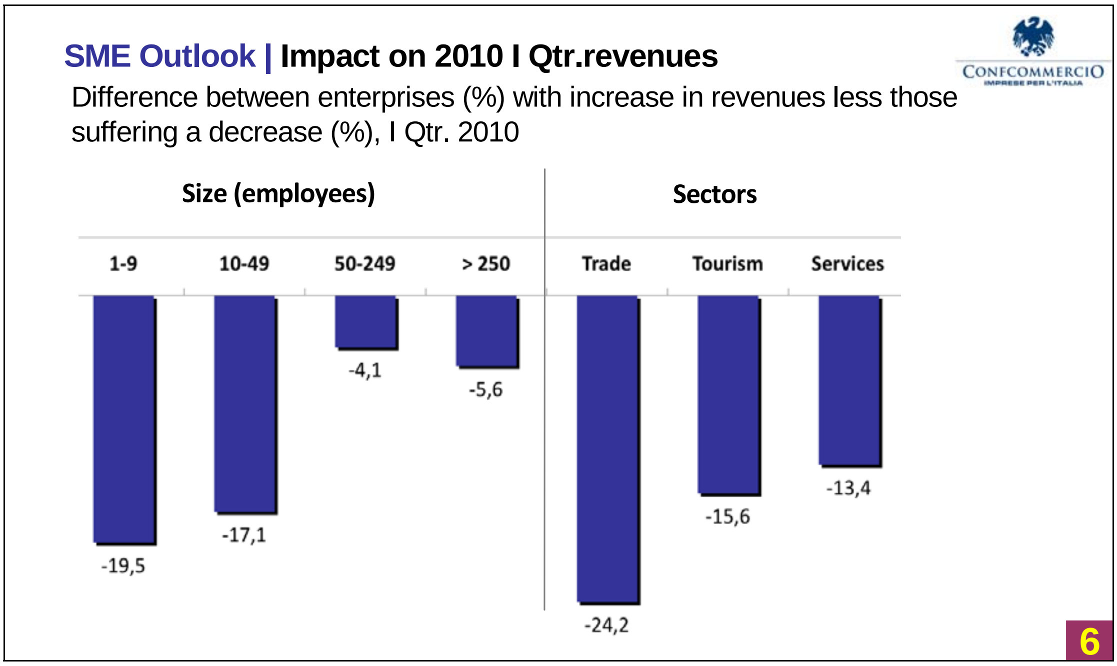
As we have already seen, the stagnation of household income implies a low consumption profile for at least a couple of years. Market services and micro and small and medium enterprises will face relatively low levels of demand for a long time from now on.

Needless to say, credit matters: if bankers now observe (bad) balance figures referring to 2009 and forecast difficulties for the future, they might lend at worse conditions, increasing problems for firms. Due to the high percentage of micro and small enterprises, even a slight discrimination on the ground of credit condition could play a prominent role in slowing the pace and the time of the recovery.

These suggestions are reinforced by the results we've been getting from the extensive research that Confcommercio runs quarterly polling companies on various issues. The Confcommercio Credit Outlook (CCO) is a survey on the enterprises operating in the Confcommercio competitive arena: Trade, Tourism and Services, excluding financial services, public sector, medical sector and "regulated professionals".

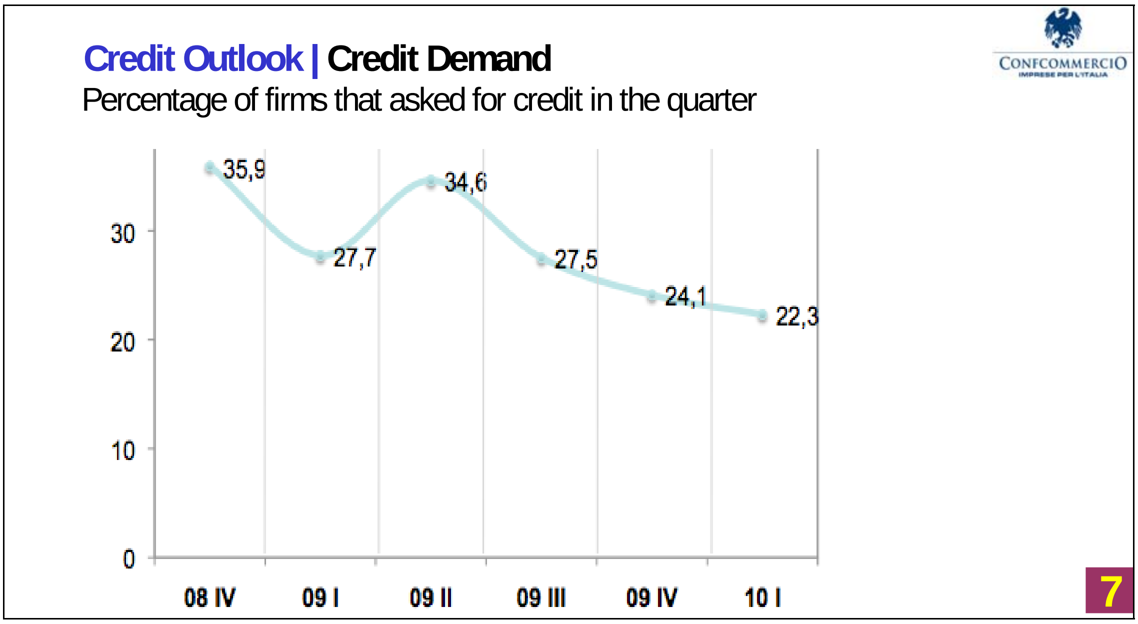
The Confcommercio potential membership so defined, accounts for 2,3 million enterprises, of which 2,2 million firms are classified as micro enterprises (1-9 employees).

The CCO, which started at the beginning of the financial crisis, is a CATI performed every quarter on 1.500 micro and small and medium enterprises, with a specific "Regional Outlook" with few questions on credit, performed every 6 months on 11.000 SMEs. The "Regional Outlook" is, if not the deepest, definitely the most extensive research on SMEs and credit performed in Italy.



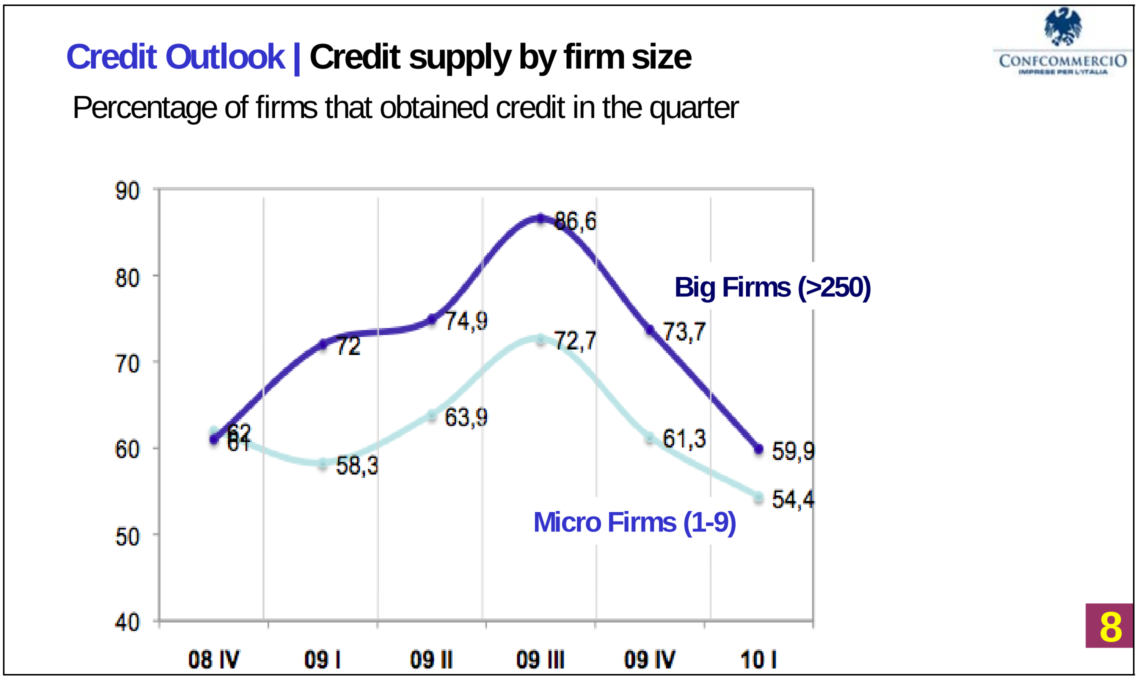
The subjects investigated in the first two sections of the CCO regard the micro and small and medium enterprises' sentiment on the Italian economy and on the main economic variables connected to credit needs. The third section is the core of the CCO, investigating liquidity levels, credit need, demand and supply of credit with its main characteristics (interest rates, warranties and so on). This is the section performed also at a regional level with 11.000 interviews. The subjects of the last section are different in every issue, but always concerning the relationship among banks and enterprises.

As to the main results of the last issue of the CCO (april 2010), it turns out that the number of firms perceiving an increase in revenues in the first quarter of 2010 is largely greater than the number of firms suffering a (perceived) decrease, and this is a strong clue of the continuation of the crisis, in particular in specific branches of economic activities (*slide 6*). Moreover, the data show that the impact on revenues is worse for small firms than for big ones. The "lag effect" among sectors (indicated in *slide 3*) seems to still be there: trade, for example, was the last sector to be hit by the crisis, now it is the last to recover.



There is strong evidence on the shift of the credit demand curve, due to the sharp reduction both in added value and in the investments firm schedule (*slide 7*). The number of enterprises asking for credit is steadily decreasing from the 2nd quarter 2009 until now.

On the other hand, data clearly supports the story of a shift to the left of the credit supply curve (*slide 8*), that should be considered a true credit crunch (taking into account the merit of credit of the borrowers). The percentage of micro, small and medium enterprises who obtained credit in steadily decreasing from the 3rd quarter 2009 till the first quarter of 2010.



It is worth noting that this data provide a simple but, at some extent, robust proof of what we called discrimination against micro firms, about which we found evidence by the regression analysis (*slide 5* and the discussion of regression results).

In fact, from the very beginning of the financial crisis, big firms (the dark blue line above in the graph) enjoy credit acceptance rates significantly higher than micro firms (the light blue line below in the graph).

Concluding remarks

We have a considerable concern for one possible outcome of the recent recession: the look for fixing its damage could make policy makers forget that Italy has many structural deficits that should be dealt with. For example, if they tried to reduce public debt by increasing the fiscal burden, another chance would be missed. In fact, during the last decades, the run-up among expenditure, debt and taxes has left us without room for planning the future of the economic system. The tax burden on production factors is too high, as well.

In the end, the economic growth and its determinants should come back to the core of the economic debate and shape the consequent policies.

Micro, small and medium enterprises must play a more effective role in the process. Given that the Italian economy, compared to the European partners and to the USA, shows a smaller share of qualified employment and a smaller share of high quality technological stock of capital, it turns out that there is a small-size problem of our firms, among the other problems.

Then, micro, small and medium enterprises must be aware of the need to change toward more turnover and more equity. We must push a process toward (contractual) co-ordination or integration of micro and small firms to exploit scale and cost economies, improve R&D investments and hire more qualified human capital. In other words, the challenge is to involve the enormous energies of small enterprises in a modernisation process along the lines of a typical long-term development: increase the single factor and the multi-factor productivity.

No other way is available.

The bank system could help. It already started a successful merger process along these suggested lines.

Confcommercio is involved in these changes by stimulating innovations among entrepreneurs, operating to develop the mutual guarantee institutions (the so called consorzi fidi) to efficiently signal to the bank system of the quality of the borrowers, lobbying to have fiscal incentives for micro and small enterprises moving toward some form of integration.