

ABSTRACT. The data concerning interest rates paid by small and medium sized firms on credit and financial markets as well as the available balance-sheets confirm the idea that firms have difficulties to get financial resources. This paper tries to put in light the financial disparities among firms when a discrimination resting on size characterises the functioning of credit market. The first section presents the main financial characteristics of French SMEs: the low level of equities, the heaviness of short term debts and the over use of payment delays. Section 2 shows how French and European authorities reacted in order to improve the financial situation of SME's and to reduce their liquidity constraint, changing tax policy and promoting the creation of new means of financing.

Introduction

This paper rests upon an idea, due to O. Favereau (1989), according to the "black box" fiction may no longer be used to study the functioning of any kind of firm. Instead, to understand the nature of the relationships between a firm and its partners, what may be called the "internal market" has to be described and analyzed. The 'internal market' concept may be defined as what happens within the firm among the different actors who take part in its activities and its life. If this idea is adopted when studying the financing of Small and Medium sized Enterprises, one has to admit that the managers' behavior, as well as the rules and habits into force within firms influence their financial decisions on one hand and their relationships with financial backers on the other hand. Of course, adopting this point of view prevents to legitimate the results coming from the traditional presentation of the Modigliani-Miller theorem which

supports the independence between the market value of a firm and its financial structure since the latter results from the firm's bargaining power on the different financial markets and, in turn, constitutes a signal used by lenders and by effective and potential shareholders to decide if it's worthwhile to enter into the registered capital of a firm or not.

Besides this first effect resulting from the fact that internal organization of the firm has to be taken into consideration to explain its strategic choices, another consequence, dealing with the kind of decision process implemented by financial departments, may be underlined. This second aspect insists on the inadequacy of subjective utility maximization criteria in order to justify financing decisions which may be considered as a result of a process in which learning plays a major role. Indeed, any kind of choice concerning the firm's organization implemented by a manager has to be analyzed with the help of the procedural rationality concept, so that a position, here a financial one, is no longer supposed to be definitively optimal but depends on a continue adaptation to new conditions appearing in a given environment as well as on specific expectations expressed by the different departments involved in the decision process.

The second point that has to be emphasized concerning the fundamental ideas exploited in this research, enhances the existence of a kind of causal relationship between financial and real factors. Such a conception, inherited from Schumpeter, allows to consider financial resources as primary factors which, just like labor or physical capital, are necessary to undertake any productive activity. Such a proposal may, of course, be applied to the case of growing economies in which the production either of an increasing output, or of new products requires a more important amount of money created by banking institutions able to supply credit. However, such an

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approach remains valid when a self-reproduction economy is analyzed: since production is not instantaneous, there is always a gap between receipts and expenses so that a supply of (short term) credit is necessary to insure production.

These two proposals are here applied to a specific topic: SMEs. They are considered with an increasing interest by Public Authorities (for instance, the EEC tries to promote the development of these firms helping them to find financial resources and to establish co-operative relationships with other SMEs settled in foreign countries) and also by economists (Cf. Acs and Audretsch, 1991 or Cibert, 1990), even if no generic definition is available (see Baroin and Fracheboud, 1983 or, more recently Julien, 1990 who insist on the heterogeneity of the definitions among the countries and on the problems raised by such a diversity when one tries to establish a typology). The growing attention paid to these firms supposed to be able to create employment, to develop innovative products and/or processes and to generate growth, has to be associated with the decline of the deterministic idea according to a SME is considered as an intermediate stage in the process of a large company formation (Audretsch, 1994).

When incorporated into the analysis of financial structure and relationships with banks, the notion of internal organization of the firm allows to take into consideration what some call the "financial territory" of the SME which can be defined as a set of relations between a firm and different types of financial partners, among which exist not only banks but also venture capitalists, second market investors, public institutions and so on (Cf. Belletante, 1991 and Levratto, 1992b). Even if the aim of such a way of analysis is to consider all SME's as an homogeneous group, mainly characterized by a limited access to financial instruments, we have to insist on the fact that all the firms employing less than 500 workers are not similar. More precisely, the employment of 200 workers defines a border line in the set of SME's since, beyond this level, an important part of the firms belong to large corporations, what allows them to have a higher economic weight and to benefit from a kind of insurance when they act as borrowers on external capital markets (Arrow, 1983). This is one of the reasons why, in the

following sections, we will proceed to data de-aggregation.

Since the national economic environment influences the firms size and structures, this work is mainly devoted to study French SMEs. Section I will thus describe the financial characteristics of these firms and, when possible, we will compare French data to information coming from other EEC countries. Section II will discuss the measures adopted at a national and a European level in order to ease the access to financial resources for SMEs and we will show that the liquidity constraint appears to be one of the main problems small enterprises are facing, credit and equity rationing having been identified as a cause of failure of firms.

1. The French SME's today: A financial appraisal

Before discussing about the measures to adopt in order to improve the performances of SMEs, we have to identify the problems they are facing. Our purpose is not to establish an exhaustive presentation of all kinds of difficulties met by these firms even if we have to keep in mind their inability to reach the minimum efficiency scale (Audretsch and Mahmood, 1991) or to determine strategic plans (Chabbal Report, 1993). Instead, we aim at describing what kinds of financial difficulties prevent French SMEs to become as efficient as they could be in the growth process.

1.1. *An insufficient level of equities*

What has to be mentioned first when one wants to define precisely the financial characteristics of French SMEs is the stability of their financial autonomy over the last decade. Indeed, since the beginning of the eighties, the ratio Equity/Capital Employed oscillates between 60 and 64%. However, if the absolute value of this ratio is roughly constant, the comparison with data of large companies shows that the relative position of SMEs tends to worsen. If at the beginning of the period, most financial results observed within the population of small firms were better than the large firms' ones, the hierarchy has reversed since 1987 mainly because the latter succeeded in increasing the level of their equities.

In fact, two elements allow to understand the existence of such a gap between the respective improvements of the two groups. The first one is exogenous to the firms strategies whereas the second one finds its origin in the management process.

i) During the second half of the last decade, large firms resisted better to the crisis than SMEs did, as shown by the first two ratios mentioned in Table I. Indeed, when performances are measured either by the ratio Value Added/Annual Turnover or by Operating Profit/Value Added Before Taxation, large firms' performances varied in a more favorable way than SMEs' results. Of course, if such a movement is observed it is because the assets efficiency has been improved in firms employing more than 500 workers but also because, as shown in the second part of the table, the financial weight of equities added to long, medium and short term credit decreased more in large firms than in SMEs. To explain this contrasted evolution we have to refer to the hierarchy of interest rates which shows that intermediation tends to increase the level of interest rates paid by borrowers due to the margin rate applied by the lender. Being risk averse, banks tend to consider

that the high rate of failure of SMEs and thus their high probability of default reduce their expected profit, so that, in order to reach their desired level of receipts, lenders often react applying a higher risk premium to borrowers whose size is small than to large sized companies. Since total current liabilities added to long term liabilities are chronically to low in SMEs, and that market structure as well as the higher default risk prevent the smallest units to call up capital in order to improve their financial structure, these concerns tend to compensate this internal disequilibrium using an abnormally high amount of short term credits whose cost remains important.

ii) Increases in registered capital have been more important and more frequent in large firms than in SMEs. As shown by the research works on the agency problem in the literature concerning financial structure, this is partly due to the responsibility of the owners who have to cope with the famous dilemma between ownership and control, and thus, must choose between getting more equity and more shareholders on the one hand and not loosing any of decisional power keeping a rather constant shareholding structure on the other hand. In most French SMEs, the independence of

TABLE I
Financial ratios according to firms' size

	Size	20-49	50-99	100-199	200-499	SMEs.	L.F.	Industry
Val. Ad./An.Turnov.	1989	39.6	37.3	35.4	34.2	36.3	33.3	34.1
	1988	40.4	38.0	36.5	34.8	37.1	34.5	35.2
	1987	41.6	39.1	37.0	35.7	37.8	34.8	35.3
	1986	41.7	39.6	36.9	36.0	38.0	34.3	35.3
Op. Profit/VABT	1989	23.2	24.6	25.1	29.0	25.8	34.7	31.1
	1988	21.7	23.6	23.4	27.3	24.3	33.4	29.8
	1987	20.3	22.4	20.9	25.1	22.4	28.0	25.8
	1986	19.3	21.8	19.1	23.7	21.1	24.8	23.4
Fin. Ch./VABT	1989	4.9	5.9	6.7	7.5	6.4	8.9	7.9
	1988	5.0	5.7	6.2	7.2	6.1	9.3	8.1
	1987	5.4	6.0	6.5	7.1	6.3	12.1	9.8
	1986	5.1	6.3	7.1	8.7	7.0	14.0	11.2
Fin. Ch./An.Turnov.	1989	2.0	2.2	2.4	2.6	2.3	3.0	2.7
	1988	2.0	2.2	2.3	2.5	2.3	3.1	2.8
	1987	2.1	2.3	2.5	2.7	2.4	3.9	3.3
	1986	2.3	2.4	2.7	3.0	2.6	4.5	3.7

Val. Ad.: Value Added; An. Turnov.: Annual turnover; Op. Profit: Operating Profit; VABT: Value Added before Taxation; Fin. Ch.: Interest and other Financial Charges.

Source: SESSI, 1991

the firm is often heavily weighted so that banks are often solicited to grant loans by managers who are eager to control financial and industrial strategies of the firm they manage. Doing so, they are at variance with the conclusions of approaches showing that a pecking order exist among the different kinds of financial resources since self financing is considered as being preferred to debt financing and then to issuing equities.

However, if such a deliberate behavior may explain the insufficient level of the registered capital, another point, concerning the problems raised by entry of SMEs on financial market, has to be mentioned. Despite the globalization and the deregulation phenomena which took place during the 80's, firms employing less than 500 workers still have difficulties to issue shares, even on the French 'second marché', the equivalent of the 'Unlisted Securities Market'. Indeed, not only the firms which plan to issue shares on USM or commercial paper on money market scarcely respect the whole set of required conditions – in fact they never succeed to overcome the still existing barriers to entry – but also they are not yet well informed about all the available way of financing since, except for the largest ones, they cannot support the cost of functioning of specialized financial departments.

When comparing firms employing less than 500 persons to those employing more than 500 persons, what has to be put in light is that French firms, at least as far as financial levies are concerned, are not really disadvantaged when compared to their

European competitors. Keeping in mind the results showing that the size of French SMEs is such that it allows them to get an average position regarding the efficiency of their production structures (Cette and Szpiro, 1992), one has to mention that a similar conclusion is reached when financial question is considered. Indeed, the increasing level of equity allowed French firms to reduce the disadvantage observed *vis a vis* the firms located in foreign EEC countries, as shown by Table II.

Disparities usually observed among firms having different nationalities seem to follow a decreasing trend. However, one may notice the existence of important differences concerning the 'net worth' evaluation, especially between French and German accounting system. In fact, in Germany, provisions for retirement appear among the fixed assets into the balance sheet whereas such an item is not taken into consideration as a stable resource by the French accounting system so, whenever respected, this condition induces a great advantages in favor of German firms according to their financial independence. However, if provision for retirement is excluded from the stockholders' equity, as it is the case for the Table II, French firms appear to be in a better situation than German ones. Such a discrepancy, which is only an example among many, increases the difficulties encountered when one tries to make international comparisons and pleads in favor of an harmonization of the European accountancy.

TABLE II
International comparison* of the ratio stockholders' equity/financial capital

Stockholders' equity financial capital	1981	1983	1985	1987	1989
F.R.G.	32.8	31.8	31.9	32.9	–
Belgium	43.3	51.9	58.2	58.2	57.3
France	49.5	41.6	30.8	43.4	53.6
United Kingdom	72.6	67.8	67.4	66.4	61.0
Netherlands	56.2	57.0	61.2	61.4	62.9
Italy	–	43.4	45.2	50.9	45.8
Portugal	24.6	22.8	19.9	39.6	52.7
Spain	–	39.2	47.0	56.1	65.1

* For France, Italy, Portugal and Spain are taken into consideration firms employing less than 500 persons, whereas for Belgium are concerned either firms whose total is less than 1 billion of Belgium Francs or enterprises employing less than 100 persons and whose annual turnover is inferior to 145 billions of Belgium Francs.

Source: Banque de France.

1.2. An overuse of short term loans

If financial autonomy, measured with the help of self financing ratio, was roughly constant over the last decade, we have to notice that the ratio of Cash Flow to Profit on Ordinary Activities before Taxation is weaker when calculated for SMEs (58%) than for large firms (71%). This disequilibrium, which tends to increase since 1987, finds its origin into the strategies developed by the largest enterprises. More precisely, these firms have succeeded in decreasing their indebtedness level while restructuring their productive assets by plants' delocations, external growth and a decrease of productive investments (SESSI, 1991). Thus, the availability of financial resources rather than the low level of return on capital assets explains why French SMEs are suffering. In fact, the main problem they have to solve concerns the structure of short and long term liabilities which is so much spurious that, as already demonstrated by Evans and Jovanovic (1989) or by Fazzari, Hubbard and Petersen (1988), it prevents the efficient organization of investment and production.

The analysis of SMEs' financial structure shows that these firms finance most of their investments with bank credit (Van Loye, 1983 and Levratto, 1990). The point is that not all the SME's have identical financial requirements partly because financial autonomy breakpoints induced by growth are not felt in the same way by all the managers. These disparities are shown in Table III which sheds some light on the share ownership structure according to the firms' size.

Having stressed the differences between SME's and large firms, it is now possible to consider that the share ownership structure has an influence on the interest rates paid by borrowing enterprises to

banking institutions. Indeed, inquiries realized in France permit to conclude that the interest rates on business credits are inversely related to the bargaining power of potential borrower (Dietsch, 1988). Firms able to diversify the origin of their financial resources pay lowest interest rates on bank credit than enterprises whose bargaining power is so weak that they can only borrow funds from one bank. Thus, besides size, often considered as a good proxy variable for risk (Levratto, 1992b), other factors such as the total cashflow, the adherence to a group, or the weight of the family in the shareholding have to be considered in order to explain the nature and the terms of the debt financing contracts. Indeed, the results obtained when one compares the financial cost paid by firms depending on their size tend to confirm the idea according to interest rates paid by SMEs are highest than financial charges bore by large corporations. Furthermore, this trade off remains valid when the sole SMEs' population is studied since, among the firms employing less than 500 persons, the largest ones get the more favorable financing conditions. Perhaps, this is because most of them are sub-companies of large organizations, what confers to them a more secure capital structure which, in turn, allows them to benefit from interest rates charged with low risk premium.

The discrepancies observed in Table IV allow to consider that banks proceed to an interest rates equalization on the business credit market since the margin they add to the prime rate is inversely related to the size of the borrowing firm. The relatively high cost of bank credits has thus to be added to the problems met by SMEs when, if possible, they have to issue equities or bonds on monetary and financial markets on one hand and

TABLE III
Shareholding typology

	Size < 200	200 < size < 500	500 < size < 2000	Large corporations
One shareholder	62	32	31	29
whose family	36	11	0	0
One +50% shareholder	23.5	50	56	36
whose family	14.5	27	8	9
Sparse shareholding	14.5	18	13	35

Source: KPMG.

TABLE IV
Size of the firm, adherence to a group and interest rates on bank credit (difference with the Bank Base)

	20 ≤ size < 100	100 ≤ size < 500	500 < size	Whole
<i>Trade discount</i>				
Subsidiary companies	1.4	1.2	0.8	1.2
Independent firms	2.3	1.7	1.7	2.2
Whole	2.1	1.5	0.9	1.8
<i>Bank overdraft</i>				
Subsidiary companies	2.1	1.8	1.6	1.8
Independent firms	2.9	2.1	1.9	2.7
Whole	2.6	1.9	1.6	2.3
<i>Medium term (fixed rate)</i>				
Subsidiary companies	1.1	-2.2	0.1	0.1
Independent firms	2.2	1.1		1.9
Whole	1.9	0.1	0.1	1.1

Source: C.E.R.C. Survey.

to benefit from reduced rate loans supplied by specialized financial institutions on the other (Paranque, 1992). Moreover, their weak bargaining power on financial markets seems specific to France; indeed, international comparisons suggest that if such a phenomenon may be observed abroad too, its importance is reduced, as shown by the data presented in Table V.

Table V describes implicitly the effect of the decreasing inflation rate on financial costs borne by French firms whose balance-sheet accounts show an over-indebtedness. Indeed, whereas the beginning of the eighties have been characterized by very low, even sometimes negative, levels of real interest rates, a period of increasing cost of bank credit followed so that interest charges which equaled 6.6% of the Value Added in 1970 have

been significantly raised and represented more than 10% of this indicator at the end of the eighties. Therefore, if one may consider that French SMEs are not significantly deep in debt when compared to English or German ones, domestic firms seem to be constrained by the relatively high level of interest rates, particularly when French financing contracts are compared to German ones. This drawback is obvious when interest rates on short term financial resources are observed, since looking at the data describing this kind of financing, one sees that in 1989 the additional cost on short term credits in France equals 3 points in comparison with Germany and 1.3 points in comparison with U.K. So, within the group of SMEs, the smallest ones have the greatest difficulties to access fair bank credit contracts, such a discrepancy being observed in all the EEC countries.

However, the effective risk level bore by the lenders and the weakness of the bargaining power of small firms are not sufficient to explain the high level of interest rates paid by this class of borrowers. Indeed, a large part of these firms either depend on a small number of important customers to sell their output or are subcontractors of large firms. Both of these relationships are at the origin of a kind of economic dependence which tends to weaken their position on real and financial markets. So, in order to preserve their market share and their competitiveness, SMEs are often constrained to consent a payment credit to their

TABLE V
International comparison of nominal interest rates paid by SME's during the first quarter of 1989.

Interest rates	France	Germany	U.K.	Italy
Trade discount	10.45	7.00	-	15.20
Bank overdraft	11.54	8.15	14.70	15.45
Medium term	9.47	6.65	14.75	8.50*
Long term	10.12	6.84	14.40	-

* In Italy, rebates on interest rates are so important that the interest rate quoted is the actual one (the effective price of long term financing paid by firms) at the end of 1988. The basic rate was set at 13.8%.

Source: KPMG.

customers, and the importance of the 'buyer credit' line in the balancesheets raises a huge problem to the managers.

1.3. *The excessive weight of buyer and supplier credit*

Looking at the working capital requirements of firms permits to understand why short term credits are so frequently used by small firms. Such a tendency is confirmed by the examination of the item 'Notes Payable', included in 'Current Liabilities',¹ and which represents the amounts that the company owes to a bank or other lender. Debts that fall due within the coming year reach a particularly high level in firms belonging to the manufacturing industry and whose the number of employees is set between 100 and 500. Such a phenomenon may be explained by the operating cycle which is shown to be longer in this group of firms than in large ones. In fact, what has to be noticed here is firstly the increasing weight of inventories managed by SMEs, such an evolution being due to the generalization of 'zero stocks' and 'just in time' systems in large firms and, secondly, the rise in charges related to supplier and buyer credits, which in France are frequently used as commercial arguments by firms eager to enlarge or preserve their market share.

Traditionally, commercial relationships between firms are asymmetric and the discrepancy is mainly due to their size since the links between customers and suppliers are frequently established in such a way that the smallest ones are constrained to grant a payment term to the other contracting parties. From this point of view, the French case seems highly specific when compared to other European countries since data show that the total amount of credit facilities exceeds the total amount of business credit (see M. Dietsch, 1988), so that, at least in France, this means of financing may be considered as an alternative to the insufficient supply of bank credit.

The size effect observed as far as payment facilities are concerned is particularly strong and may be considered as the main explanatory element of the distribution of this peculiar kind of credit which holds the first place among the short term financial resources used by firms. In 1988,² the Accounts Payable, that is, the amounts

that the company has to repay to its regular business creditors, observed for the set of firms subject to corporation tax represented about 26% of aggregate 'total liabilities and stockholders' equity'. This general appreciation has to be qualified taking into consideration the industry the firm belong to since, for instance, whereas in the manufacturing industry the ratio Accounts Payable/Total Current Liabilities oscillates between 22 and 30% depending on the kind of activity observed, this indicator reaches levels exceeding 50% in retail trade. The analysis of the item 'Accounts Receivable',³ which represents the amounts not yet collected from customers and gives a rather precise idea of the average length of time the firm has to wait before being paid for the sales it has realized, shows that this item figuring on the asset side of the balance sheet cannot be neglected because of the important amounts it represents. Indeed, for a sample including all the non financial companies, this line represented 37% of the total assets in 1988. Nevertheless, as in the previous case, the global tendency hides important differences among industries since the ratio Accounts Receivable/Total Current Liabilities reaches 47% for firms producing intermediate goods and 3% for the retail foodstuffs trade companies.

As already mentioned, the size effect has to be taken into consideration when one wants to explain the allocation of payment facilities and the level they reach in the balancesheets of domestic firms. According to the results of an experiment conducted by the French Central Bank, firms size may be considered as a key factor as far as the amount of accounts payable and accounts receivable is concerned within an industry (Boissonade and Palu, 1991b). Indeed, looking at the manufacturing industry, generally considered as a sector which plays a function of lender, the average length of payment terms reaches 40 days for SME's but only 20 days for large firms.⁴ Such a difference is mainly explained by the settlement period consent to customers which is equal to 90 days if a SME is involved in such a contract, whereas the average term falls to 70 days when a large firm grants a payment facility. However, these discrepancies have to be considered as highly specific to the 'Accounts Receivable' structure of manufacturing industry since, looking at

the item 'Accounts Payable' for the same sector, one observes that the difference in terms represents only 5 days (the average credit period equals 80 days for SMEs and a little less than 75 days for large firms).

Finally, if one tries to bring to the fore the distribution of lenders depending on the amount of loans outstanding it has to be insisted again on the relation between the firm's size and the level of credit sales. What is observed is that firms paying an important amount of interest and other finance charges have also to manage a high level of accounts receivable; so that, already weakened by their indebtedness towards banks, the financial position of these firms is worsened by the disequilibrium of the Assets structure induced by the amounts not yet collected from customers. On a solvency standpoint, when compared to less risky firms, firms having to manage a problem of cashflow whose origin may be found in the Accounts Receivable item have the following characteristics:

- a high amount of unpaid bills,
- a Zeta score (a ratio calculated by the French Central Bank in order to estimate the *ex ante* default risk of industrial SMEs) higher than average value,⁵
- a relatively low financial profitability level.

Since these three elements are frequently observed simultaneously, payment facilities may be considered as a narrow substitute to bank credit for firms whose expected repayment capacity is judged insufficient by lenders who find an incentive to ration them on credit market. Besides, from the Harmonized European Accounting System data base implemented by the EEC it has been possible, by comparing two ratios, to conclude that the firms involved as lenders as far as payment facilities are concerned are indeed the small and medium sized ones since the following relation may be observed:

$$\frac{\text{risky firms' turnover}}{\text{total turnover}} <$$

$$\frac{(\text{trade debtors} - \text{accounts payable}) \text{ in risky firms}}{\text{total} (\text{trade debtors} - \text{accounts payable})}$$

When compared to firms located abroad, the specificity of French firms becomes obvious.

Firstly it may be observed that payment delay is longer in France than in other EEC countries and, secondly, that the proportion of Accounts Payable to Total Liabilities and Stockholders' Equity is higher in France than abroad (Table VI).

TABLE VI
Share of accounts receivable and payable reported to the total assets or liabilities

Country	Accounts receivable (%)	Accounts payable (%)
France	29.4	34.2
Netherlands	13.3	10.6
Germany	16.3	15.7
United Kingdom	16.3	11.8
Belgium	28.4	24.9
Spain	28.6	18.7
Italy	29.6	23.7

Source: C.E.R.C., 1989.

If there is no doubt about the fact that French SME's have to take in charge most of the payment facilities, it seems that an arbitrary shortage of the maximum credit period authorized cannot be considered as a feasible measure to adopt in order to improve the balancesheets structures. Here again, according to simulations done by researchers of the French Central Bank (Boissonade and Palu, 1991a), it may be concluded that this kind of decision would have a strong negative effect on firms' behavior and financial performances. Indeed, assuming that the maximum settlement period is 45 days, it is possible to demonstrate that if the financial situation of about 50% of the firm would be better, the financial resources requirements would be increased for 20% among them. Such an evolution would be highly prejudicial since the firms that would suffer the most would be unable to cancel these effects because, in such circumstances, their equity level and their borrowing capacity would remain constant. So, to be really efficient, the decision concerning a shortage of the credit periods would require a general change in financing opportunities. More precisely the diversification of the supply of financial resources is a condition to respect in order to protect the firms' financing structures against the equity rationing due to the decrease in payments delay.

This section was devoted to the analysis of the French SMEs' financial situation and the collected data allow us to demonstrate that, on a general standpoint, firms employing less than 500 persons have to manage a more important and more expensive indebtedness than large firms. Such a position may be explained by referring to the type of industries most SME's belong to since these enterprises often act in industries characterized by a low technological intensity level. But a second element has to be emphasized; it concerns the relative weakness of ratios that illustrate the competitiveness of the firms production process. Among them the apparent productivity of factors,⁶ the profitability of the operating activities,⁷ and the mark-up ratio⁸ whose evolution allows to appreciate the improvement in the efficiency of the operating process have to be mentioned. All of these ratios are lower for SME's than for large firms. Nevertheless, beside these concrete problems have to be taken into consideration the financial difficulties SME's are facing especially because it seems that, despite the important efforts realized by the European Authorities, a large proportion of small and medium sized firms managers still consider that disparities remain and that a great number of actions in their favor have in fact benefit to large sized competitors.

2. Presentation of the decisions adopted in order to satisfy the request of SME's managers

It is interesting to begin this section with a fact that, although anecdotal, gives a rather precise idea about a feeling largely shared among the SMEs' managers. It is taken from a sounding out of opinion made by a French bank (the *Crédit du Nord*) in April 1993 on SMEs' managers. According to this survey, 80% of the participants were considering that the decrease in French interest rates on business credit was insufficient to improve their indebtedness capacity. They would have preferred a specific change in their own environment: a selective policy specially devoted to financing conditions applied to SMEs is more required in order to promote their growth than a decrease in interest rates since the latter does not reduce the discrepancies observed between SMEs and large firms.

2.1. Tax system regulation and public subsidies

Corporate taxation, defined as the whole system organizing every tax levy and all the other charges a firm has to pay on wages, has to be considered as an important factor of the economic environment since it has been shown that it has a strong influence on firms' competitiveness. Differences observed among the members countries of the EEC increase the difficulties we met trying to establish comparisons. Up to now one survey has been realized in order to estimate the tax burden which characterizes SMEs whose operating conditions are harmonized but which are located in different European countries (Arthur Andersen Consulting, 1988); however if this survey remains the only available reference in this field, some restrictions concerning the size of the sample used must be made since only ten firms have been observed. In spite of this methodological limit which tends to reduce the representativeness of the quoted report, we may mention the main results from this study:

- i) French SMEs are submitted to the heaviest tax burden whose origin does not come from the French equivalent of Federal Income Tax but instead from taxes on wages paid to public utilities such as URSSAF (an organization which collects social security and family allowance payments) or ASSEDIC (the French unemployment benefits department);
- ii) Corporate Tax seems to be less heavy in France than abroad but the amounts saved this way are smaller than the total cost of social welfare bore by firms.

Reasoning according to a mark-up process of price determination induces us to consider that the increase in charge caused by the corporation tax system acts as a negative factor since it increases the total costs for the supplier and, in consequence, decreases the international competitiveness of French SMEs. It is very likely that the origin of pessimistic expectations of small firms managers about their ability to increase their market share has to be found in the high tax level. This idea is confirmed by the fact that these agents request a decrease in burden tax instead of a reduction of interest rates that appears to be a measure which might have only temporary effects. The interest

rate structure, which changed drastically during the eighties, explains such an attitude. Indeed, after having functioned as an overdraft economy into which the Central Bank used to play the major role in the determination and stabilization of the price and the quantity of credit supplied by commercial banks by means of the discount window, French financial sector complied to international standards. Such a transition explains thus why, since the mid-eighties the money market rate is the point of reference whose level determines every interest rate on credit market following a mark up process. The characteristics of the interest rate structure, whose the influence on the firms' financial strategies cannot be neglected, being determined at an international level, managers of small firms react to this established fact demanding for a reduction of their other charges, such a measure being able to increase the effects of competitive deflation policy started in the mid eighties and to decrease the production costs, what would probably have a positive effect on employment.

Facing this demand, Public Authorities reacted by setting up a set of measures aiming at decreasing administrative, legal and social obstacles to the development of SMEs. The efforts concerned mainly a reduction in the tax burden, the action proposed in this direction having been undertaken not only in France but also in other EEC countries (D. Baroin and P. Frachebou, 1983 list all the measures adopted this way until the beginning of the eighties). In France, this economic option consisted mainly in abandoning the traditional credit policy in which the supply of reduced rate credits played the major role. The transition was quite rapid since, whereas in 1985 the supply of reduced rate credit represented 100% of the credit allocated to the manufacturing industry, this proportion fell to 35% in 1989 and to 18% in 1990. Simultaneously was experimented the decrease of the corporation tax rate in order to prevent the double taxation phenomenon whose negative effects on the share capital level were strong. Two main reasons may explain such a choice:

- i) from a macroeconomic viewpoint, the rebates on interest rates due to public subsidies allocated to banks engaged in debt contracts with

most of the manufacturing industries induced important budgetary expenses which became rapidly unbearable. Besides, at the same time, the control of the quantity of money was abandoned and progressively replaced by an open market policy resting on interest rates on money market. Thus, these two elements contributed to the decrease in the supply of reduced rate credits.

- ii) from an administrative viewpoint, the system of rebates became rapidly so complex that most of SMEs' managers could not understand neither the conditions to respect in order to be able to benefit from such advantages nor the way to fill the credit forms. The heaviness of the system induced an adverse effect the Public Authorities could not ignore longer since most of rebates were granted to the largest SMEs and especially to large corporate subsidiaries. Such a result was hardly different from the objectives pursued by the settled selective system (Levratto and Torre, 1986).

Since 1985, when credit restriction has been stopped, the supply of reduced rate credits has sharply decreased since the only ones still proposed are the Special Loans for Investment Purposes distributed by specialized credit institutions. Then, this change in banking policy allows to set up an incentive tax system aimed at easing the strengthening of the Capital Stock item in balancesheets. In the past, the tax system was such that the enterprises could benefit from important financial as well as fiscal leverage effects so that indebtedness was considered as the very best financing way. On the contrary, the accumulation of retained earnings presented some drawbacks due to the net profit taxation. This system partly explains the high level of current and long term liabilities French firms have to cope with (Borel and Bouvier, 1985). The transition from an overdraft economy to a system characterized by a kind of desintermediation added to the increase in real interest rates and to the implementation of a new taxation system favorable to Capital Stock discouraged firms to raise their debt level and induced a decrease in Accounts Payable – due to the cut of Notes Payable – and in Long-term Liabilities. Simultaneously, Equity's strengthening

has become more interesting according to the taxation system since the Corporation Tax rate is actually set at 33.3% not only for the dividends paid on the common stocks but also for the accumulated retained earnings. Such an harmonization has induced a different payment of dividend policy in firms finding some financial incentives in retained earnings accumulation.

The generalization of deductibility of dividends paid to stockholders regime to cash contributions and the improvement of taxation system applied to partners current accounts rest on a quite similar logic since both of these changes aimed at strengthening and stabilizing the stockholders' equity. Besides improving the taxation system which concerned every SME, the Public Authorities set up tax credit concerning R&D investment and expenses specially dedicated to firms which, instead of paying a lump sum tax which is quite frequent among small enterprises, are taxable according to the effective level of net profit they realize, the maximum amount they may save being equal to 50% of the sum devoted to R&D. However, since in 1991 the ceiling amount of expenses engaged raised from 5 billions to 40 billions of French Francs, we may wonder if such a measure is still adapted to SMEs or if its field of application does not also include large firms, so that the initial aim which was the promotion of innovative activities in SMEs is no longer valid (for a presentation of the critics addressed to this modification, see Lallemand, 1991).

2.2. *How to improve the quality of relationships between SME's and banks*

One of the main characteristics of the relationships between SME's and their financial partners may

be expressed in term of inertia. Indeed, as captive customers of banking institutions, most of small and medium sized firms possess a very weak bargaining power and are thus unable to crawl any advantage from the competition between intermediate and desintermediate financing instruments so frequently exploited by larger firms in order to pay relatively low interest rates on bank credit. Data demonstrate the trade off between the firm's size and the interest rates paid on loans, whatever their term is, as we may see in Table VII.

The trade off between firms' size and interest rates on credit market is confirmed by data concerning interest rates on business loans published by the French Central Bank (Table VIII). These series refer to the amount borrowed, that may be considered as a convenient proxy variable for size and, as previously, they shed some light on the question of the existence of what some call a bargaining power of the largest borrowers.

What may be concluded, looking at these figures is that discrepancies between large firms and SMEs concerning interest rates paid are almost structural and find their origin into appreciation of risk by banks. Indeed, among the different criteria used by lenders in order to estimate if it's worthwhile or not to allocate funds to a potential borrower, some play a major role; it would appear to be the probability of default of the applicant, the firm's financial structure, the level of indebtedness and the amount of fixed cost the applicant has to pay. Keeping in mind this matter of facts leads us to find elements either strengthening or weakening this position.

The riskiness of firms according to their size may be appreciated having a look on data published by the National Institute of Statistics (I.N.S.E.E.) concerning the number of bankrupt-

TABLE VII
Nominal (N) and real (R) interest rates levels according to the firm's size

	20-99		100-199		200-499	
	N	R*	N	R*	N	R*
Bank overdrafts	12.6	9.2	11.1	7.7	10.9	7.5
Medium term	10.1	6.7	9.1	5.7	9.2	5.8
Long term	9.8	6.4	9.6	6.2	10.9	7.5

* Inflation rate: 3.4%.

Source: K.P.M.G. Fiduciaire de France.

TABLE VIII
Average interest rates observed according to the amount borrowed (thousands F. Francs)

Loan	≤ 100	> 100 and ≤ 300	> 300 and ≤ 500	> 500 and ≤ 2000	> 2000 and ≤ 10000	> 10,000	Average rate
Bank discount							
1st quarter 1992	13.42	12.96	12.57	12.09	11.45	11.00	11.41
1st quarter 1993	13.41	13.00	12.39	12.01	11.73	12.25	12.12
1st 1994	11.21	10.65	10.14	9.64	8.79	7.59	8.61
Bank overdraft							
1st quarter 1992	14.82	13.36	12.70	12.15	11.69	11.33	11.64
1st quarter 1993	14.48	13.29	12.59	12.21	11.89	11.41	11.74
1st quarter 1994	12.72	11.22	10.26	9.59	8.37	7.53	8.19
Medium and Long term credit							
1st quarter 1992	11.35	11.18	11.05	11.02	10.54	10.78	10.84
1st quarter 1993	11.21	10.98	10.87	10.78	11.21	–	11.00
1st quarter 1994	9.12	8.83	8.64	8.27	7.71	–	8.28

Source: French Central Bank.

cies. What may be observed is that the number of failures in all the more important since the firms are small. Indeed, for instance, from official source we know that in 1992 3.0% of the firms employing less than 500 persons went bankrupt against only 0.3% of large firms, these figures being representative of a general tendency. Since the number, and thus the probability, of default is negatively linked to annual turnover, the lenders' intuition about the vulnerability of SMEs and their proportionally weak capacity of repayment is justified and so is the fact that these firms have to pay a higher risk premium than large enterprises. Besides, as already mentioned in the previous section, indebtedness decreases when size increases what induces a higher risk of insolvency for the SMEs' class than for the large firms group, the vulnerability of the first ones being all the more important that their return on assets and their cashflow are low.

However, the observed disparities according to the firms' size may also be explained referring to the informal relationships between potential borrowers and lenders who prefer to finance firstly the customers able to give them regularly a set of precise information. Such a behavior, reminding clearly the notion of customer relationship, tends to reduce the asymmetry of information between owners/managers and suppliers of external funds and thus induces a decrease of uncertainty and of interest rates paid by borrowers. Indeed, the

imperfection of information must be considered as a fundamental characteristic of the financial resources (Greenwald and Stiglitz, 1992) and this imperfection may cause disfunctionings forcing some financial needs to remain unsatisfied, what reminds clearly equilibrium credit rationing according to the rate of interest is not necessarily at a level that cancel the excess demand or supply. Such a phenomenon is particularly strong as far as SMEs' financing is concerned since asymmetric information can generate potentially significant cost disadvantages of external finance. This point of view is in agreement with the ideas inherited from the lemon problem first considered by Akerlof (1970).

According to this approach, some sellers with inside information about the quality of an asset will be unwilling to accept the terms offered by a less-informed buyer, what may force the sale at a price lower than it would command if all agents were perfectly informed. Applied to the question of debt finance, these ideas induced analysis according to the effects of leverage on a firm's cost of funds posit an increasing marginal cost of debt due to the cost of financial distress and agency cost. It thus explains why lenders stipulate target debt-equity ratios whose non respect may result in credit rationing especially when lenders cannot distinguish borrower quality. The same kind of consideration give birth to models in which, depending on per capita levels of internal

net worth, the allocation of new funds may be characterized by an equilibrium such as some classes of asymmetric-information borrowers are denied loans (Evans and Jovanovic, 1989; Fazzari, Hubbard and Petersen, 1988).

Then, such a functioning of credit market justifies why, during periods of tight credit, better-quality borrowers who could also obtain funds from securities or commercial paper markets and who are able to disseminate information about their quality to potential lenders or investors are preferred over SMEs which, for this reason, are often rationed. Indeed, because of their size SMEs cannot possess specialized financial departments and, consequently, do not succeed neither in gathering correctly internal information nor in presenting reliable balancesheets and profit and loss accounts. The lack of security concerning financial information provided by SMEs' decreases their bargaining power and largely explains why they are often unable to get either low fixed interest rate or variable rates indexed to the money market rate instead of to the bank base rate which is much more sticky.

The disparities in interest rates paid by firms was judged so important by French Monetary Authorities that they decided to remove the tax on loans outstanding paid by banks (except on credits in foreign currencies and on credit devoted to export financing) in 1989. Such a decision was adopted in order to encourage financial institution to grant more loans to small firms which, given the tiny fraction of international trade they realize (less than a quarter of export are due to SMEs in manufacturing industry), demand for a relative weak amount of export credit so that, on the whole, they tended to pay more expensive interest rates than large firms whose contribution to import/export is much more important.

The setting of rates is so inequitable and the barriers to entry on most segments of money and financial markets are so important that they induce a bi-modal distribution within the firms. The first group includes the largest firms that have access to an important number of financing methods. Because of this diversification they have found many opportunities in the deregulation of financial markets and in financial innovations. Even if the largest ones belong to the first group, the second subset includes SMEs, whose financing

network is only composed of banks; most of these firms have only one financial partner, what tends to worsen their bargaining power in terms of interest charges on one hand and in terms of value date on the other hand.

However, even if most of SMEs' managers are aware of the fact that the firm's financial structure is clearly sub-optimal and tends to considerably raise the working capital requirements they have to cope with, they consider that the solution to this problem goes beyond the adjustment of interest rates on credit. The kind of relationships they keep up with banking institutions is in the core of their preoccupation since they consider that, limiting the relationships they have with managers to credit considerations, bankers prevent French firms to adopt way of reasoning embodying the whole balancesheet structure and to set up an active management of Current Assets, Cash and other items which constitute the Total Current Assets devoted to be turned into cash in a reasonably near future but whose a non negligible part can be converted into readily marketable securities able to earn dividends and interest. Based on this point of view, French managers of small firms believe they are disadvantaged when compared to German managers who benefit from the 'hausbank' system traditionally engaged in co-operative relations with their customers, especially because banks are not only lenders but shareholders too.

Replacing a partial management of the balancesheet by a global one which takes into consideration the structures and the equilibrium between the different items could allow the firm to identify the risks more precisely, to determine more accurate expectations concerning interest and change rates and to choose the level of exposure to market risks with its financial partner. It would be only in a second stage that the bank would intervene proposing a financial arrangement such as it would give birth to an optimal, that is diversified, financial structure. In fact, one may consider that the financing decision process is not a dual one but instead an interactive one since the bank has to act as a genuine partner helping the firm to determine its financing plan. So, according to the firms managers, banks have to provide them a large range of services among which advice and assistance have to prevail, instead of being restricted to a pure lender role.

Up to now, SMEs were considered by banks as captive customers since, despite the financial market liberalization movement, the creation of commercial paper and the opening of the second market, most SMEs fail to satisfy their financial needs. In such a constrained environment, the development of venture capital appears to be a possible way to overcome the liquidity constraint of SMEs since the development of this kind of intermediation allows to collect an additional amount of saving whose affectation is dedicated either to start up or to growing firms. But, beyond the supply of long and medium term financial resources, venture capital Companies are also able to satisfy the non financing needs of managers by providing them with advises in marketing, accounting and technical fields. At last, as far as love-saving is concerned, the emergence of venture capitalists whose action is limited to a Region or a narrower territory acts along the same lines than the decisions adopted within the framework of the regional policies which tends to promote the settlement of very small sized firms in rural areas. For all these reasons, the European Commission implemented measures and incentives that contribute to the creation of regional venture capital companies financed by regional Authorities, local banking institutions and local firms. These newly created institutions may benefit from public funds, including equity loans, and are characterized by a very advantageous distribution of profit since the fraction due to EEC is not paid but is automatically reinvest into the venture capital funds.

If the development of venture-capital societies is justified from a theoretical point of view, the best argument to emphasize is essentially related to their ability to function as screening mechanism because of their specialization in certain areas. Indeed, venture capitalists operate in a small community and share projects among partners often well identified. As a result, reputation and trust become fundamental aspects of the financing process in which entrepreneurs and venture capitalists are involved, so that the latter usually have detailed information on the operation of the project they fund. Consequently, the stability of such a co-operative relationship is granted by the existence of a sanction system in case of misfeasance. Thus, specialization and tightness of

relations with firms and regional environment may be considered as the main advantage possessed by venture capital companies, and their efficiency in information gathering explains why their development is promoted by the EEC Authorities which consider them as institutions able to attenuate the asymmetry of information on financial markets.

On the whole, it is no longer possible to consider that SMEs do not make a major contribution towards the increase of the global competitiveness of an economy even if one has to recognize that their financial environment is still too poor to allow them to fully reach their potentialities. Efforts have been undertaken in two directions in order to improve their position. The first one, concerning financial aspects, consists in a diversification of resources employed by these firms on one hand and in the decrease of the tax burden in order to restore their profit margin on the other hand. The second one deals with the technological environment of SMEs which, in France, are still too much involved in traditional industries. This prevents them from benefiting from a kind of innovative rent and thus from improving their operating and financial profits. However, these two fields are not fully disconnected since, to be really competitive on national and international markets, SMEs have to get the financial resources consistent with their industrial strategies.

Concluding remarks

The aim of this paper was to put in light the financial difficulties the Small and Medium sized Firms have to cope with. For this purpose, we started from the presentation of the French firms' situation. What may be observed is the following: besides the relatively high level of real interest rates, the price of financial resources is not the major problem the firms are facing as far as credit availability or growth financing are concerned. Instead, what prevents SMEs to realize their potentialities has to be defined in terms of credit, or more generally, equity rationing, since it is the lack of all sorts of financial resources that prevents them from fully achieving their investment projects. In view of the extent of the problem, French and European Authorities reacted proposing a set of decisions able to lighten the

tax burden and, by promoting venture capital, inducing an increase of financial resources' supply.

However, if the financial aspect cannot be neglected when one wants to study what prevents SMEs to play a more important role in an economy, especially from innovation and international trade points of view, we have to insist upon the fact that their internal organization is not really propitious to their expansion and that the frequent confusion existing between property and control prevents the managers to set up strategies concerning equity strengthening. What has thus to be

underlined is that financing process must be conceived a fundamental stage in the growth process since, according to the evolutionary approach, deficiencies in the financial markets give rise to new contracts forms gradually learnt by participants which, exploiting them, will understand their deficiencies giving rise, in turn, to still new arrangements. So, since the behavior and functioning of firms are closely linked with finance, debt markets must evolve in such a way that new financial instruments regularly appear in order to satisfied new financial needs.

Annex 1: Simplified presentation of the French balancesheet

Asset	Liabilities
<i>Fixed asset</i>	<i>Equity</i>
- intangible fixed assets	- Shareholders' equity
- tangible fixed assets	- bond discount + merger premium
- long term investments	- reserves (legal, statutory or contractual . . .)
	- carried forward
	- profit or loss for the financial period
	- investment subsidies
	- regulated provisions
	<i>Quasi-equities</i>
	- equity loans
	- conditional advances
<i>Current assets</i>	<i>Debts</i>
- inventories	- loans and other debts
- deposits with the order	- advances
- accounts receivable + subscript capital called and unpaid	- accounts payable
- marketable securities + liquid assets	- taxes and social security charges
	<i>Prepaid incomes</i>

Annex 2: The Zeta score method

The Zeta score aimed at expecting the vulnerability of a firm employing less than 500 persons belonging to the manufacturing industry. It appears to be a linear combination of eight financial and economic ratios, as shown by the following table.

Ratios	Coef. within the function (1)	Ratio for the firm observed (2)	Median value (3)	Contribution of the ratio to the final score $1 \times (2 - 3)$
Financial charges/cash flow	-1.255		62.8	
Rate of investments financed on cashflow	+2.003		80.2	
Pay off capacity	-0.824		24.8	
Rate of brut operating margin	5.221		6.8	
Accounts payable term	-0.689		98.2	
Growth rate of the value added	-1.164		11.	
Accounts receivable term	+0.706		79	
Rate of material investments	+1.408		10.1	
100 Z = Σ last column			100 Z =	Z =

Note: The probability of default of the observed firm is all the more important since the value of the score is negative.

Notes

- ¹ See the simplified balance sheet presented in Annex 1.
- ² The figures used in the section devoted to buyer and supplier credit are supplied by the French Central Bank.
- ³ The item 'accounts receivable' belongs to the currents assets, as shown in the balance sheet at the end of the paper. As a short term financial resource, this item appears in the lower part of the balance sheet, the upper part containing the long term resources.
- ⁴ All the data concerning the length of buyer and supplier credit come from the Conseil National du Crédit Survey.
- ⁵ See Annex 2 for a short presentation of the method used by the French Central Bank to measure the Zeta score.
- ⁶ The apparent productivity is measured with the help of ratios such as the "value added per capita" or the "turnover per capita".
- ⁷ The profitability of operating activities may be appreciate using the ratio Profit on ordinary activities after taxation/turnover, both of these data coming from the profit and loss account.
- ⁸ The mark-up ratio is measured reporting the Operating Profit to the Added Value is used to represent the gross margin make available at the end of the operating cycle.

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