

FINANCIAL CONSTRAINTS AND ECONOMICS BEHAVIOR: THE  
SPECIFICITIES OF SMALL MANUFACTURING FIRMS FROM 1985 TO  
1995 (CONTRAINTES FINANCIERES ET DEVENIR ECONOMIQUE: LA SPECIFICITE  
DES PME DE L'INDUSTRIE DE 1985 À 1995)

Bernard Paranke.

Banque de France - 44 1356 - 31 rue Croix des Petits Champs, 75049 Paris Cédex 01, France<sup>1</sup>

Abstracts.

*The aim of this paper is to give an overview of the behavior of manufacturing firms, in particular the small ones and to go deeper into the conclusion of a previous paper ( « Equity and rate of return », ewp-fin-9608001 and International Council of Small Business, Sydney, June 1996). After some quotes about capital structure and private firms, a comparison of own funds is made between german, french, spanish, italian and austrian manufacturing firms. We can find that french manufacturing firms, for each size studied, are less indebted than their foreign counterparts. Otherwise, french small firms are more profitable and more efficient than the larger ones. We then point out two economic behaviors. The first one depends on growth capacity of the firms and also on their accumulation outlay; the second depends on the intensity of the links with the financial markets, the facilities to obtain lendable funds, all aspects which oblige firms to make high financial profitabilities that can reduce accumulation decisions.*

The purpose of this paper is to look further into the conclusions forwarded in preceding seeks concerning the comparison of the performances and the capitalizations of SME and the large companies ( « Equity and rate of return » ewp-fin/9608001). After have to point out the role of the own funds at the same time from a theoretical point of view but also within the framework of a conservative appreciation of the solvency of the firms, a reconciliation of the charges in own funds of the firms of manufacturing industry in Europe is commented on. Then while concentrating on the French firms of 1985 to 1995 we identify specific behaviors. The assumption of economic logic different is then advanced. This one takes support on the limits of the size as explanatory factor of the risk ( Cieply,

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<sup>1</sup> Banque de France is not engaged by the analysis and comments made.

Paranque, 1996) and the nature of the constraints to be managed according to the procedures to accede to the financial markets ( Harris, Raviv, 1989 ).

## **1) THE DIVERSITY OF THE ECONOMIC SITUATIONS**

To wonder about the financing of SME requires to recognize the diversity of the industrial situations which is induced by the very large variety of the modes of management. Those correspond to the arbitrations effected at various stages of the operation of the firm in order to make it powerful.

### **1 Choices of management**

To evaluate the performances of the firm, it is important to take into account the various types of choices which condition perennality of it. These choices are of three types:

- choices of market, namely the identification of a need to be satisfied under profitable conditions, according to the mode and conditions of financing obtained (Paranque, Rivaud-Danset, Salais 1996);

- choices of investment, in other words the definition of a productive combination integrating at the same time technology and organization;

- choices of an organisation, which determine the conditions of control of the times of return on investment and, more largely, those of the implementation of the productive combination.

It is in the light of these choices, and in particular among those which relate to the policy of investment, that one can analyze the problems of financing, and in particular gaps of charges in own funds between the firms of different size. And, it is while wondering about the foundations of the profitability of the firm which one can determine if the problems of financing and to accede to the credit which SME know are due or not to the fact that their performances are insufficient compared to those of firms of bigger size.

This step is more essential than it clarifies the specificity of the financing of SME, generally underestimated when it is a question of their difficulties. If these difficulties can go hand in hand with

the insufficiency of own funds, the relation is far from being bi-univocal. Many factors, independent of the insufficiency of own funds as such, are likely to contribute to the bad health of a firm. It can result, for example, of an investments badly targeted or whose times of return are too long (or longer than foreseen), which involves a heaviness of the leverage (to finance the delay) and an incapacity to ensure the charge of the debt (by insufficiency of wealth created). Loss of one or several markets can also cause serious difficulties, in the same way than a too strong dependence with respect to customers or suppliers.

## **2 Sources of financing**

To be financed, a firm has two main categories of resources.

The first, of external origin, is consisted of the contributions of the shareholders and the borrowings near the credit institutions. The contribution of the shareholders forms the authorized capital. This last, with the reserves generated by the benefit of the former years which were not distributed and the result of the exercise, constitutes the stockholders' equity. The own funds represent a notion broader than that of the authorized capital: they integrate contributions of shareholders, who are different from the precedents by the rights which are conferred on their bond, but also other stable resources without voting rights. In the text which follows, the term of own funds is employed, unless otherwise specified, in the generic direction of contribution of stable resources. The borrowings contracted near the credit institutions correspond to the financial debts which give place to the payment of an interest (financial expenses) and to repayment. Interest charges and repayment correspond to the charge of the debt which one reports to the surplus gross overall. This one is established by deducing from the added value the personnel costs and the taxes and taxes.

The second category of resources is of internal origin. These resources are obtained by the own activity of the firm and result from its sales, because of its marketing policy and of its policy of investment. They enable the firm to refund its borrowings, to renew, even to increase its outputs, to pay dividends with its shareholders and to assign whole or part of its results to the stockholders' equity. In this last case, it capitalizes its results. The capacity of self-financing is the usual indicator of this internal resource, although the added value can claim also there.

The distinction made according to the origin and the nature of the resources at the disposal of the firms covers with the economic differences as for the consequences and the chattels of their mobilization. Indeed, in asymmetry of information one can think that a firm treats on a hierarchical basis its preferences between various sources of financing (Myers, 1977, 1984; Majluf and Meyers, 1984).

### **3 The role of the own funds**

The own funds have as a cardinal function to guarantee the solvency of firms, its capacity to face its financial commitments. They constitute, for a firm and for the economic agents which are involved there, a « holds » of safety making it possible to deal with the internal or external accidents. The own funds are characterized by triple quality (Manceau, 1992):

\_ they have null current liability ; in other words, a shareholder cannot require from the firm the repayment of his shares, as it is the case for a loan whose date of repayment is fixed by contract;

\_ this capital cannot claim with a fixed remuneration, the distribution depends on a general decision of the meeting of the shareholders;

\_ they have as an ultimate function to cover the risk, namely to refund the debts contracted by the firm in the event of failure of this one.

If it is thus essential for a firm to hold a minimum of own funds, it is, on the other hand, difficult to define an optimal division between own funds and debt ( Harris and Raviv, 1989 ). In fact, each firm will seek to optimize the recourse to the external financing, by taking account of the cost of this one but also according to the autonomy degree the firm wants ( or can ) to safeguard and of the projects of development which she wants to implement. Multiplicity of the possible arbitrations between the various sources of financing (intern and external) induced of the behaviors which vary from a firm to another, from category of society to another.

## **2) COMPARISON ENTERS SME AND THE LARGES COMPANIES**

A comparison between European industrial firms over the period 1991-1993 stresses the good financial health of French society, in particular of SME ( Comité Européen des Centrales de Bilans, 1997).

If the ratio is considered net equity / financial resources in median:

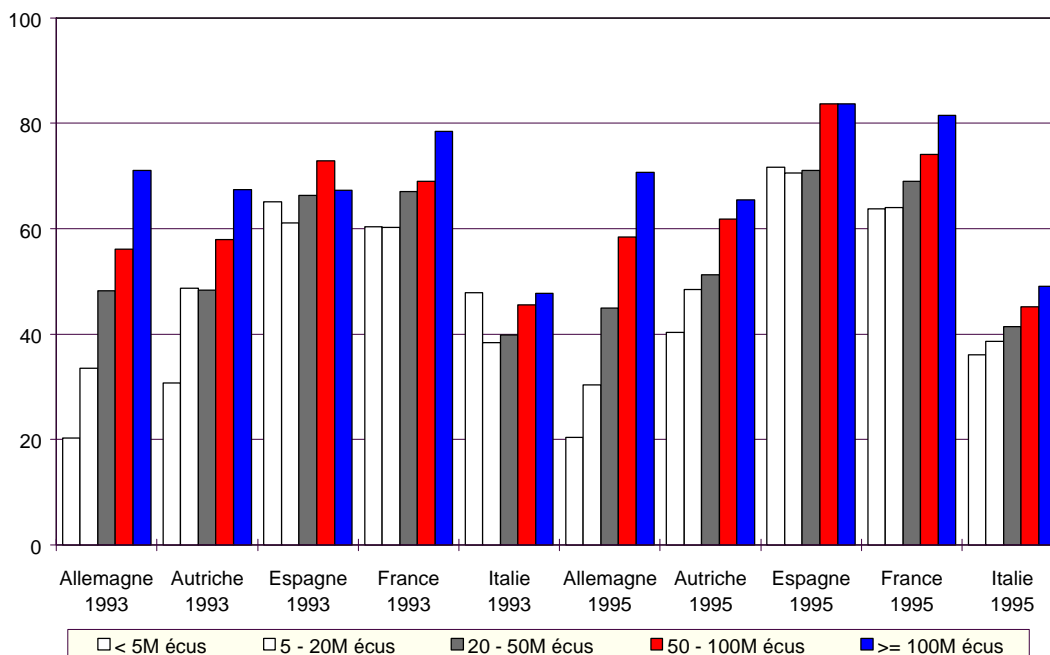
- the German firms seem most slightly equipped, at 10 points behind Italian;
- French and Spanish society are capitalized, whereas the Austrian firms are in an intermediate situation.

This report is valid over all the studied period. From 1991 to 1993, the ratio declined for the German firms whereas Italian and Spanish society strengthens their position lightly.

### **1 French firms vis-a-vis their homologues European**

The analyse of teh effect of size on the capitalization of the firms in 1993 provides two principal lesson:

**RATIO NET EQUITY / FINANCIAL RESOURCES by size**  
(median, expressed as a percentage)



Source: Banco de Espana, Deutsche Bundesbank, Banque de France, Osterreichische Nationalbank, Centrale dei Bilanci

- the influence from the size of the firms on their level of capitalization strongly varies from a country to another. It is very important in Austria and even more in Germany : the difference between the firms which realize less than 5 million ecus of sales and those whose sales exceed more than 100 million is 36.7 in Austria and 50.8 in Germany against 18.1 in France. On the other hand, the influence of the size is quasi non-existent in Italy and Spain, contrary to the three other countries where the financial autonomy more or less strongly grows with the size.

- the gaps are much more important between the small firms than between the very large ones. In German SME (of less than 5 million ecus of net turnover), the own funds in median represent only 20.3% of financial resources whereas this percentage reaches 30.7% in Austria, 47.9% in Italy, 60.4% in France and 65.1% in Spain, for the same category of firms. On the other hand, for the very large companies ( up to 100 million ecus of net turnover ) the gaps are rather weak if one excludes Italy. Thus, in this category of population, the median of the report net " equity/financial resources " is of 67.4% in Austria, of 67.3% in Spain, 71.1% in Germany and of 78.5% in France, that is to say a

maximum change of 16 points (or of 30.7 points if one includes Italy). It thus would seem that the recourse to the international financial markets by the large companies leads to a certain harmonization of their structures of financing.

## **2 Comparative Results of small and large French companies of 1985 to 1995**

Between 1985 and 1995, SME strengthened their own funds (own funds/ capital financing involved) of almost 10 points. It is true that the restoration of financial autonomy was more sustained in society of more than 500 labours (+ 15.4 points), but the level reached by SME at the beginning of the 1990's corresponds to that of the large companies at the end of the Eighties. In fact, this reconciliation between SME and large companies have little direction if one does not study the needs for financings which correspond to each case and reflect different logics of operation. In other words, it is important to analyse the relationship with the overall behavior of this one. the to appreciate correctly the financial autonomy and conditions of its financing. If they are well interpreted, the examination of several indicators of performance, in the form of ratios, makes it possible to evaluate the results of the firm. On the other hand, the recourse to only one ratio is insufficient to include/understand the real operation of firms as well as the way in which it manages its outlets and the requirements of remuneration of the contributors of capital, shareholders and lenders.

If one judges some by their accumulation rate, therefore by balancing the rate of investment (investment / added value) by the efficiency of the capital (added value / capital), it appears that SME invest more than the large companies. However which says more important investment said more substantial needs for financing (including for working capital), which results in a recourse to the higher external financing. These requirements in financing also depend on the relations maintained with the economic partners and on nature of insertion of entreprise in the trace (domination or dependence between agents, type of subcontracting carried out).

In terms of economic profitability (gross operating profit margin / capital involved), the performance of SME is higher than those of the firms of more than 500 people, except in 1992 and 1993 when it is similar. It is also the case in terms of gross financial profitability, " gross cash flow (

gross operating margin after payment of taxes and of the financial expenses ) / own funds ": over all the studied period, the financial profitability of SME is higher than that of the large companies.

On the other hand, after deduction of depreciation or the dividends paid with the shareholders.

- thus, in terms of financial profitability after distribution ( gross cash flow less dividends paid / own funds ), SME are increasingly more profitable than the large companies, the weight of the dividends is indeed higher in the large companies than in SME. This ratio constitutes an indicator of profitability after remuneration of the shareholders, therefore an instrument of evaluation of the capacity of capitalization of firms, before taking into account of the investment policy;

- conversely, in terms of net financial profitability ( net cash flow before dividends paid / equity ), the performance is a little higher for the large companies than for SME.

No differences appear when we deduct both dividends paid and capital consumption allowances.

Thus, by analyzing the various stages of the process of activity of the firm, one notes that the capacity of capitalization of the results, and thus of reinforcement of the stockholders' equity, defers little from a category of size of firm to another. On the other hand, the weight of the charges to depreciation is higher in SME, whereas that of the dividends is less there than in the large companies. The effective reinforcement thus depends on the decisions which each matter firm makes into affectation of their results, i.e. according to whether it chooses to assign its benefit to the investment, degearing or capitalization.



### SME and large companies of the manufacturing industry of 1985 to 1995

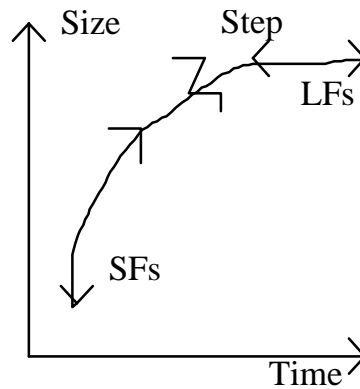
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Own funds / financial resources											
SFs	62,0	63,2	63,8	64,0	63,9	64,4	65,7	67,0	69,7	71,0	71,8
LFs	64,2	67,0	70,3	71,6	71,1	71,5	73,5	74,8	77,6	79,0	79,6
Accumulation rate *											
SFs	13,5**	14,3	15,4	16,3	16,8	17,1	14,6	12,7	10,3**	10,9	11,8
LFs	13,2	13,2	13,0	13,8	14,8	14,8	13,1	11,6	9,4	8,2	9,5
Added value/ employed capital*											
SFs	79,1	78,1	76,0	75,3	74,3	73,6	70,9	68,1	65,0	65,8	66,1
LFs	59,9	60,1	59,0	58,3	56,7	54,2	52,4	50,7	46,8	47,7	46,7
Gross profit margin/added value *											
SFs	23,1**	24,1**	24,0	25,0	25,9	25,9	24,6	23,2	21,5	22,8	22,7
LFs	22,1	23,4	25,8	27,3	28,2	29,1	27,9	26,2	24,2	26,6	26,3
Economic profitability ( ROA )*											
SFs	14,9	15,7	15,9	16,5	16,9	16,7	15,3	13,5**	12,2**	13,0	13,1
LFs	13,0	13,8	14,4	15,2	15,2	14,7	13,7	12,8	13,4	11,8	11,5
Gross financial profitability*											
SFs	12,1	13,7	14,1	15,6	16,5	16,4	14,6	12,8	11,1	12,5	12,4
LFs	10,2	11,1	12,2	13,2	14,0	13,2	12,2	11,5	9,5	10,5	10,1
Gross cash flow after distribution/ own funds *											
SFs	10,5	12,2	12,3	13,6	14,4	14,1	12,2	10,4	8,4	9,7	9,4
LFs	8,5	9,3	10,1	10,7	11,2	10,2	9,1	8,8	6,0	7,0	6,8
Net cash flow/equity**											
SFs	-2,1	1,6	2,7	3,7	5,6	3,8	0,6	-3,1*	-6,2	-1,4	0,5
LFs	-3,8	0,5	4,2	7,4	7,4	7,0	2,3	2,4	-2,3	1,7	2,4
Dividends/equity *											
SFs	1,7	1,8	2,3	2,7	3,1	3,4	3,4	3,3	3,9	4,0	4,4
LFs	2,8	2,6	3,7	4,6	5,3	5,6	5,4	5,2	6,0	6,1	6,5
Capital consumption allowances / own funds *											
SFs	10,0	10,0	10,1	10,7	11,1	11,6	11,4	11,2	10,2	9,5	9,3
LFs	8,7	8,6	8,0	8,2	7,9	8,4	8,3	7,9	7,5	6,8	6,7

Source et réalisation : Banque de France

\* statistically discernible gap with the threshold of 5

\*\* nonsignificant gap.

This opposition between SME and large companies is certainly simplistic for all SME are not intended to become large companies. On the other hand, very undertaken is confronted with problems of threshold which are variable according to the acquired size, like illustrates it the following diagram.



The gaps as regards distribution of dividends illustrate different economic logics, one more industrial, the other more financial. The large firms know a constraint of profitability specific to the shareholders, because of intensity of their bonds with the financial market: the net financial profitability and the remuneration of the shareholders must be higher there than in the small firms. In SME, the constraint of profitability is more important to the lenders than in the large companies: it is necessary that economic profitability is stronger there to ensure the charge of the debt and the weight of the investment policy.

The financial standing of SME is more sensitive to the charge of the debt than their development strongly depends on the evolution of the outlets, without their assets having a value other than accounting because of the lack of financial market which is adapted to them. They are obliged to invest to continue to develop. This need can be contradictory with the distribution of dividends or induce a profitability lower than that which one considers " normal ", and this for one length of time higher than the horizons of the financial markets. In addition, the requirements for profitability which characterize the financial markets do not coincide inevitably with the choices of development of SME, which are dictated by a real activity. A new shareholders has no reason to agree to this logic: either he is not interested to invest, or it will introduce a more or less large distortion between the logic of SME and its own needs for remuneration. SME react to this distortion by an important flexibility generates: of the high efforts of renewal of equipment and workers with considerable know-how enables them to adapt quickly to the developments. By doing this, if they can't get new shareholders, they can nevertheless control the constraint of solvency, in so far as their outlets are maintained, failing to grow.

Because of that and their place in the productive system, SME are by no means defined as "small large companies". They are controlled by a different logic than the large companies ones. One could describe it as logic of accumulation under constraint of outlets, the constraint of profitability "playing only" like forces reminder in the market rates. This logic of accumulation corresponds to the need for increasing or for developing the productive potential to answer the request. It acts as much a development in volume (rise of the capacities) than in quality (new technology, modernization, innovation) to meet the needs expressed by the customers and the clients.

The large companies, as for them, would obey a logic of capitalization under constraint of profitability, in particular financial, the constraint of outlets being processed through alliances, reorganizations of the assets, dominant position. The constraint on these firms is trained through arbitrations to which the financial markets between various investment appropriatenesses are delivered. The logic of capitalization then consists in making sure that the difference between the expectations of growth of the firm and the evaluations to which the speakers proceed on the markets coincide as well as possible, not to call into question the structures and financial balances of society. In this case, the pivot of the performance is not any more the rate of accumulation, but well profitability.

## **CONCLUSION**

Ultimately, the handicap of SME as regards financing would be of two types :

- on the one hand, the risk concerning SME less touches with their profitability than the uncertainty on their perennality, which directly poses the problem of their capacity required to their financial partners information on the way in which they manage this perennality ;

- in the other hand, the development and the liberalization of the financial markets increased the volatility of the operation of the markets. The credit banks and, more largely, institutions are confronted with temporality gap between the rate/rhythm of these markets and that of real activity of the firms. They react to the cost of this shift either by reducing their margin, or by increasing the selectivity of their offers of loanings. This selectivity runs on the quantities offered or the interest rate. SME are then particularly handicapped compared to the other firms. The large companies, forwarded to the same

financial strategy, answer it by adapting their investment and employment policy while resorting to the financial markets. On the other hand, SME are more passive and are forwarded to the " regulation " by the financial markets. It thus appears that problems of SME are more one problems of financing of the growth that of reinforcement of the own funds.

The differences in logics of behavior, as well in the formation of profitability as in the procedures of financing, then result in defining SME as a firm whose bonds are not negotiated on a market.

If the balance sheet evaluation of the financial standing of SME can incite to believe that their level of capitalization is insufficient, on the other hand, the analysis of their economic and financial behaviour indicates an accumulation rate and an economic and financial profitabilities higher than those of the large companies and a financial autonomy higher than those their homologues European. The potential profit discounted from a participation to the capital of SME is thus as high as that which can be obtained in a firm of more important size. However, the realization of this profit and the amount of capitalization will depend on the intensity of the accumulation and then the amount of capital consumption allowances, which will determine the distribution of dividends.

In fact, it seems that SME are confronted at the two specific risks : the insolvability one in the badly controlled case of investments and / or of fall of activity ; and the loss of competitiveness if, to face the first risk, they reduce their accumulation intensity. Taking into account the levels of performances noted in 1995, the second risk appears most urgent today to reduce.

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