

**EUROPEAN COMMITTEE OF  
CENTRAL BALANCE SHEET OFFICES**

**WORKING GROUP ON NET EQUITY**

**NET EQUITY AND  
CORPORATE FINANCING  
IN EUROPE:**

**A COMPARATIVE ANALYSIS OF GERMAN, AUSTRIAN  
SPANISH, FRENCH AND ITALIAN  
COMPANIES WITH SHARE CAPITAL  
DURING THE PERIOD 1991-1993**

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## EUROPEAN COMMITTEE OF CENTRAL BALANCE SHEET OFFICES

The European Committee of Central Balance Sheet Offices, set up in 1985 to improve the analysis of company data through the exchange of information, comparison of analytical methods and joint studies, comprised twelve of the fifteen European Union Member States in 1996.<sup>1</sup> In addition, the Directorate-General for Economic and Financial Affairs and the Directorate-General for Financial Institutions and Company Law of the European Commission and the OECD have contributed to this work on a regular basis.

Over the past ten years, the Committee has carried out a wide variety of tasks and has set up three working groups.

– The first, which is responsible for methodological questions, has already published a report on models of financial flows in Europe in 1990. The current focus of its research is the analysis of business risk in the various countries, and more particularly the use of scoring (discriminating function).

– The second working group co-operates closely in the development and enrichment of the BACH database managed by DG II of the European Commission. Most notably, it has recently drawn up a new transition table between the accounting data available in each country and the figures recorded in the European database.

BACH, the harmonized databank for company annual accounts, created in 1985, provides information on the balance sheets and profit and loss accounts of non-financial companies in twelve countries (Germany, France, Italy, United Kingdom, Spain, Belgium, Netherlands, Portugal, Austria, Finland, United States and Japan), by broad economic sector and by size, using a standardized accounting layout. Some of the information available dates back 10 years or more.

The BACH data can therefore be used as a basis for a wide range of comparative analyses on the financial structures and profitability of companies by country or year and provides a useful supplement to the national studies.

Harmonization is at the heart of this project. Although comparability has remained the principal objective, sometimes at the cost of reducing the level of detail of the information, the specific features of national accounting methods, together with the difficulty of drawing up accounting documents based ex post facto on a common layout, have limited the results in certain respects. Consequently, although it is perfectly feasible to compare trends, comparisons of level are more problematic (and even impossible in some cases) and require a thorough theoretical grounding in the accounting and financial background of each country. For this reason, a user guide is supplied with the data to facilitate comparative work. From 1 January 1997, the accounts will be presented according to a new methodology, thereby improving comparability.

– The role of the third group is to compare the approaches of the various participants regarding groups of companies from the point of view of the objectives (macroeconomic studies, individual studies, quotation, etc.), analytical layouts and databases (special bases, common consolidated accounts databases, company accounts). It has already drafted two reports, the first on the application of the 7th Directive in the various countries and the second on the methods used to analyse consolidated accounts and database structure. It is currently completing its work on a comparison between the standards of the 7th Directive and those imposed by the IASC and on a common approach to consolidated accounts.

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<sup>1</sup> Currently, only Denmark, Sweden and Luxembourg remain unrepresented.

"Every day, when undertaking a business transaction, capital must be found, but asking for renewals (of bills of trade) is in commercial jurisprudence what the police court is to the Assizes, a first step towards bankruptcy just as the misdemeanour leads to crime. The secret of your powerlessness and your straits is in the hands of others. A trader places himself bound hand and foot at the mercy of another trader and charity is not a virtue practised on the Stock Exchange."

Extract from: "Histoire de la grandeur et décadence de César Birotteau", by Honoré de Balzac, 1838.

## INTRODUCTION

Corporate financing problems, described by Balzac nearly 160 years ago, are just as topical now as they were then. In all the Member States of the European Union, corporate financing, and especially the question whether companies in each country have sufficient net equity to stave off competition within the single market, lies at the heart of economic policy discussions. Moreover, given the risk that a company may become insolvent, credit institutions will grant additional external funds only if it can offer guarantees, or if it can maintain its net equity at a level sufficient to provide a safety margin.

In some countries, such as France, radical structural and tax reforms have been implemented in the past fifteen years in order to enable companies, SMEs in particular, to strengthen their equity (decompartmentalization of markets, creation of the second market, development of venture capital, and so on).

It is therefore natural, in the context of the work of the European Committee of Central Balance Sheet Offices, that Germany, Austria, Spain, France, Italy and Directorate-General II of the European Commission should have decided to set up a working group with the task of comparing the financial autonomy of European industrial enterprises.<sup>2</sup> This research, covering the years 1991-1993, concerns intermediate economies in which the capital markets play a minor role compared to that in the English-speaking countries.

This report,<sup>3</sup> which is the fruit of initial research, must be considered as the completion of a stage in the work. It set out to be essentially descriptive and its main objective was to provide a response to the questions raised by both theoreticians and practitioners in the financial sector: *Are there differences in levels of corporate net equity between countries? Does net equity vary according to size of company, regardless of country? Are small companies a special case in every country?*

Despite its descriptive approach, the working group did not wish to conduct its research independently of financial theory and the work already carried out on the financial structures of the various countries. For this reason, after a brief overview of the role of equity, the first part of the study contains a summary of the research and the discussions carried out since the publication in 1958 of the celebrated study of Modigliani and Miller, and the second part, a critical review of the empirical findings of international comparisons.

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<sup>2</sup> The first meeting of the group was held on 25 February 1994 in Frankfurt. The first year was devoted to problems relating to accounting and statistical methodology, the second to analysis of the theoretical studies and examination of preliminary findings, and the third to the actual drafting of the report.

<sup>3</sup> The participating institutions cannot be held responsible for the analyses and comments of the authors.

The sometimes contradictory conclusions of the above-mentioned studies led the group to attach fundamental importance to resolving the problems of financial and statistical methodology raised by any inter-country comparison of financing structures. The third part of the report is therefore devoted to the presentation of the choices made by the group in order to base their approach on the most comparable populations of enterprises and ratios possible. Two points need to be clarified without further delay.

– The data used in this study derives from company accounts available in each country. They are presented by broad economic sector and by size of company in the manufacturing industries of the countries concerned. The restriction of the scope of the analysis to manufacturing industry and its three major branches enables the industrial core to be highlighted, which is defined in a relatively homogenous fashion for each of the countries under review and is of the very highest level of interest from the economic point of view. More refined classifications at the level of the individual branches would have led to problems of comparison associated with the different sectoral classification systems adopted by the countries considered.

The findings were also subdivided into five categories based on company size as uniformly defined on the basis of net sales thresholds expressed in ecus. The need to analyse the data by company size derives in part from the consideration that a company's access to money and capital markets depends a great deal on its size. It is also often asserted that, in view of institutional factors, small and medium-sized enterprises are disadvantaged by the financing system and must consequently bear higher financial costs. The size-based approach is also all the more essential as aggregate values mask the greater or lesser diversity of situations from country to country, especially in Germany, where the results are dominated to a very large extent by the information supplied by the large enterprises.

Only the accounts of companies with share capital are covered by this study. The exclusion of partnerships and sole proprietorships was not only necessary because, through their legal form, characterized by the absence of any limitation of liability, considerable problems arise in comparing capital structure, but also on account of the fact that the balance sheet statistics available in most countries include only information on companies with share capital.

– The approach adopted in this study is described as a conventional one by certain theoreticians, who contrast it with the so-called monetary approach (Perridon and Steiner, 1993). Traditional financing is based on the abstract concept of capital entered on the balance sheet, this capital being subdivided into two components: shareholders' equity and borrowed capital. Shareholders' equity itself is made up of resources placed indefinitely at the disposal of the enterprise by its owners. When the company does not distribute its profits, these resources, of external or internal origin, can cover risks to which the business may be subject. The legal status of the financial backer is essential to this definition. Whereas in the case of borrowed capital, the creditors' claim to repayment (i.e. the repayment of the outstanding capital and the payment of interest) does not depend on the results achieved, owners' equity guarantees only a right to repayment dependant on results. This initial static concept based on legal criteria was contrasted with a monetary financing concept based on flows and the conflation of all forms of capital, including those derived from the new instruments resulting from the liberalization of capital markets. According to the logic of monetary financing, the enterprise is no longer considered from the points of view of the shareholders or the corporate entity, but as a set of assets formalized by the capital committed. This so-called "pool of funds" analysis is based on the principle of the unity of cash and the principle of the non-assignment of resources to uses. This means that uses must all be financed from aggregate resources. This approach provides the financial analysis with a concept of equity known as

self-financing or internal financing. The latter corresponds to all the self-financing resources accumulated by the enterprise, including depreciation and provisions, to which are added the capital and premiums which are the definitive contributions made by the shareholders. This approach allows a statement of corporate fund sources and uses to be drawn up and facilitates the transition from the static study of accounts balances to a dynamic analysis.

Despite all the advantages of this latter approach, it disregards the concept of capital as a counterpart to risk. The present study therefore keeps to a traditional concept of financing. In the field of risk management,<sup>4</sup> the analysis carried out by the Central Banks and credit institutions is traditionally based on the capital structure of enterprises. Other reasons have been even more decisive in this choice: firstly, the information necessary at European level for an analysis from the point of view of monetary financing is not available in full (notably for Germany and Austria), and secondly, comparisons pose major methodological difficulties.

#### DIFFERENCES BETWEEN TRADITIONAL AND MONETARY CONCEPTS OF FINANCING

Characteristic	Traditional definition of financing theory	Monetary financing concept
Basic concept	Capital entered in the balance sheet (Static observation)	Flows of means of payment (Dynamic observation)
Definition criteria	Legal status of the financial backer (derived from law)	Sources of means of payment (derived from economics)
Components	Owners' equity Borrowed capital	Internal financing External financing
Analytical orientation	Oriented towards guarantees (point of view of the creditor)	Oriented towards sources (point of view of the enterprise)
Defined objective	Analysis of solvency and financing risk	Analysis of financial policy and efficiency

The fourth part of the study is devoted to an analysis of corporate financial structure using the data obtained. The conclusion highlights the areas needing more detailed examination. The first aspects for consideration relate to the influence of macroeconomic determinants of corporate financing structure, and especially the institutional factors. Apart from the national differences revealed in legal systems, particularities in the organization and structure of the capital markets, as well as the specific features of banking systems, also lead to fundamental differences from one country to another in the way in which corporate financial statements are drawn up.

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<sup>4</sup> For the Central Banks concerned.

# 1. COMPANY NET EQUITY: THEORETICAL ASPECTS <sup>5</sup>

## 1.1. The need for equity

Several arguments have been put forward by different schools of thought to justify the existence and the need for equity. For many of them, equity has the cardinal function of guaranteeing the solvency of the enterprise. For the firm and the agents committed to it (shareholders, lenders, suppliers), it constitutes a security reserve acting as a buffer in the event of accidental occurrences of internal or external origin. Sufficient equity therefore enables firms to bear the consequences of the default of major customers or market losses. Likewise, at times of economic slowdown, enterprises with little debt have an advantage over those which have preferred to borrow, to the detriment of equity. The former are able to stagger the remuneration of their external suppliers of capital over time, whilst the latter must meet compulsory payment deadlines. In addition, depending on the level of debt, variations in interest rates have a greater or lesser impact on the financial charges which companies have to bear.

As a guarantee, a substantial level of equity ensures not only the financial independence of companies in relation to third parties, but also allows them to obtain loans more easily, often on better terms, to finance investments (tangible or financial) which are necessary for their development <sup>6</sup> and even their survival.

In any event, equity is of the utmost importance for financing investments in recently established and/or innovative companies, as defined by Schumpeter, enterprises which are particularly exposed to risks. Such companies often enjoy only limited access to borrowing because of the inadequacy of the guarantees they can offer. In addition, during the start-up phase, they cannot generate sufficient cash flow and often suffer high initial losses which cannot be offset by sufficient venture capital. In such cases, too little equity is an obstacle to investment and may therefore impede the structural development and growth of an economy.

The importance of equity indicated above in guaranteeing corporate assets and acting as a buffer to losses is particularly obvious in times of recession when many enterprises become insolvent. Lack of equity is then expressed in large numbers of bankruptcies and job losses, which weaken national economies.

## 1.2. The cost of equity

Although the cost of debt is relatively easy to define by reference to interest rates (although it is far from straightforward to align the debt structure with the various rates involved using accounting data alone), the cost of equity is more difficult to determine.

Equity derives either from external contributions or from accumulated cash flow from trading. Despite the fact that dividends are not obligatory, it is nevertheless necessary for the company, especially if it is listed, to take account of the remuneration the shareholders may require in comparison with what they would obtain from investing their money on the financial markets. The rate of this investment is an opportunity rate, which represents the remuneration given up by shareholders when they contribute funds to the company or when

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<sup>5</sup> For a summary of the literature on the subject, see "The theory of capital structure", M. Harris and A. Raviv, The Journal of Finance, March 1991.

<sup>6</sup> Especially if there are no *in rem* guarantees.

they agree to a fraction of the profit obtained being retained within the company (Cohen, 1994). This rate of remuneration then becomes an estimate of the cost of equity.

The difficulty is then to select the rate of remuneration and to calculate the cost since the flow of future resources to be expected from holding a company share is not known with certainty. In fact, not only are future profits uncertain, but the company's future income distribution policy is far from being known to shareholders (Cobbaut, 1994).

It is also necessary to examine the reversibility of the choices of investment allowing shareholders to decide between an investment in the company and an alternative investment on the financial markets. Finally, this calculation is only possible for listed companies regarding which the new shareholders can weigh up the possibilities in this way.

### 1.3. Optimal capital structure <sup>7</sup>

Therefore, every industrial strategy, whether directed at internal or external growth, has a corresponding financial strategy. This financial strategy reflects the method of financing adopted, i.e. the choice between self-financing, recourse to borrowing or a call on shareholders. In theory, there are many possible compromises between these various sources of finance, even though, for a certain number of firms, the constraints, which are notably of an institutional nature, greatly reduce the range of choice. For example, SMEs often find it From a theoretical perspective, Modigliani and Miller were the first to devise models for the optimization of financial structures in 1958. After highlighting the specific features involved in consideration of an environment offering uncertain income levels, they show that any financing structure mixing equity and debt is neutral as regards the weighted mean cost of the various sources of finance, i.e. the **value of the company**. The work of Modigliani and Miller started a controversy related to the restrictive hypotheses of the basic model (taxation, transaction costs, asymmetric information, etc.) which enabled support to be given to the idea put forward by Myers and Majluf in 1984 that, contrary to what is commonly believed, equity is not cost-free and may even cost more than debt. The theoretical aspect, which relates exclusively to the **intrinsic value** of equity, can be revised in the light of the recent developments in organizational theory (transaction costs, agency conflicts, etc.).

The Modigliani-Miller theorem has in fact only been shown to hold for "perfect" capital markets operating under suitable conditions. In particular, it must be possible for the holding of debt securities to be weighed up freely against property rights in the form of shares and therefore for the conditions of indebtedness (interest rate) to be identical for both private individuals and legal entities.

Where the conditions of market access, especially taxation, are different for the company and the shareholders, borrowing may increase the value of the company through the tax saving it allows on financial charges. Consequently, the value of a borrowing company is, strictly speaking, higher than the value of a company which has not borrowed, since the interest on the debts is deductible. This does not hold, however, if private individuals are authorized to make such deductions or if the incentive of a firm to borrow is low on account of tax advantages allowing it to reduce its taxable profit (tax credit, depreciation, etc.). Positing an optimal level of debt at macroeconomic level, Miller (1977) shows that the financial structure is always neutral even if account is taken of the impact of corporate and personal taxation. He gives the example of American firms during the period 1920-1970, which did not

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<sup>7</sup> We received assistance in drafting this and the two following sections from Henri Koulayom in the Department for Methods of Corporate Analysis and Financial Documentation of the Corporate Division of the Banque de France.

increase their debt despite the higher tax rate which should have encouraged them to do so since, at the same time, taxation on investors was rising.

Moreover, the **risk of bankruptcy**, the probability of which increases with the burden of debt, and the costs involved in controlling that risk, limit behaviour leading to excessive levels of debt (Warner, 1977). In particular, it encourages shareholders to demand a higher rate of return.

All in all, the optimal structure is achieved when the tax advantage of debt offsets the cost of bankruptcy.

## 1.4. The need to keep financial backers informed

Akerlof (1970) and Spence (1974) are seen in the literature as the pioneers of the approach based on the **signals theory**. Akerlof looks at the behaviour of buyers and sellers on the second-hand car market (the "*market of lemons*"). Spence describes the situation of an employee on the labour market who wants to be hired at a salary above the market rate by sending out a signal as to his academic qualifications.

Signals theory was not applied to the corporate financial structure theory before the latter half of the 1970s (Ross, 1977). According to Leland and Pyle (1977), a company can emit a signal in the form of the percentage of capital held by its shareholding manager: this shows the reliability of investment projects. In Ross' model (1977), the signal is the financial structure chosen by the company managers. The value of the company increases with the level of debt. Since the managers wish to avoid bankruptcy, i.e. maximize their share in the profits, the level of debt may be interpreted as a signal of good management and therefore of good corporate performance.

## 1.5. Unequal access to information

Originally, Myers (1977) was interested in the phenomenon of "debt overhang effect", high-risk debt in a situation of symmetrical access to information, i.e. in a situation where nobody has inside information (Hyafil, 1985). He then shows that the presence of a debt overhang is sufficient to prevent shares being issued to finance valid projects. The existence of a hierarchy of sources of funds (pecking order theory) was set out by Myers and Majluf (1984), after Myers had defined its main characteristics. The situation may in fact change where there is asymmetrical access to information: internal financing is preferable to debt, which in turn is preferable to equity. **Asymmetric information** means that economic agents do not have all the information available to them. Because of their position, company managers have inside information on the firm's circumstances and prospects regarding economic and financial development. This asymmetry explains why, in certain circumstances, recourse to contractual debt is the preferred course. This may be the case, for example, to finance temporary requirements. In fact, "if it is considered that the managers protect the interests of established shareholders only, a share issue will be poorly viewed. Indeed, might such an issue not mean for potential investors that the price reached by the shares is deemed too high by the company's managers? The new shareholders therefore demand a large risk premium, which promotes the other forms of financing" (de Bandt, Jacquinet, 1991). This work on asymmetric information formed the starting point for new approaches to the issue of optimal capital structure. A large proportion of such work is based on the observation that conflicts exist between shareholders, creditors and managers and that agency costs are generated by those conflicts.

## 1.6. Diverging interests and agency costs

Three categories of asymmetric information and principal/agent problems may be distinguished as between a firm and its lenders.<sup>8</sup>

– The phenomenon of asymmetric information appears before the execution of a loan agreement in so far as it is difficult for lenders to discriminate effectively between the various applications for finance. Such types of asymmetric information, which may be described as *ex ante*, are at the origin of the phenomenon of **adverse selection** on the credit market (Stiglitz, Weiss, 1981). The interest rate is not in this case a good regulating mechanism for the market. A rise in rates may induce the lowest risk borrowers to leave the market. Only the highest risks remain.

– Asymmetric information arises as the loan agreement progresses. The borrower may choose from among his investment projects one entailing greater risk than the project submitted to the lender and on the basis of which he obtained his loan. If the lender observes only the income generated by the borrower, he does not know the precise nature of the project actually implemented. He must determine whether, for example, a fall in income is the result of poor management of the firm by its manager or the normal reaction of the enterprise to variance in its general economic environment. Such principal/agent problems have been given the label **moral hazard**.

– Finally, asymmetric information may emerge *ex post facto*. In this case, the lender cannot accurately assess the rate of return for the project undertaken by the borrower, who may be prompted to declare income lower than that actually generated in order to minimize his repayments (Williamson, 1986), behaviour which has been termed **opportunism**.

All these asymmetries generate **principal/agent problems** and therefore monitoring costs. The creditor perceives a sub-optimal investment policy risk which may take the form of the firm's repayment capacity being below its financial debt. Such a risk is linked either to a strategy of under-investment (Myers, 1977) notably attributable to withdrawals in kind made by the entrepreneur to the detriment of the company, or to a strategy of over-investment reflecting excessive risk-taking on the part of the borrower, who in this way transfers wealth from creditors to shareholders (Jensen, Meckling, 1976). The problem of the non-incentive to invest in the optimal manner is assumed in economic literature to be particularly acute among firms with major opportunities for growth, which may either initiate excessively risky projects or fail to avail themselves of options for growth.

Conflicts of interest may also appear between shareholders and managers, which is the subject of contemporary reflection on "corporate governance".

Adam Smith was the first to stress the separation between power to take decisions (the managers) and the power to control (the owners of the capital) which characterizes large companies with share capital. Nearly two centuries later, this subject has generated renewed interest with the advent of modern firms. Management theory links the growth of large enterprises to the nature of the property rights and the imperfect nature of the internal and external control of organizations, which generates agency costs. It has the great advantage of providing an explanation for the reasons for the growth of firms and of stressing the importance of the role of the capital markets (Berles, Means 1932). The division between ownership and management therefore leads to the appearance of interests which are liable to diverge: the former are those of the shareholders, who are concerned by profit, the latter those

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<sup>8</sup> For a review of the literature on asymmetric information, the reader may refer to Goyer (1995).

of the managers, who are seeking growth.<sup>9</sup> To control the activities of the managers, shareholders may therefore be led to introduce procedures whose cost may have an impact on share issue prices. Such agency costs related to equity are particularly high where managers hold only a small proportion of the company's share capital.

## 1.7. The implications of theoretical work for international comparisons

Many theoretical studies has been devoted to capital structure. The conclusion is that assigning a single meaning to the level of debt or the degree of financial autonomy is far from straightforward. This is so because, depending on whether one is an investor or banker, financing policy may give rise to differing analyses: a sign of good health for the one in the former case, a sign of vulnerability for the other in the latter case. The common problem of this work is explicitly that of maximizing the value of the firm, subject to the requirement to control level of risk. This is an issue which falls within the remit of neo-classical theory, according to which the value of an enterprise corresponds to the present value of the income flows generated by the enterprise. However, implementing models based on this work is problematic, since if by definition "the financial objective of the firm consists in maximizing the market value of the shares", the determination of that value is only possible if the enterprises are quoted on the Stock Exchange (Cohen 1994, Cobbaut 1994).<sup>10</sup>

In principle, benchmarks are needed if financial structures are to be analysed, i.e. reference points for use in inter-company comparisons. The existence of an optimal financial structure, if a complete economic theory were available on this subject, would offer the most natural reference point for the present study.

In reality, the models derived from the theories presented above refer essentially to two approaches.

The first, which has so far been the subject of a relatively small number of empirical tests, gives priority to a dynamic view of the financial structure, based on a hierarchy of preferences ("*pecking order theory*") in the activation of sources of finance.

It would be inappropriate to speak here of optimal financial structures. The structures observed would be the product of the stratification of the firms' various financing decisions: the extent of growth in investments and recourse to internal financing and the scale of the asymmetries of information existing between managers and shareholders (especially minority shareholders), which limit issues of equity capital, are the most relevant variables taken into account in the models which use this method of analysis.

The second approach sees the relative proportions of equity and debt as the result of the interaction between cost components of the sources of finance, investors' aversion to risk, fiscal decisions, asymmetric information, agency costs and bankruptcy risk. The optimization of costs with contradictory effects deriving from the various components leads to the choice of an optimal financial structure (if this exists), which may be interpreted as a medium-term objective towards which the enterprise should strive to maximize its capacity for growth and

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<sup>9</sup> Galbraith, for his part, speaks of the appearance of a "technostructure" (Galbraith, 1967).

<sup>10</sup> A great deal of research has been conducted to confirm or invalidate the theoretical models. Readers interested in this may consult the list in the bibliography provided at the end of this study, in addition to the summary drawn up by M. Harris and A. Ravis (1991) since it offers an overview of the main empirical results obtained using market data for Anglo-American companies. One of the findings is that, in accordance with signals theory, debt is positively correlated with the value of the firm.

the value of the shareholders' capital. This essentially static approach raises thorny problems of econometrics and requires the definition of proxies for a large number of variables which are considered important.

Against this background, international comparisons should set out to evaluate the existence of different financial structures between countries by determining which institutional factors help explain the dissimilarities: differences in dividend taxation due to tax systems, interest on bonds and bank loans, differences in bankruptcy legislation, differences in the regulation of share and bond markets, relations between banks and companies with regard to the long-term stability and the scale of potential agency costs, national savings levels and mean aversion to risk felt by savers.

Looked at from the point of view of pecking order theory, international comparisons should examine not only a certain number of institutional factors (relations between banks and companies and the division between managers and shareholders), but also the overall results of the economic systems in terms of growth, investment and accumulation of corporate savings.

## **2. A SUMMARY OF RECENT STUDIES ON INTERNATIONAL COMPARISONS AND THEIR ANALYTICAL CONSEQUENCES**

Few international comparisons have been done, which is doubtless related to the difficulty of finding reliable databases. Where European and English-speaking countries are concerned, apart from the study by Rajan and Zingales, the findings of which will be commented on below, the following can be consulted: "Dotations en fonds propres des entreprises: comparaisons dans quelques pays membres de la communauté européenne" [Levels of corporate net equity: comparisons between some member states of the European community] (Bundesbank monthly bulletin, 1994), C. E. V. Borio "Leverage and financing of non-financial companies: an international perspective" (Bank of International Settlements, 1990), E. M. Remonola "Understanding international differences in leverage trends" (Federal Reserve Bank of New York, Quarterly Review, autumn 1990) or J. T. Kneeshaw "A survey of non-financial sector balance sheets in industrialised countries" (Bank for International Settlements WPA No 25, 1995).

On the basis of a sample of listed companies in the G7 countries, Rajan and Zingales (1995) study capital structure in 1991 using accounting and market indicators. Overall, the aggregate level of debt is similar between the countries, with the exception of Germany and the United Kingdom, where it would appear to be lower. This conclusion tallies in part with that of the Bundesbank (1994) which shows that once the main differences in method have been resolved, the net equity of German, Italian, Spanish and French companies, on the basis of aggregate data, is similar. The author places considerable emphasis on the existence of bias attributable to differences in accounting practices, data collection, statistical methods used to process the data, and choice of indicators. These various difficulties may explain why Remonola (1990), working on the period 1982-1987, or Borio, studying the years from 1970 to 1987, using aggregate accounting data and with the help of figures for liability-to-asset gearing, find a higher level of debt in France than that observed in Germany, but Kneeshaw (1995, comparing 1982 and 1992, finds the reverse on the basis of creditors-to-asset ratios, equity gearing and financial creditors-to-GDP ratios).

The choice (or rather the availability) of data and indicators is also decisive for the assessment of the impact of corporate size on the level of debt. Rajan and Zingales find that

debt increases with size, except in Germany. They explain their result by the fact that the bigger the company, the more it can diversify, thereby reducing the likelihood of its finding itself in difficulty (the probability of bankruptcy being smaller, it can take on more debt). The explanation seems a pertinent one for listed companies whose investment choices are directed at maximization of the value of the firm. They can benefit all the more from higher gearing as their assets portfolio allows them to cover their commitments. On the other hand, if both listed and unlisted companies are considered, the inverse relationship found between size and gearing in other studies (Bundesbank, 1992; Paraque, 1994a - 1994b; Cieply and Paraque, 1996) tends to indicate different financing parameters.

Germany's negative relationship between size and debt is not explained by Rajan and Zingales. They consider the findings obtained for the German firms to be atypical. They are however consistent with the analyses of the Bundesbank (1992), which show that a negative correlation does exist between size and the level of debt.

To conclude the present section, the main results obtained by Rajan and Zingales are the following<sup>11</sup> (see table below):

– taking the ratio between liabilities and net equity/assets, Germany is the country with the highest debt, followed by France and Italy (with medians of 0.73 and 0.71 respectively in 1991);

– taking the ratio between creditors and assets, Germany and the United Kingdom have the lowest level of debt, with the proviso that pension provisions are not included under creditors;

– taking the ratio between creditors and net assets, Japan, Canada, Italy and France have the highest level of debt (where net assets = assets - advances and payments on account - other creditors);

– taking the ratio between creditors and creditors + net equity, the United Kingdom has the least debt, closely followed by Germany and the United States, whilst France, Italy and Japan have the highest levels of debt.

Country	Number of companies	Liabilities-net equity/assets (median)	Creditors/assets (median)	Creditors/net assets (median)	Creditors/net equity + creditors (median)
United States	2,580	0.58	0.27	0.34	0.37
Japan	514	0.69	0.35	0.48	0.53
Germany	191	0.73	0.16	0.21	0.38
France	225	0.71	0.25	0.39	0.48
Italy	118	0.70	0.27	0.38	0.47
United Kingdom	608	0.54	0.18	0.26	0.28
Canada	318	0.56	0.32	0.37	0.39

Source: Rajan - Zingales (1995)  
Produced by: Banque de France  
*Observatoire des entreprises* - Tel.: 33+ (0)1 42 92 56 58 Updated August 1996

<sup>11</sup> Based on the book value.

In fact, the studies on corporate financial structure, as summarized in the following table, give an insufficiently clear picture of the various European countries. According to the studies based on specific samples of companies with share capital listed on the Stock Exchange, German companies are always in a favourable financial position with very low debt. Conversely, according to the studies based on broad representative samples, French companies are the most highly capitalized and have the least debt in Europe. Likewise, in the case of Italy, the position of its companies is sometimes considered to be very similar to that of the French companies and sometimes, on the contrary, their financial self-sufficiency is considered to be the weakest of the countries considered.

These various studies do not allow precise comparative classification of financial structures in European countries. The considerable differences in the results yielded by the comparative studies of recent years reflect fundamental problems which must be resolved if the empirical approach to corporate financing at European level is to be improved:

- The samples used for the calculations are not homogenous. Comparisons have for example been arrived at on the basis of samples covering different types of companies with very specific financing structures (partnerships and sole proprietorships versus stock companies). The method used to process the data (aggregation versus extrapolation) has also proved to be inappropriate.

- In some cases, the samples are not sufficiently representative. The collection of aggregate individual data is problematic in countries where firms seek finance more readily from the banking system than from the capital markets. In this case, companies listed on the Stock Exchange will not be representative of the national industrial fabric. Only broadly based samples not confined to very large listed corporations allow the effect of the size of companies on their level of debt to be observed.

- The presence of very large enterprises in the samples has a considerable effect on the analysis of aggregate data, given that significant size effects are at work, especially in the case of Germany.

## SUMMARY TABLE OF THE MAIN RESEARCH FINDINGS

Document title	Databases used and countries compared	Selected indicators	Period studied, scope and size of sample	Main findings
C. E. V. Borio: "Leverage and financing of non-financial companies: An international perspective", Bank for International Settlements, Economic papers No 27, May 1990.	<ul style="list-style-type: none"> <li>- OECD financial statistics and national statistics on financial flows.</li> <li>- United States, Canada, United Kingdom, Japan, Germany, France, Italy.</li> </ul>	<ul style="list-style-type: none"> <li>a) (Gross) creditors/total assets,</li> <li>b) (Net) creditors/real assets.</li> </ul>	<ul style="list-style-type: none"> <li>- 1970-1987;</li> <li>- Sample of enterprises from industry and commerce or manufacturing industry;</li> <li>- Representative national samples.</li> </ul>	According to indicator a) France has higher levels of debt than Germany; according to b) the reverse is true, with Italy very similar to Germany.
L. Bloch and J. Laudy: "France, Allemagne et Belgique: des structures de bilans proches à la fin de la décennie quatre-vingt", Economie et Statistique No 268-269, August/September 1993.	<ul style="list-style-type: none"> <li>- BACH (former version);</li> <li>- France, Germany and Belgium.</li> </ul>	<ul style="list-style-type: none"> <li>a) Net equity (+ provisions)/balance sheet total;</li> <li>b) Net equity (+ provisions)/fixed assets (historical costs and market value).</li> </ul>	<ul style="list-style-type: none"> <li>- 1985-1991;</li> <li>- Manufacturing industry;</li> <li>- Representative national samples.</li> </ul>	If accounts provisions are considered as quasi-equity, France has higher levels of debt than Germany, otherwise Germany has a higher level of debt.
R.G. Rajan and L. Zingales "What do we know about capital structure? Some evidence from international data", NBER WP No 4875, October 1994	<ul style="list-style-type: none"> <li>- Global Vantage Data;</li> <li>- United States, Japan, Germany, France, Italy, United Kingdom, Canada.</li> </ul>	<ul style="list-style-type: none"> <li>a) Creditors + provisions/total assets;</li> <li>b) Creditors /total assets;</li> <li>c) debts/total net assets;</li> <li>d) Creditors /creditors + net equity (median and mean) (historical costs and market value).</li> </ul>	<ul style="list-style-type: none"> <li>- 1991;</li> <li>- All enterprises;</li> <li>- Restricted to companies with share capital listed on the Stock Exchange, from 118 companies (Italy) to 225 (France)</li> </ul>	According to a) Germany has the highest levels of debt (historical costs), with Italy and France not far behind; according to b), c) and d), Italy has higher debt than France, and Germany has a lower level of debt than France (positive correlation between size and debt, with the exception of Germany).
J. T. Kneeshaw: "A survey of non-financial sector balance sheets in industrialised countries", Bank of International Settlements WP No 25, April 1995	<ul style="list-style-type: none"> <li>- National sources: INSEE for France, <i>Statistisches Bundesamt</i> for Germany, OECD and Banca d'Italia for Italy, OECD and Banco de España for Spain;</li> <li>- Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States.</li> </ul>	<ul style="list-style-type: none"> <li>a) Financial creditors/total assets;</li> <li>b) Financial creditors + provisions/GDP;</li> <li>c) Financial creditors /GDP</li> <li>d) Net equity/GDP (market value).</li> </ul>	<ul style="list-style-type: none"> <li>- 1992;</li> <li>- Sample of non-financial enterprises;</li> <li>- National samples and macroeconomic data.</li> </ul>	According to a) Germany has higher debt levels than France; according to the other indicators, Italy has the lowest level and Germany the highest; greatest financial autonomy in France.
Deutsche Bundesbank: "Dotation en fonds propres des entreprises: comparaison dans quelques pays de la communauté européenne", Monthly Bulletin No. 10, October 1994	<ul style="list-style-type: none"> <li>- BACH (former version) and national sources;</li> <li>- Germany, France, Spain, Italy.</li> </ul>	Net equity/balance sheet total.	<ul style="list-style-type: none"> <li>- 1982-1991;</li> <li>- Manufacturing industry;</li> <li>- National samples.</li> </ul>	When methodological differences in building samples and in processing data remain uncorrected, Germany less autonomous than the other countries; after correction, the situation is similar.
E. M. Remolona: "Understanding international differences in leverage trends", FRBNY Quarterly Review, Spring 1990	<ul style="list-style-type: none"> <li>- BACH (former version) and Global Vantage Data;</li> <li>- France, Germany, Japan, United Kingdom, United States (Italy, Netherlands, Australia)</li> </ul>	Creditors/assets.	<ul style="list-style-type: none"> <li>- 1982-1987 and 1983, 1987;</li> <li>- All enterprises;</li> <li>- Representative national samples and limitation to a few stock companies listed on the Stock Exchange from 16 companies (France) to 31 (Germany).</li> </ul>	France has higher levels of debt than Germany and Italy, with Italy higher than Germany. The results using Global Vantage data confirm this finding but show greater differences between France and Germany.
J. Laudy and D. Szpiro: "Endettement, désendettement et taux d'intérêt", Banque de France, 1989	<ul style="list-style-type: none"> <li>- BACH (old version);</li> <li>- France, Japan, Belgium, Germany, Netherlands, United Kingdom.</li> </ul>	Creditors /balance sheet total.	<ul style="list-style-type: none"> <li>- 1975-1985;</li> <li>- All enterprises;</li> <li>- Representative national samples.</li> </ul>	France has higher debt levels than Germany.

- Some studies offer only simplistic conclusions. By reducing the analysis of corporate financing structure to liabilities alone and disregarding asset structure, they fail to take account of the different needs and conditions governing corporate financing.

- In some cases, insufficient checks are made of the homogeneity and international comparability of the indicators. The conclusions are then affected by national differences in accounting methods and by the structural and organizational differences between national systems of production.

It is therefore imperative for the present study:

⇒ to calculate indicators on the basis of samples which are representative and homogenous in terms of companies, economic sector and statistical processing;

⇒ to build samples containing sufficient percentages not only of large and medium-sized, but also of small companies, for the specific purpose of allowing correct analysis of the effect of size on corporate debt;

⇒ to take account of the particular influence exerted on the aggregate ratios of the results of large companies. Analysis by size band therefore needs to be fine-tuned;

⇒ to check for all differences in accounting, empirical and statistical processing, national industrial structure, concepts and definition of the variables used in each country in order to arrive at homogenous indicators;

⇒ to check and to consolidate the analysis using additional ratios, notably for observation of the requirements and conditions governing corporate financing and in order to understand the financing structures of European companies.

All the above considerations subtend the group's research and have led to it attaching fundamental importance to its methodological aspects.

### **3. RESEARCH PROBLEMS AND METHODOLOGICAL CHOICES**

#### **3.1. Accounting data and market data**

In theory, the market value of equity and debt constitutes the most valid yardstick for corporate financial structure, thereby allowing comparison of the companies of one country with those of another.

The prices that form on an efficient capital market make possible measurements which go beyond the limits intrinsic to accounting data: the market value of the equity in an efficient, complete market expresses not only the current value of the existing assets, but also the value of a company's options for profitable development, as estimated on the basis of the best available information. In addition, the efficient market price is not influenced by accounting practices or by the opportunistic behaviour of managers when preparing their Annual Reports to shareholders. This is so because an efficient market succeeds in "reading" the company's real situation between the lines of the accounts figures, being neither influenced nor misled by the effects of balance sheet policies.

In principle therefore, market value allows account to be taken, for example, of the existence of undervalued assets, excessively prudent provisions, depreciation for tax purposes differing from true economic depreciation and rash, opportunistic balance sheet presentations tending to offer a view of the company's situation which does not reflect reality.

For similar reasons, the market value of debt allows a more meaningful expression of corporate debts to be obtained than using accounting methods alone. The market value implicitly takes account of the existence of contractual conditions (interest rate, indexation clauses, and so on) which differ from generally prevailing average conditions for liabilities of the same residual maturity, repayment or early conversion options, risks of insolvency which are greater or smaller than the average (and not reflected in the interest rate), and so on.

In practice, however, literal recourse to market valuations comes up against considerable difficulties. Markets are in fact neither as complete nor as efficient as the theoretical models assume.

In international comparisons, among others, market cycles may not be in phase at any given moment and, consequently, the presence of unsynchronized upward or downward speculative bubbles may generate non-uniform price distortions on the various national markets.

Differences in the "depth" and degree of liquidity of national markets need also to be taken into consideration. Even if it tends toward efficiency, a market on which only a few transactions take place generally forms prices which are excessively volatile and not congruent with the economic value of the companies.

In particular, the capital markets of the countries covered by this study are not representative of their industrial reality since, in fact, the number of listed companies is too low in relation to the total number of companies.

Consequently, if it had been decided to use market value in this study, and assuming that such information was easily available, the analysis of net equity would have been carried out on the basis of a small group of large corporations in each country, without any possibility of being able to claim representativeness for the results obtained.

Again, because of the lack of representativeness of the capital markets, it was decided not to estimate the economic value of unlisted companies on the basis of the data available on the listed companies, as has been done in some economic research.<sup>12</sup>

Observable market values are of even more limited use if one is considering corporate debt. Only a small proportion of the debts payable by a company is negotiated on the market, since such debt largely consists of funds advanced by banking institutions, groups or other financial backers (not to mention trade creditors).

As regards that part of the liabilities represented by short-term instruments, market value and book value are very close, although not identical. This is not true of debts payable over the medium and long term (not to mention amounts owed to the group, obtained on beneficial terms compared to the prevailing average).

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<sup>12</sup> The estimate may be obtained by applying, for example, the ratio between market value and book value of the equity or the registered capital in the listed companies of the same sector or by capitalizing the dividends at the dividend-yield rate. However, these procedures do not take account of differing corporate gearing and risk levels.

Estimating the market value of debt therefore proved to be impracticable. In particular, it would have required the creation of phased structures for interest rates for each country, assessment of the probabilities of the insolvency risk for each company and evaluation of the options (implicit or explicit) present in the financing for each debt agreement. In the majority of cases, it is quite simply impossible to obtain some of this information from outside the company.

The limited scope of the capital markets (in terms of number of companies and debt instruments) of the countries covered by the present study, and the doubts entertained as to the concordance between prices and fundamental corporate values, therefore led to the use of accounting data to analyse net equity. This choice has enabled the research to be conducted on the basis of very extensive samples, using the wealth of information available in the databases of Central Balance Sheet Offices. These bodies collect information on several times more companies than it is possible to examine using market data. In particular, this choice allows more detailed study of the data sorted by corporate size band, ensuring a degree of representativeness impossible to achieve using the population of quoted companies.

The results obtained may therefore be considered as generally satisfactory. The chapter on the results of methodological processing will return to the issue of the significance of the samples of companies used.

### **3.2. Harmonization of the data: importance and limitations**

If it is already complicated to undertake comparisons between the balance sheets of companies based in the same country, the difficulties increase still further when one begins to look at balance sheets from different countries.

The problems involved do not stem solely from the variety of accounting options which companies may adopt in drawing up their balance sheets from among those accepted under the legislation or accounting principles of reference, but also from:

- a) differences in institutional structures and standard business practices;
- b) the greater or lesser diversity of accounting systems between the various countries, such as the difference in attitude toward the principle of conservatism in the valuation of the assets and liabilities, for example;
- c) the intensity of the macroeconomic variables with a direct impact on balance sheet content, such as, typically, inflation rates.

Obtaining a broader understanding of balance sheet content between the various countries and enhanced possibilities for comparison are doubtless goals which subtend the process of integration in the European Community and which are strengthened by the globalization of financial markets.

In fact, two major Directives deal with the harmonization of accounts<sup>13</sup>: these are the Fourth and the Seventh Directives, relating to annual and consolidated accounts respectively.

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<sup>13</sup> A distinction is drawn in the literature between *uniformity of accounts*, in which alternative accounting procedures are entirely eliminated, the *standardization of accounts*, in which uniform rules are defined on the basis of common accounting standards, and *harmonization*, by which is meant the process of gradually reducing differences between national accounting systems.

In particular, the translation of the Fourth Directive into national legislation gave rise to significant changes and, at least in theory, an important step was taken towards building a European balance sheet, recognizable and recognized in all Community countries. The Directives on corporate annual accounts, and especially the Fourth, are the result of a long and laborious process of compromise which has introduced a large number of options: some of them are intended for companies drawing up their balance sheet, others for the various countries to help them apply the provisions of the Directive in their national legislation.

According to the choices made, the various national versions of the 4th Directive resemble one another to varying degrees: some researchers of a pessimistic cast of mind go so far as to maintain that this Directive has completely failed to arrive at the lowest common denominator for corporate balance sheets in the Community, and has done no more than codify the differences already existing without achieving real and substantive harmonization.

There can however be no doubt that the Directives were a step forward towards common accounting rules and language.

One of the limitations of the Directives as instruments for harmonization lies in their cumbersome and rigid character typical of "legalistic" approaches to the regulation of corporate activities. The criticisms have highlighted the following specific issues:

- 1) the need gradually to reduce the number and scope of the existing accounting options (despite the fact that the current tendency seems to be toward their preservation);
- 2) slowness in accommodating and codifying emerging accounting practices (for example: innovation in the financial sphere);
- 3) difficulty in extending the monitoring of the Directives to fields not envisaged when they were originally drafted (for example, leasing finance, cash-flow statements, foreign currency transactions, etc.).

In response to these difficulties, the Accounting Advisory Forum was set up in 1991 within the European Commission for the purpose of examining such accounting problems in the process of emerging or not yet regulated by the Directives.

Still greater pressure for accounts harmonization is being exerted by the International Accounting Standards Committee (IASC).

The internationalization of the business world and multinational corporations, the globalization of financial markets and the tendency for companies to raise their capital on non-domestic markets are powerful arguments in favour of the harmonization of accounts.

The IASC has received considerable support from IOSCO (International Organization of Securities Commissions), which groups together the Stock Exchange supervisory authorities (focused around the United States' SEC). The objective is to reduce the quotation costs of companies listed on markets other than their home market; if the balance sheets of the listed companies were all prepared on an internationally agreed, uniform basis, their content could be recognized and accepted by the various Stock Exchange supervisory authorities, obviating the need for long and costly adaptation procedures.

To accelerate the harmonization process, the IASC has finalized a draft document — "The Comparability of Financial Statements" (E32 1989) — directed at the reduction of the options allowed for in IASC-promulgated accounting standards.

However, it should be pointed out that the IASC's essential remit includes multinationals and listed companies, or companies eligible for listing, in the various markets. The scope of the Directives is far wider, since it covers all companies with share capital in Europe, whether or not they are listed on the capital market.

The harmonization of accounts and, consequently, improved international comparability of balance sheets, is therefore a process currently under development, but far from complete.

In reality, in addition to those aspects linked to the structure of the national accounting systems, there are deeper concerns which must be properly understood if balance sheets in the various countries are to be correctly evaluated.

One such factor is the attitude to the principle of conservatism: traditionally, examples used in the relevant literature compare German balance sheets to those in English-speaking countries.

The essential aim of a balance sheet in the English-speaking world is to inform shareholders of the performance of the company during the financial year. Consequently, the accounting principles of reference are designed to limit the margin of discretion in adjusting profit for the reporting period, in order to protect the shareholders and to give operative effect to the concept of the "true and fair view". Entirely in accordance with this formulation, tax legislation has no influence on the way in which the balance sheet is drawn up. The danger in such balance sheets in English-speaking countries is that of recourse to forms of "creative accounting" used by company managers in an attempt to depict the company's situation as better than it in fact is, through the overstatement of company profits to improve its market performance.

From the point of view of the English-speaking countries, strengthening the assets of the company must be pursued with accounting transparency for third parties in mind and therefore through the constitution of equity reserves (providing for profits to be determined in reaching decisions as to dividend policy) — equalization of dividend payments is preferred to equalization of profits over time.

Conversely, companies in Germany rely far less on the capital market and far more on their long-term relationship with the banking system. The result is that the presentation of balance sheets is less sensitive to the requirement to inform shareholders on the profits for the period. On the other hand, particular importance is attached to the principle of conservatism and to the rules of true and fair presentation in order to protect third parties (creditors) and to guarantee the long-term survival of the company and its capacity to surmount periods of difficulty. Systematic understatement of assets, overstatement of liabilities, formation of reserves and equalization of profits over time are all technical solutions allowing the integration into the company accounts of the principle of conservatism.<sup>14</sup>

In concrete terms, it is recognized that compared to the accounting principles of English-speaking countries, the assignment of priority to conservatism as an accounting principle leads to the following:

1) more restrictive definitions of the concept of assets and stricter accounting criteria for intangible assets;

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<sup>14</sup> However, equalization of profits over time gives more conservative figures for corporate performance only in good financial years, whereas when the business climate is depressed, such profits may prove to be significantly less conservative than those shown in the balance sheets of English-speaking countries.

2) the adoption of more conservative criteria for the valuation of assets (inventory of long-term work-in-progress for example);

3) a broader conception of liabilities and allocations to reserves, even where the occurrence of undefined events detrimental to the company is no more than probable;

4) the anticipation of losses and the recognition of profits or gains only where they are realized (following a prudent definition of the principle of realization): taking dividends into consideration and not shares of profit accrued on long-term equity interests.

To this should be added that in Germany, as in certain other countries, there is a close relationship between balance sheets and the impact of taxation. Since certain expenses are only tax-deductible if they are shown on the balance sheet, amortization and certain types of provision are determined on the basis of tax criteria (for example: early repayment). This leads *ipso facto* to more conservative corporate performance figures.<sup>15</sup>

In addition, because of the fiscal consequences, companies are encouraged to show the lowest possible profits, especially as they do not have to fear negative repercussions on the part of the stock market, to which they have little recourse.

For this reason, the legislation protecting creditors, third parties and the company itself leads to very conservative valuation of equity and significantly substantial provisions for pensions and charges in German balance sheets. Such provisions are equivalent to some extent to fund reserves, but it is extremely difficult to identify them correctly from outside the company.

The predominance of the principle of conservatism in Germany is not a problem which can be tackled as part of the process of accounts harmonization (this process could, on the other hand, deal with the relationship between the balance sheet and tax legislation). This predominance is the result of significant institutional features<sup>16</sup> that will continue to have a profound influence on German balance sheets.

Simplifying the situation in the extreme, we could say that the dividing line between the will to preserve the company and the will to inform investors (both actual and potential) may represent a relevant key to evaluating the accounting options under discussion within the Community; the institutional aspect is reflected in the duality between the pressure of the capital market, which wants the value of the company to be maximized, and fiscal pressure, which is pushing for profits to be minimized.

Between these two extremes (German and Austrian balance sheets on the one hand and balance sheets in the English-speaking world on the other) lie the majority of the balance sheets of the other Member States. It can reasonably be assumed that on average the French, Italian and Spanish balance sheets, to confine ourselves to the countries examined in this study, were in the past closer to the German and Austrian balance sheets and that, under market pressure, they have tended to move towards the English-speaking type.

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<sup>15</sup> Or at least so long as there is no inversion of the effect on performance of the provision or depreciation expense.

<sup>16</sup> The absence of significant inflation also contributes to explaining the exclusive use of historical costing in the valuation of assets.

### 3.3. The variables used to define net equity

The choice of accounting variables made by the group for this study was strongly influenced by the context and the problems described in the previous chapters. Its objective was to focus the commentary on those ratios permitting maximum comparability between countries.

The research gave preference to an approach based on corporate solvency. Such an approach, which is of a prudential, even liquidation-based character, is traditionally the point of view of the creditor.

The solvency perspective was also preferred to a more economics-based approach not only because it makes for less thorny methodological difficulties in international comparisons, but also because analysis of credit risk is the very basis of the prudential approach of the central banks.

In theory, the best reference for the financial analysis is the group, since it is only in this context that certain transactions for the transfer of resources, financing, or the allocation of profits or losses become fully meaningful.

Consequently, the most reliable picture of the net equity of an economic unit is that derived from the consolidated data of the legal entities comprising it.

The availability of consolidated balance sheets in the databases of the Central Balance Sheet Offices is not however at present either sufficiently extensive or systematic in all the countries examined.

It is for this reason that the analyses were conducted using the balance sheets of the different companies. It is not therefore necessary to discuss the inclusion in net equity of net capital of minority shareholders.

However, it emerges from the analysis of the composition of the balance sheet assets of the companies in the countries under review that in France and Germany, unlike the other countries, a large proportion of the assets of large companies is composed of long-term loans and investments, particularly equity holdings. Straightforward aggregation of the balance sheets inevitably leads to overstatement, in accounting terms, of the net equity of companies belonging to the same group, by biasing their financial structures. After checking, by deducting equity interests from total equity, no significant changes emerged in relation to the findings which will be presented in the fourth part of the study.

#### 3.3.1. Definition of net equity

In accordance with the choice made by the group, net equity is defined so as to assess the solvency of the company and its financial independence from third parties thereby. It is calculated on the basis of the charts of accounts and tax returns in each country, in the following manner:

**Net equity** = Subscribed capital

- + Share issue, corporate merger and split premiums
- + Revaluation variance
- + Reserves (including amounts carried forward)
- + Net profit or loss for the financial year
- + Statutory provisions
- Subscribed capital uncalled (or unpaid)
- Intangible fixed assets<sup>17</sup>

The following points need to be stressed particularly:

**a) Revaluation surpluses:** although valuation at historical cost is a basic principle of asset valuation which is widely accepted in the majority of European countries, some countries have introduced exceptions to provide a more accurate view of the position of the company, especially in a context of high, persistent inflation.

For this reason, whereas in Germany and Austria there is strict application of the principle of historical cost, Spain, France and Italy have from time to time introduced revaluation rules into their legislation (Deutsche Bundesbank, 1994).

In Spain, the most recent tax law concerning revaluation relates to 1983: revaluation surpluses, indicated in a special reserve item, may be used to absorb losses or, after three years, be converted into capital or into other reserves (unregulated or subject to conditions). Only the residue of the initial revaluations is therefore shown in the Spanish balance sheets, the rest in fact being included under other headings in the accounts. In 1991, a special revaluation law was passed for Basque companies.<sup>18</sup>

In France, the most recent revaluation based on law was authorized by the statute of 1978 on the basis of 1976 government price indices. In addition to this legal revaluation, French companies may undertake voluntary revaluations on an annual basis (which therefore have tax consequences). Revaluation surpluses must be entered under a special reserve which cannot be distributed or used to cover losses, but which may be converted into capital.

In Italy, in recent years, revaluation statutes were passed in 1975, 1983, 1990 and 1991: whereas the first two of these were designed to make a flat correction in balance sheets for inflation, the latter two were influenced by the state of public finance (companies paid what was in effect a partial tax on the revaluation surpluses of 1990 and 1991).<sup>19</sup> As in France, it was also possible to undertake voluntary revaluations (with consequences for tax liability) if "special reasons" existed; the introduction of the Fourth Directive (effective as from the 1993 balance sheets) assigned greater importance to the historical cost principle, from which it is only possible to deviate in exceptional cases with a view to ensuring a true and fair view of the company.

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<sup>17</sup> Not including adjustment accounts (short term)

<sup>18</sup> In 1996, Spanish companies were authorized to undertake a further revaluation.

<sup>19</sup> The revaluation was optional in 1990, but became obligatory in 1991.

For the purposes of the present research, it was decided to include revaluation surpluses in corporate equity for two main reasons:

– firstly, the figures given in the reserves of the Spanish, French and Italian balance sheets are the as yet unused residue of the earlier revaluations: consequently, the exclusion of still-visible revaluations would have made for more distortion instead of eliminating it;

– and secondly, at least for monetary revaluations justified by inflation, there is a theoretical reason for including them as part of the net equity: their inclusion in the balance sheet permits comparison of corporate data from countries with different inflation rates, thereby eliminating distortions.

Conversely, voluntary revaluations, largely directed as they are at embellishing the company's position from an accounting point of view, do indeed introduce systematic distortions between countries and should be excluded from the calculations. It was not however possible to separate the accounting effects of monetary revaluations from those linked to legal revaluations.

b) **Statutory provisions:** specific regulations governing these provisions have existed for a long time only in France. In Austria, a similar principle was introduced from 1992, based on the Fourth Directive. In Germany, a direct deduction from assets or an entry under reserves is accepted; half this reserve is deemed to be equity, whereas the rest is entered among debts and liabilities in order to take account of deferred taxes on a flat-rate basis.

In Italy, on the other hand, exceptional depreciation is mainly deducted from fixed assets. Since the introduction of the Fourth Directive, a growing number of companies enter it under the reserves. From the 1994 balance sheets, however, the Italian situation has become more confused since companies may either deduct the extraordinary depreciation from fixed assets or enter it under the reserves, or not take account of it in the balance sheet but only in the tax return.

c) **Investment grants:** depending on their character and according to country, different accounting systems allow one or more options for showing these grants: as deductions from fixed assets, as items of deferred income (in the adjustment accounts) or even, albeit partially, in a special reserve; in the latter case, the grant may be charged to the profit and loss account as the corresponding asset is depreciated.

To improve international comparability, grants have been excluded from the definition of net equity.

d) **Own shares:** since this accounting information is not available in all cases for the countries considered here, they **were not deducted** from the definition of net equity, with the exception of Germany and Austria where they cannot be separated from unpaid, subscribed capital. For those countries for which this figure exists, the volume of own shares is very limited and have no impact on the analytical findings.

e) **Dividends for distribution from net profit for the financial year:** as in the case of own shares, the lack of information covering all the countries led to a decision not to deduct dividends for distribution. **Equity is therefore considered prior to the distribution of dividends.**

f) **Intangible fixed assets:** as we have seen in the previous chapter, the accounting systems of the various countries and the interpretation of the conservatism principle allow a

wide variety of options regarding the capitalization of industrial expenditure, the treatment of goodwill and the depreciation of these.

In general, German and Austrian standards are the most restrictive for recording this expenditure in the assets, whereas in Spain, France and Italy, it is possible to record various types of cost under the assets, including those relating to an activity carried out by the company on its own behalf, such as advertising (except in Spain), training, restructuring costs, research and development. In Spain, intangible assets also include goods acquired under leasing agreements.

With a view to ensuring better international comparability, the full amount of the intangible fixed assets was deducted from equity without taking the tax effects into account, even at a flat rate.

From the point of view of the financial analysis, this definition of net equity is very conservative and is close to that of "tangible" equity. Its aim is to show the ability of the company to remain solvent, without taking account of assets which, at the time of winding up, might have no realizable value (the liquidation aspect of solvency analysis).

The working group realizes, however, that this restrictive definition of net equity diverges significantly from a more **economic** analysis of the company in which the intangible factors are of great importance in explaining competitive capability. However, the justification for this lies in the notorious difficulty of arriving at a viable market valuation of the company's intangible resources using aggregated data converted into accounting data and in the decision made for this research to analyse financial structures from a solvency perspective.

### **3.3.2. Variables for comparison of net equity levels**

Once net equity has been defined, it remains to specify the variables which will serve to assess the differing degrees between countries of corporate financial independence in relation to third parties.

The choice of variables reflects the plan of the analysis which set out to highlight companies' level of solvency and strength in terms of net worth. The yardstick for these concepts is basically to compare net equity with two variables: a flow variable reflecting turnover and an inventory variable reflecting level of debt.

- Turnover net of tax<sup>20</sup>
- Financial debt
 

=	Amounts owed to credit institutions	Financial creditors
+	Debenture loans	
+	Other financial creditors	
+	Trade bills discounted	
–	Bond redemption premium	
+	Bond issue premium <sup>21</sup>	
–	Advances to groups and associates	
- Financial debt – cash – marketable securities

To solve as far as possible the problem arising from ratios with a negative denominator (see next paragraph), it was decided to add in all cases the volume of net equity as defined above to the denominator (except in the case of net turnover) to arrive at the concept of **financial resources**.

The following essential points must be stressed:

a) **Net turnover**: the main limitation of net turnover is its dependence on the degree of vertical integration of the company's manufacturing process. Despite this, it was preferred to added value as a flow variable, in view of the difficulty in arriving at a uniform definition of the latter for all the countries considered (mainly because of the differences in the ways certain categories of charges are entered in the accounts).

As will be discussed in greater detail in the chapter commenting on the study findings, comparing net equity and net turnover is intended to assess the ability of the company to maintain its own production cycle in terms of net assets and to evaluate the potential risks of overtrading.

Through its construction, the net equity/net turnover ratio depends on the turnover rate of the entire capital used by the company. On account of this, it is liable to be affected by the economic cycles of the various countries.

In the concern for exhaustiveness, the **financial debt/net turnover** ratio was calculated. Composed of almost uniform monetary variables, it allows more relevant comparisons to be made between countries with different inflation rates. The **financial resources/net turnover** ratio is also examined.

b) **Financial debt**: all categories of financial creditors were taken into consideration, whether short or long term (to take full account of the various financing instruments used by the companies). A few adjustments were made, however.

For some countries, it was not possible to draw a distinction among the components of the liabilities to groups and associates between financial, trade creditors and sundry creditors. The definition of financial debt adopted excludes amounts owed to groups and associates: it is therefore a measurement by default of the actual debt of the company. This error is however less important than that which would have been made by including the total amount owed to

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<sup>20</sup> The volume of turnover net of tax is defined as "net of value added taxes". It includes the other taxes (on alcohol and tobacco) for France, Germany and Italy, but not for Austria and Spain. But the effect of these differences in accounting treatment has no significant impact for the variations observed between countries.

<sup>21</sup> For those countries where this information is available

groups and associates, as this includes part of the total for non-financial debt, notably trade creditors, and involving quite another logic.

A control indicator was calculated to assess the significance of total intra-group liabilities, although the information was not available for Spain from 1992 for companies with fewer than 100 employees.

$$\frac{\text{Total amounts owed to groups and associated companies}}{\text{Total creditors (financial, trade, sundry)}}$$

Furthermore, using the accounting principles of reference, the amount of debt recorded on the liabilities side of the balance sheet represents the nominal value of the amount which the company will pay on the due date to its own creditors.

To obtain a more representative measurement of the value of the financial debt exclusively from accounting data without recourse to estimates of market value, the total for financial debt was corrected to take account of bond redemption and issue premiums. If the amortization of the premiums is carried out appropriately, the book value of long-term debt, after subtracting bond redemption premiums and adding bond issue premiums, is close to its economic value (discounted at the rate of the actual cost of the debt and not at the contractual interest rate).

The information available at the Central Balance Sheet Offices is restricted in most of the countries to premiums relating to debenture loans and, consequently, the calculations only took account of the latter.

In the case of short-term financing instruments, the difference between the value on redemption and the value on issue does not exist. Either it is very limited and is cancelled out during the financial year, or it is included indiscriminately in the adjustment accounts and therefore not available analytically for reprocessing.

The following indicator was introduced:

$$\frac{\text{Bond redemption premium} - \text{bond issue premium}}{\text{Financial debt}}$$

with the purpose of measuring the scale of the correction in the countries for which the information is available. However, since the ratio is close to zero, the indicator is not presented.

c) **Off-balance sheet items:** the working group considered the question of off-balance sheet financing instruments. In particular, it examined **leasing transactions** and **trade bills discounted**.

Although the technique for reprocessing leasing transactions is to be recommended, it is not yet used systematically by all the companies of the various countries; Spain is the only country that requires companies to record the transactions on the assets side and the liabilities side, as it is allowed by the Fourth Directive. In Germany, even though the entry in the accounts of leasing finance is not prescribed by the accounting standards, the off-balance sheet liabilities are available; on the other hand, the payments are reclassified under other external purchases and charges without it being possible to single them out; in Italy non-systematic information exists on the company's leasing commitments in the notes to the

accounts. In France, only the leasing payments are available, the commitments being capitalized off-balance sheet. Finally, this information is not available in Austria.

For all the above reasons, it was decided **not** to include **leasing agreements** in financial debt.

**Trade bills discounted** were included in the financial debt, reflecting an "extended" concept of debt, by assimilating to a financial debt the resources obtained in exchange for the transfer of trade claims to the banks. This concept of debt abides by the conservatism principle since a discounted bill represents an actual liability only if the company has transferred it to the bank under the "*pro solvendo*" formula and the final debtor has not paid his own debt on the due date. Throughout the period between the date of transfer and the date on which the bill falls due, this is a risk of recourse relating to exchange and not an actual liability.

Some analysts assimilate trade discounting operations not to a transfer of assets, but to financing secured by claims and as such eligible for presentation as a true liability

Be that as it may, to include trade bills discounted in financial debt allows better comparison of the situation of different sectors and different countries where financing terms and practices differ in technical ways (in this case, the financial policy is "adjusted" by the policy for use of discounting).

The significance of this phenomenon was assessed using the following control indicator:

$$\frac{\text{Trade bills discounted}}{\text{Financial debt}}$$

Trade bills discounted are not available for Austria from balance sheet data. However, a control carried out on the risk database shows that their amounts are not significant. Moreover, in some countries, they also include transfers to factoring companies.

d) **Gross financial creditors and net financial creditors**: it is customary in some countries to hold liquid balances partially offsetting amounts owed to banks. The **net** financial debt was therefore calculated by subtracting from total financial debt the amount of cash resources, defined as the sum of **cash** and **marketable securities**.

This approach also allows account to be taken of the effects of the active financial management of companies engaging in short-term arbitrage in securities to take advantage of interest rate and/or tax opportunities.

Finally, the definition of net financial debt is more significant from the economic point of view if it is wished to take into consideration the resources intended for financing the structural activities of the company, net of the cash cycle and the investments of surplus liquidity.

Nevertheless, setting off cash resources against financial debt tends to "over-adjust" the data, so to speak, since it also eliminates the effect of the greater or lesser efficiency of the national payment management system. The efficiency of the payment system is expressed in the greater or lesser need for money for transactions: this information, however, cannot be derived directly from balance sheets.

For these reasons, analysis of the ratios using net financial creditors must be combined with an examination of the indicators using gross creditors, in order to obtain a fuller picture of the company's financial structure.

e) **Provisions for risks and charges:** in some countries, provisions for risks and charges are very high. For example, pension funds in Germany and the workers' compensation funds in Austria, and to a lesser extent in Italy, represent a major share of companies' liabilities.

From the financial point of view, these provisions are an important source of accumulated resources within the company and invested in all its activities without distinction. In the context of the analysis of the financial structures, it is consequently necessary to take account of these items which, since they reduce the extent of the need for external borrowing, may be regarded as supplementary to other sources.

Given that these provisions are liabilities from the legal point of view, they cannot be considered as net equity in any examination of solvency. However, they are not part of financial debt by nature since they do not reflect transactions undertaken specifically to procure resources for companies, but are based on national company regulations and represent debts to members of staff (or former members of staff) for deferred remuneration which the company will have to defray in the future, even though the amounts and/or the dates are uncertain. However, to disregard their existence would have the consequence of introducing systematic distortions into international comparisons of asset structures and ignoring the presence of substantial financial resources.

Consequently, an extended concept of debt could have been defined, which would have included financial debt (gross and net of cash) and total provisions for risks and charges.

It should be pointed out that items included under provisions for risks and charges may not always be of a uniform type. This heading is likely to include charges of a specific nature but where the amount and/or the date are indeterminate, and it may also include provisions set aside as a precaution, whose nature is similar to that of the reserves included in net equity. Tax legislation may also favour the setting aside of these provisions by allowing their deduction from taxable income. It is impossible for an outside observer to determine the true nature of the various items making up the provisions for risks and charges and to single out the part which may be charged to net equity.

For this reason, the inclusion of the entire amount of the provisions for risks and charges in the definition of debt would give rise to an underestimate of the soundness of the company's net assets, the extent of which cannot be specified exactly.

For this reason, to assess the scale of these provisions, the working group preferred to calculate the following control ratio:

$$\frac{\text{Provisions for risks and charges}}{\text{Financial debt} + \text{provisions for risks and charges}}$$

f) **Total assets:** among the inventory variables to be compared with net equity, the total assets including trade accounts receivable was selected. This ratio is in fact very frequently used in international comparisons. It also allows implicit account to be taken of the fixed asset revaluation process used in certain countries.

However, it encapsulates not only the means of financing used by companies, but also the effects of standard commercial practices. This is because the assets include the trade accounts receivable, the amount of which, as in the case of the trade accounts payable, varies according to the mean contractual credit period for collection and payment.

It should be noted that trade accounts payable were not included in financial resources in order to remain consistent with the financial solvency approach, in which priority is given to remunerated debts payable. They are also different in nature from financial creditors: they are not covered by any loan agreement, they reflect a variety of commercial practices (arrangements, exchange for a price, securing customer loyalty, etc.) and they finance requirements of the same nature on the assets side.

The working group also did not consider it possible to conduct separate analyses of balance sheet assets and liabilities: the former (in terms of level and structure) enable the latter to be understood, i.e. the reasons for the financial decisions. Financing decisions are determined by the nature of the requirements. The asset turnover (assets to net turnover) is thus shown to be an explanatory variable for differences in financial structure. In conjunction with the net equity to total assets ratio, it provides an explanation for the relationship between net equity and net turnover (which is interpreted as the ability of the undertaking to support its business).<sup>22</sup>

For the sake of methodological uniformity, the assets include trade bills discounted, but intangible fixed assets, investment grants and bond redemption premiums are deducted.

g) **Comments on debt at the year-end and mean debt:** the balance sheet expresses the company's position **at the end** of the financial year and it may not be representative of the actual mean situation observed **during** the financial year.

Financing obtained during the final months of the year or a repayment made at the end of the year may profoundly distort the amount owed as shown in the balance sheet in relation to the mean amount owed; further, the amount owed as recorded in the balance sheet offers no record of financial transactions initiated and completed in the course of the financial year.

In the absence of more precise information provided by companies in the notes to the accounts, it is not possible to obtain from outside any insight into the difference between the actual mean amount owed and the final amount owed (especially in the case of companies subject to significant seasonal cycles).

Only flow data can record events occurring during a period: the financial charges thus reflect, through the interest rate, the company's actual mean financial debt during the financial year.

The financial charges/net turnover ratio is therefore a good yardstick for the evaluation of the mean financial structure of the company using flow data. However, it is an indicator which recapitulates both the amount owed and its cost and cannot be used directly in international comparisons between countries with different inflation rates. Nominal interest rates in fact take account of the country's inflation rate and do not allow uniform comparison of the real situations: this comparison must be based on real interest rates.

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<sup>22</sup> The reader may however observe that the definition of financial resources based on the liabilities is equivalent to a definition based on asset items combining fixed assets and working capital requirements. Such a definition corresponds to an approach in terms of financial requirements (net of financing by trade creditors), which we assess using adjusted assets.

The financial charges/net turnover ratio was calculated as an aggregate, subtracting from the numerator the effect of inflation on financial debt (at the end of the year).<sup>23</sup> In fact, inflation causes monetary losses to the detriment of creditors and these losses are cushioned by rising interest rates. However, the controls carried out do not evidence any consequences for the ranking based on the principal ratio, which led to a decision not to present this ratio.<sup>24</sup>

All in all, the ratios considered most important in this study are the following:

Numerator	Denominator
Net equity	<ul style="list-style-type: none"> <li>• Net turnover</li> <li>• Financial resources (financial debts + net equity)</li> <li>• Financial resources - cash - marketable securities<sup>25</sup></li> </ul>

The supplementary or control ratios to be studied are the following:

- Provisions for risks and charges/financial debt + provisions for risks and charges
- Total amounts owed to groups and associates/total debts (financial, trade, sundry)
- Trade bills discounted/financial debt
- Financial debt/net turnover
- Net equity/adjusted assets<sup>26</sup>
- Total assets/net turnover
- Financial resources/net turnover

### 3.3.3. Methodological aspects of forming ratios and statistical choices

The specific construction of the ratios gave rise to a certain number of analytical problems concerning the presence of zero or negative data and extreme values (outliers).

The main problems are the following:

a) During the period under review, some companies had negative or zero net equity, whereas a significant number had no financial debt and a large proportion had liquid assets exceeding financial debt, which yielded negative net debt values.

In the construction of the ratios, the presence of denominators capable of taking not only positive but also negative or zero values poses problems as regards the possibility of arithmetical calculation of the indicators themselves (zero denominator case) and monotonic

<sup>23</sup> Assuming, for reasons of simplicity, that  $n = r + j$ , where  $n$  = nominal interest rate,  $r$  = real rate and  $j$  = inflation rate,

$$\frac{FF (= \text{financial charges})}{CA (= \text{net turnover})} = \frac{n * DEB (= \text{financial debt})}{CA (= \text{net turnover})}$$

the ratio between financial charges and net turnover corresponds to:

$$\frac{r * DEB}{CA} \text{ i.e. } \frac{n * DEB}{CA} - \frac{j * DEB}{CA} = \frac{FF - j * DEB}{CA}$$

<sup>24</sup> The choice of the relevant interest rate (*ex post - ex ante*) nevertheless remains problematic.

<sup>25</sup> Cash + marketable securities = liquid assets.

<sup>26</sup> Adjusted assets: assets - subscribed capital uncalled - bond redemption premium - intangible fixed assets - investment grants + trade bills discounted.

functions describing the indicator (i.e., in other words, concordance between numerical values and economic significance).

To reduce the frequency of the cases of zero denominators (debt = 0 or debt = liquid assets) or negative denominators (liquid assets > debt), it was decided to calculate all the data in the form of "composite" indicators ( $A/A+B$ ) and not as structural indicators ( $A/B$ ), by adding net equity to all the variables for comparison included in the denominator (excluding turnover).

This approach, without entirely eliminating the problem of inversion of the sign of the denominator, reduced it to a very large extent and eliminated the zero denominator cases.

b) After this operation, a limited number of cases still remain with negative denominators where the following possibilities occur (with NE = net equity, DEB = gross debt with and without provisions for contingent and charges, LIQ = liquid assets):

- 1)  $NE < 0$  and  $|NE| > DEB$ , which also includes the case of  $DEB = 0$ ;
- 2)  $NE < 0$  and  $|NE| > (DEB - LIQ)$ , which also includes the case of  $DEB - LIQ = 0$ ;
- 3)  $NE < 0$  and  $(DEB - LIQ) < 0$ ;
- 4)  $NE > 0$  but  $DEB - LIQ < 0$  with  $NE < DEB - LIQ$ , which includes the case of  $DEB = 0$ .

Cases where the denominator is zero due to an exact offset of positive and negative items, are limited to a very few devoid of statistical significance.

c) The effect of the above difficulties on the calculation of the indicators was tested using the Italian data.

• The various financial autonomy ratios were calculated without any processing of the cases with zero or negative denominator.<sup>27</sup> Three statistical indicators were calculated:

- the mean obtained by dividing the sum of the ratios by the number of companies,
- the weighted mean or mean ratio, which can be calculated by dividing the combined numerators by the combined denominators,
- the quartiles and, in particular, the median which, once the companies have been ranked in rising order of ratios, separates the population studied into two equal parts.

• These same statistical indicators were recalculated without the cases of zero or negative denominators.

• In cases where the denominator was zero or negative, the ratio was calculated by assigning a predetermined external value depending on the cases which may arise. The latter were identified by examining the distribution of companies with a negative, zero or positive numerator respectively for a negative or zero denominator respectively. Then the cases of ratios with both the numerator and the denominator zero or negative were distributed in the corresponding cases of positive, zero or negative debt.

Analysis by sector and net turnover band shows that the divergence of the adjusted data from the raw data is greater in the small groups and does not vary much over time,<sup>28</sup> whichever indicator is used.

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<sup>27</sup> The net equity/net turnover indicator being excluded, since the case of negative turnover cannot occur. The cases of zero turnover were excluded in the initial selection of the companies.

These conclusions, obtained from the Italian sample, were extended in a reasonable manner to the other countries, leading to the following final decisions:

- 1) to use indicators, as described under point a);
- 2) not to introduce corrections but to calculate the indicators with negative numerators and denominators;
- 3) to limit the statistical parameters to the mean ratio and the quartiles;
- 4) to carry out a simple non-parametric test on the median to assess the significance of the divergence between companies of the different countries;
- 5) to apply these same procedures to the control indicators.

## 3.4. Survey population and samples

### 3.4.1. Description of the population surveyed

It is difficult to make international comparisons given the differences in the composition of the population surveyed. The working group decided to confine its research to **enterprises set up in the form of companies and belonging to the industrial sector** to ensure the uniformity of the population examined.

The annual accounts of partnerships and sole proprietorships have specific features and differ fundamentally from those of stock companies. A significant portion of operating assets is not shown in their balance sheets for tax reasons or because of the legal form of the company. Moreover, while sole proprietorships and partnerships do not set up reserves, such reserves represent a considerable share of the net equity shown in the balance sheets of stock companies. In addition, the equity of the former is often negative, since an excessive debt burden does not necessarily lead to bankruptcy. As a result, balance sheet statistics that include data on partnerships and sole proprietorships show comparatively lower aggregate equity rates.

Together with the legal form of the companies, the economic sector also has a major impact on the findings of inter-country comparisons. The capital intensity, loss risk and financial structures of companies bear the specific features of their respective branches. This may generate quite substantial divergence in capitalization rates between the different sectors and influence the overall findings.

Given that the comparisons are influenced by the characteristics of each country's system of production, the group decided to calculate ratios for **each sector** of activity. To ensure that the populations of each country examined are as homogenous as possible, the working group also **broke the companies down by size** on the basis of net turnover expressed in ecus.

- 1 - Net turnover < ECU 5 million
- 2 - ECU 5 million  $\leq$  Net turnover < ECU 20 million
- 3 - ECU 20 million  $\leq$  Net turnover < ECU 50 million
- 4 - ECU 50 million  $\leq$  Net turnover < ECU 100 million

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<sup>28</sup> See the demonstration in Annex 2.

5 - Net turnover  $\geq$  ECU 100 million

### 3.4.2. Presentation of the samples

The samples examined comprise industrial manufacturing companies trading over the period 1991 to 1993, including the food processing industry.

GERMANY									
Year	Size in terms of turnover	Non-durable consumer goods		Intermediate products		Investment goods and consumer durables		Industry	
		Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over
1991	< 5 M ecus	1,883	0.82	579	0.25	2,544	1.12	5,006	2.18
	$\geq$ 5 M < 20 M	1,236	2.37	452	0.93	1,783	3.43	3,471	6.73
	$\geq$ 20 M < 50 M	480	2.87	218	1.32	644	3.78	1,342	7.97
	$\geq$ 50 M < 100 M	177	2.42	120	1.59	285	3.65	582	7.65
	$\geq$ 100 M	164	9.25	191	22.19	296	44.02	651	75.46
	All sizes	3,940	17.73	1,560	26.28	5,552	55.99	11,052	100.00
1992	< 5 M ecus	1,840	0.79	546	0.23	2,469	1.06	4,855	2.07
	$\geq$ 5 M < 20 M	1,225	2.26	463	0.91	1,788	3.34	3,476	6.51
	$\geq$ 20 M < 50 M	480	2.76	208	1.22	641	3.66	1,329	7.64
	$\geq$ 50 M < 100 M	179	2.30	115	1.44	283	3.59	577	7.33
	$\geq$ 100 M	170	9.80	198	20.79	309	45.87	677	76.45
	All sizes	3,894	17.90	1,530	24.58	5,490	57.51	10,914	100.00
1993	< 5 M ecus	1,370	0.66	414	0.20	1,804	0.86	3,588	1.72
	$\geq$ 5 M < 20 M	1,054	2.17	391	0.84	1,458	2.99	2,903	6.01
	$\geq$ 20 M < 50 M	421	2.62	188	1.20	550	3.45	1,159	7.27
	$\geq$ 50 M < 100 M	173	2.42	111	1.54	238	3.34	522	7.31
	$\geq$ 100 M	162	10.34	182	21.11	283	46.24	627	77.69
	All sizes	3,180	18.22	1,286	24.89	4,333	56.89	8,799	100.00
National structure of companies according to 1990 turnover tax statistics		29.0%		17.8%		53.2%		100.0%	
Company sample structure in 1991		35.7%		14.1%		50.2%		100.0%	
<b>Share of sample in 1992 market GDP</b>		not available		not available		not available		<b>49.9%</b>	

## AUSTRIA

Year	Size in terms of turnover	Non-durable consumer goods		Intermediate products		Investment goods and consumer durables		Industry	
		Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over
1991	< 5 M ecus	51	0.30	26	0.18	46	0.34	123	0.82
	>= 5 M < 20 M	154	3.78	85	2.03	131	3.18	370	8.99
	>= 20 M < 50 M	97	6.27	57	3.93	96	6.29	250	16.49
	>= 50 M < 100 M	35	5.08	30	4.62	43	6.47	108	16.17
	>= 100 M	31	12.43	26	24.99	31	20.10	88	57.52
	All sizes	368	27.86	224	35.74	347	36.39	939	100.00
1992	< 5 M ecus	50	0.31	19	0.14	34	0.21	103	0.67
	>= 5 M < 20 M	144	3.41	86	2.02	152	3.49	382	8.92
	>= 20 M < 50 M	99	6.19	65	4.33	103	6.61	267	17.13
	>= 50 M < 100 M	39	5.55	34	4.96	40	5.84	113	16.35
	>= 100 M	30	12.08	28	26.31	29	18.55	87	56.93
	All sizes	362	27.54	232	37.76	358	34.70	952	100.00
1993	< 5 M ecus	33	0.22	19	0.12	35	0.23	87	0.57
	>= 5 M < 20 M	147	3.46	96	2.29	156	3.64	399	9.40
	>= 20 M < 50 M	102	6.37	55	3.76	100	6.46	257	16.59
	>= 50 M < 100 M	40	5.64	33	4.86	44	6.37	117	16.87
	>= 100 M	30	13.69	29	25.84	33	17.04	92	56.57
	All sizes	352	29.38	232	36.88	368	33.74	952	100.00
<b>Share of the sample in the total turnover of manufacturing industry in 1993</b>		not available		not available		not available		<b>50.1%</b>	

## SPAIN

Year	Size in terms of turnover	Non-durable consumer goods		Intermediate products		Investment goods and consumer durables		Industry	
		Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over
1991	< 5 M ecus	861	1.89	269	0.63	399	0.89	1,529	3.41
	>= 5 M < 20 M	439	4.90	201	2.29	239	2.72	879	9.91
	>= 20 M < 50 M	138	4.71	87	3.08	96	3.24	321	11.03
	>= 50 M < 100 M	64	4.81	61	4.72	46	3.56	171	13.09
	>= 100 M	50	15.34	55	15.10	46	32.11	151	62.25
	All sizes	1,552	31.65	673	25.83	826	42.53	3,051	100.00
1992	< 5 M ecus	880	1.99	288	0.67	426	0.96	1,594	3.62
	>= 5 M < 20 M	403	4.71	188	2.22	208	2.58	799	9.50
	>= 20 M < 50 M	135	4.86	88	3.28	92	3.37	315	11.50
	>= 50 M < 100 M	59	4.89	54	4.46	36	2.98	149	12.33
	>= 100 M	49	16.38	50	13.11	45	33.55	144	63.04
	All sizes	1,526	32.84	668	23.72	807	43.44	3,001	100.00
1993	< 5 M ecus	822	2.10	250	0.68	386	1.00	1,458	3.78
	>= 5 M < 20 M	383	5.02	179	2.45	172	2.25	734	9.73
	>= 20 M < 50 M	109	4.61	81	3.41	78	3.06	268	11.08
	>= 50 M < 100 M	50	4.45	40	3.69	26	2.44	116	10.58
	>= 100 M	45	17.07	44	14.39	40	33.38	129	64.83
	All sizes	1,409	33.24	594	24.63	702	42.13	2,705	100.00
INE national company structure in 1995		60.1%		11.2%		28.7%		100%	
Company sample structure in 1993		52.1%		22.0%		25.9%		100%	
<b>Share of sample in 1991 GDP</b>		<b>25.6%</b>		<b>44.2%</b>		<b>49.1%</b>		<b>35.1%</b>	

## FRANCE

Year	Size in terms of turnover	Non-durable consumer goods		Intermediate products		Investment goods and consumer durables		Industry	
		Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over
1991	< 5 M ecus	2,921	2.14	2,134	1.59	1,460	1.12	6,515	4.85
	≥ 5 M < 20 M	1,760	5.60	1,166	3.71	892	2.83	3,818	12.14
	≥ 20 M < 50 M	515	4.94	321	3.20	299	3.02	1,132	11.18
	≥ 50 M < 100 M	239	5.43	121	2.67	107	2.38	467	10.48
	≥ 100 M	204	18.69	122	12.30	143	30.36	469	61.34
	All sizes	5,636	36.83	3,864	23.46	2,901	39.70	12,401	100.00
1992	< 5 M ecus	3,001	2.10	2,212	1.56	1,526	1.10	6,739	4.77
	≥ 5 M < 20 M	1,763	5.33	1,146	3.42	905	2.75	3,814	11.50
	≥ 20 M < 50 M	536	4.97	358	3.40	285	2.77	1,179	11.14
	≥ 50 M < 100 M	231	5.02	123	2.59	126	2.71	480	10.31
	≥ 100 M	214	17.74	140	15.13	144	29.40	498	62.28
	All sizes	5,745	35.16	3,979	26.11	2,986	38.73	12,710	100.00
1993	< 5 M ecus	2,819	2.04	2,151	1.58	1,429	1.07	6,399	4.69
	≥ 5 M < 20 M	1,672	5.21	1,076	3.30	768	2.41	3,516	10.92
	≥ 20 M < 50 M	500	4.85	346	3.38	278	2.77	1,124	11.00
	≥ 50 M < 100 M	209	4.71	115	2.48	110	2.40	434	9.59
	≥ 100 M	206	18.92	128	13.98	137	30.90	471	63.80
	All sizes	5,406	35.73	3,816	24.72	2,722	39.55	11,944	100.00
INSEE national company structure in 1991		48.7%		27.8%		23.5%		100.0%	
French company sample structure in 1991		45.5%		31.2%		23.4%		100.0%	
<b>Share of sample in the gross added value of the manufacturing industry in 1992</b>		<b>45.4%</b>		<b>51.3%</b>		<b>56.9%</b>		<b>50.9%</b>	

## ITALY

Year	Size in terms of turnover	Non-durable consumer goods		Intermediate products		Investment goods and consumer durables		Industry	
		Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over	Number of companies	% Turn-over
1991	< 5 M ecus	3,726	2.39	2,064	1.85	3,274	2.12	9,066	6.86
	≥ 5 M < 20 M	3,355	8.55	1,651	4.08	2,776	7.00	7,782	19.63
	≥ 20 M < 50 M	860	6.73	419	3.31	700	5.43	1,879	15.47
	≥ 50 M < 100 M	275	4.95	174	3.01	175	3.19	624	11.16
	≥ 100 M	203	13.19	122	13.57	177	21.12	502	47.89
	All sizes	8,421	35.81	4,430	25.32	7,102	38.87	19,853	100.00
1992	< 5 M ecus	3,474	2.42	1,923	1.38	3,140	2.16	8,537	5.96
	≥ 5 M < 20 M	3,365	8.89	1,675	4.30	2,753	7.10	7,798	20.29
	≥ 20 M < 50 M	887	7.11	421	3.51	723	5.73	2,031	16.36
	≥ 50 M < 100 M	295	6.48	164	2.93	169	3.19	628	11.59
	≥ 100 M	203	13.91	130	12.73	173	19.17	506	45.81
	All sizes	8,224	37.80	4,313	24.84	6,958	37.35	19,485	100.00
1993	< 5 M ecus	3,681	2.90	1,957	1.58	3,252	2.69	8,790	7.08
	≥ 5 M < 20 M	3,064	9.62	1,445	4.42	2,289	7.17	8,798	21.22
	≥ 20 M < 50 M	783	7.65	351	3.49	555	5.31	1,889	16.45
	≥ 50 M < 100 M	248	5.38	140	3.05	152	8.41	638	11.84
	≥ 100 M	171	13.27	112	12.53	133	17.81	416	43.41
	All sizes	7,845	38.82	4,005	25.08	6,381	36.09	16,231	100.00
ISTAT national company structure in 1991		51.1%		14.6%		34.3%		100.0%	
Italian company sample structure in 1991		42.2%		22.2%		36.6%		100.0%	
ISTAT national added value structure in 1992		39.3%		24.1%		38.6%		100.0%	
Italian added value sample structure in 1992		34.9%		23.7%		41.3%		100.0%	
<b>Share of sample in gross added value of industry in 1992*</b>		<b>48.8%</b>		<b>53.8%</b>		<b>61.8%</b>		<b>54.7%</b>	

\*Added value factor cost (current prices)

The coverage rate of over 50% relates to net turnover in Austria, to gross added value in France and Italy and to the market sector GDP in Germany. Spain is an exception, at

33.5%. Excepting Austria, for which there is no basis for comparison in the sample structure, the inter-country comparison shows that:

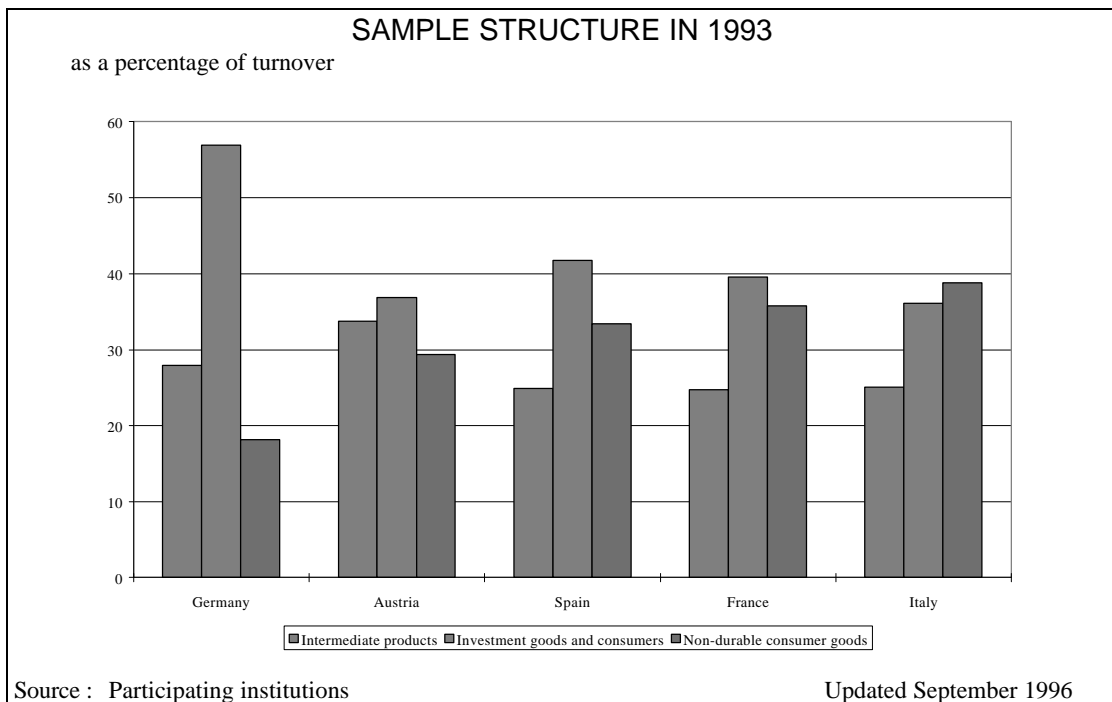
- in France, intermediate product companies are over-represented (at 31.2% of the sample compared to 27.8% of the total figure) whereas non-durable consumer goods are under-represented (45.5% compared with 48.7%);

- in Germany, the proportion of companies in the fields of intermediate products, investment goods and consumer durables is lower (respectively: 14.1% against 17.8% of the total population and 50.2% against 53.2%). Representation of non-durable consumer goods is greater, with 35.7% as compared with 29.0%;

- in Italy, as in France, non-durable consumer goods companies are under-represented at 42.2% against 51.1%, but the proportion of investment goods and consumer durables and intermediate product companies is higher (respectively: 36.6% against 34.3% and 22.2% against 14.6%);

- in Spain, intermediate product companies are over-represented at 22% against 11.2% of the total population and companies in investment goods or consumer durables, which represent 26% compared with 28.7%, and companies in the non-durable consumer goods sector, which account for 52.1% against 60.1%, are under-represented.

As can be seen, the various samples are on the whole consistent with the structure of the relevant national system of production, despite the small number of biases described above.



The sectoral structure of the samples expressed as a percentage of net turnover is fairly similar in Spain, France and Italy on the one hand and in Germany and Austria on the other. It is clear that some of the sectoral variations stem from differences in sectoral breakdown, in particular in Germany and Austria where the classification differs more from NACE than in other countries.

A comparison between countries demonstrates the following:

- the non-durable consumer goods sector is smaller in Germany and, to a lesser extent, in Austria, than in the other three countries;
- the intermediate products sector accounts for a larger proportion of the total in Germany, Austria, than in Spain, France and Italy;
- the investment goods sector is markedly more substantial in Germany;
- there are few companies with turnover of less than ECU 5 million, especially in the Austrian sample.

## 4. THE FINDINGS OF THE COMPARATIVE ANALYSIS

### 4.1. Levels of net equity in European companies

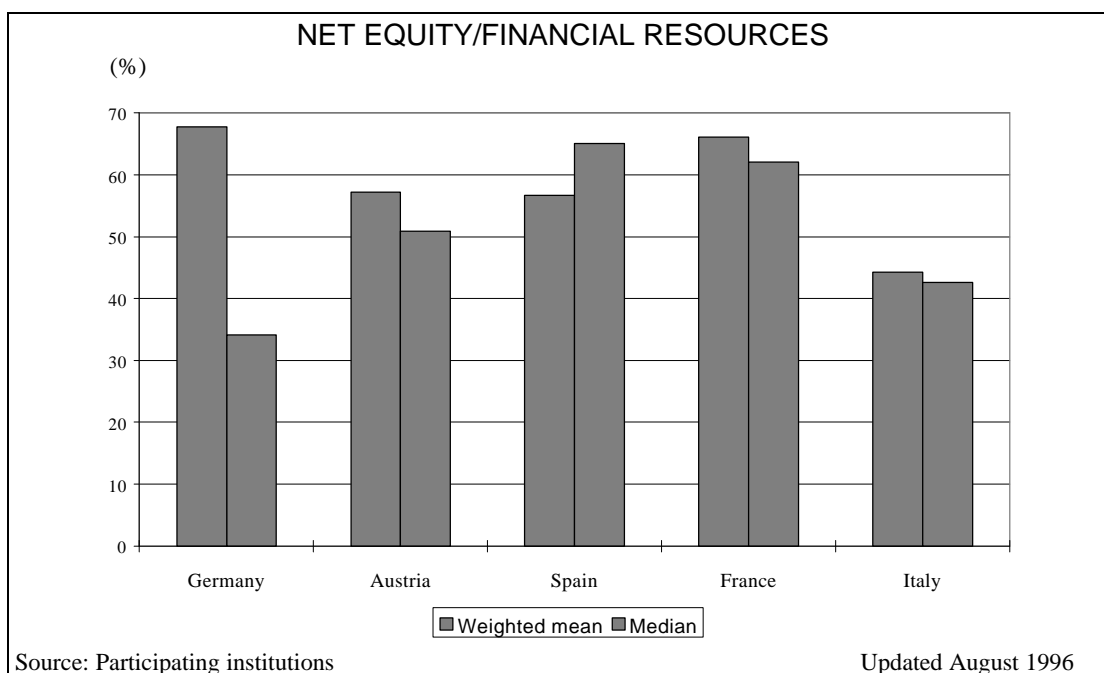
Unlike the English-speaking countries and in spite of recent developments, particularly in France, banks play a major role in corporate financing in all the countries participating in the study.

However, **the capital structure of the companies in these countries is not identical no matter which key indicator is used.**

Thus in 1993, the weighted mean of the **net equity/financial resources ratio** (Annex 1, Table 1.1) amounted to 67.8% in Germany and 66.1% in France, compared to 57.2% in Austria, 56.7% in Spain and 44.3% in Italy. Calculated as a median (Annex 1, Table 1.2), the same ratio is 65.1% in Spain and 62.1% in France, compared to 50.9% in Austria, 42.6% in Italy and 34.1% in Germany. These differences are all statistically significant.<sup>29</sup>

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<sup>29</sup> See Annex 3: non-parametric median tests.



The main conclusion to be drawn from examination of this ratio is that the ranking of the countries differs markedly according to whether the median or the mean ratio is examined. This is clearest in the case of Germany, where companies appear to have the lowest capitalization rates according to the median, but the highest when based on the mean ratio.

More specifically, in terms of the weighted mean, net equity levels are fairly similar in Austria, Spain, France and Germany, and only Italy appears to be under-capitalized. The median, however, divides the countries into two groups, with France and Spain showing high net equity/financial resources ratios, and Italy and Germany low ratios. This is borne out by an analysis of quartiles Q1 and Q3. For example, the value of this ratio exceeds 36.3% and 39.6%, respectively, for three-quarters of French and Spanish companies, while in Germany it is only 12.1% (Table 1.8). Analysis of the situation of Austrian companies is far from straightforward on account of the under-representation of small companies, which overvalues the median in view of the under-capitalization of this group of companies.

The ratio also behaves differently according to the key indicator used. While Austrian, French and German companies increased their equity levels from 1991 to 1993 in terms of the weighted mean, German firms merely maintained their position in terms of the median.<sup>30</sup> Conversely, Italian companies, which register a decline in the weighted mean ratio over the period under review, saw their median level out, or even rise slightly. Spanish companies recorded a fall in the ratio due to accumulated losses during the recession which occurred during the period considered here, whichever key indicator is used.

The substantial contradiction between median and weighted mean values can be understood in the light of the fact that the weighted mean value reflects the aggregate situation of the industrial sector of each country by combining the data of all companies in a single balance sheet (as if, in fact, they formed a single large company), thus cancelling out the comparative strengths and weaknesses of their financial structures. The median, however, expresses a value central to the distribution of the data without any such offset. Since each

<sup>30</sup> The improvement in the situation of the Austrian companies corresponds in part to changes made in 1992 to the regulations governing provisions.

company carries the same weight, the median is influenced by the greatest number of companies, these being the smallest in size. The impact of large companies on the weighted mean value is particularly noticeable in Germany, where the overall figures largely reflect the behaviour of the very big firms. As a result, the working group decided to make more use of the median rather than weighted mean and to analyse the impact of corporate size on net equity.

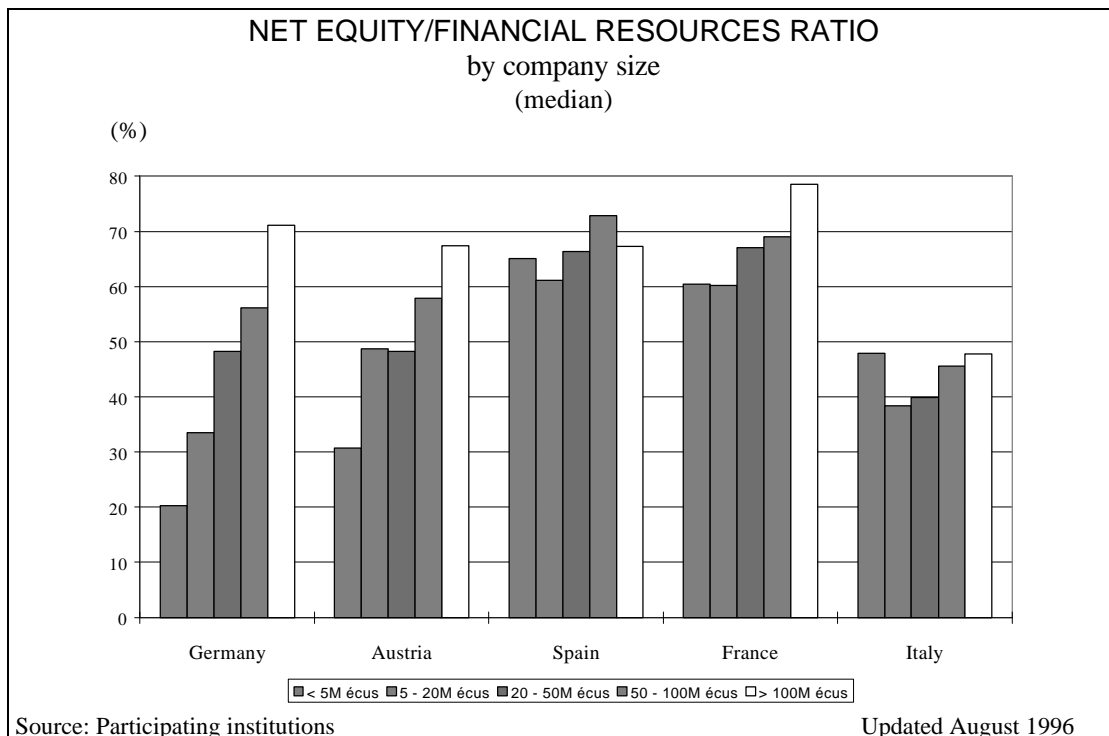
Two lessons can be drawn from this analysis:

- **The impact of corporate size varies widely from country to country:**

- It is almost non-existent in Italy, where no ranking can be established by size of company, whereas in Spain only companies with net turnover of between ECU 50 million and ECU 100 million stand out.

- In France it is no more than average, with a differential of approximately 18 points between the largest companies with net turnover of over ECU 100 million and the smallest companies.

- It is very strong in Austria and even more so in Germany, where the median is only 20% for firms with net turnover of less than ECU 5 million, and 71% for large companies, giving a differential of nearly 50 points. Interestingly, in Germany the value for the first quartile of very large companies is higher than that of the third quartile of very small companies.



It should also be noted that this ranking of companies in France is fairly recent. In the early 1980s, small and medium-sized companies enjoyed a stronger financial structure than the large companies. But ebbing inflation, rising profits and expanding capital markets enabled the large companies to improve their financial structures significantly. At the beginning of the 1990s, all companies were affected by the economic downturn, with the

notable exception of large French corporations, which continued to strengthen their financial structures.

• **There are greater variations between the small companies of the different countries than between the very large companies.**

– The median net equity of small German companies represented only 20.3% of their financial resources in 1993. In Austria, this percentage is 30.7%, in Italy 47.9%, in France 60.4% and in Spain 65.1%. Italian SMEs are distinguished by the fact that in many cases part of their bond borrowing is subscribed directly by the owners of the company, which reduces observable debt. Unfortunately the relevant variables are not available directly in the balance sheets.

– Conversely, if Italy is left out of account, the differences for very large corporations posting net turnover in excess of ECU 100 million are comparatively limited. The median net equity/financial resources ratio of this population stands at 67.4% in Austria, 67.3% in Spain, 71.1% in Germany and 78.5% in France. This works out to a maximum spread of 16 points (or 30.7 points if we include Italy). Examination of the first and third quartiles produces the same findings. It would appear therefore that access to international capital markets tends to harmonize financing structures. The median net equity/financial resources ratio for very large companies declined from 1991 to 1993 by almost 6 points in Italy and nearly 4 points in Spain, whereas it rose by 11 points in Austria,<sup>31</sup> by 7 points in France and by 4 points in Germany.

It is impossible to assess the sensitivity of the financial structures of large companies to economic downturns. This sensitivity may take the form of declining profits and capacity for internal financing, slower product sales and a relative increase in working capital requirements and/or deteriorating prospects on financial markets. This is a subject that can be examined in greater depth by further research and an extension of the historical data series.

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<sup>31</sup> See note **Erreur! Signet non défini.**, page 28.

MACROECONOMIC REFERENCE POINTS

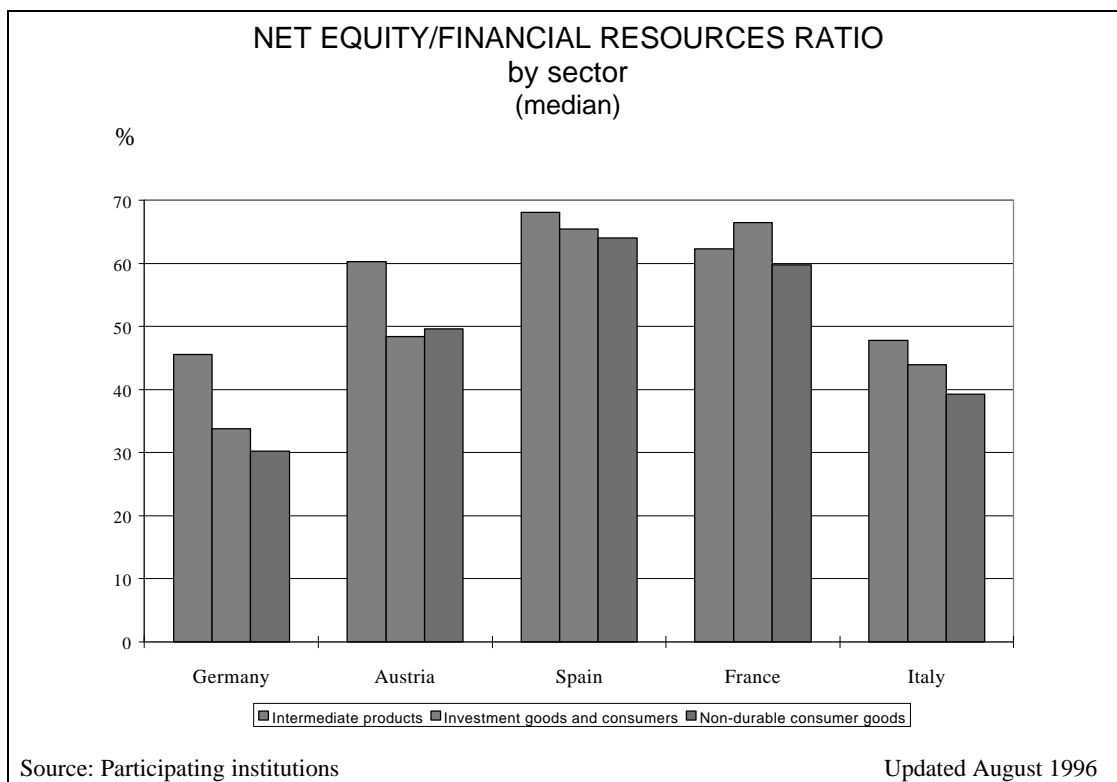
	1991	1992	1993
<b>WEST GERMANY *</b>			
% change in GDP	9.1	6.2	1.1
% change in inventory	11.9	-0.1	-9.7
Change in industrial production	2.9	-1.3	-7.9
Equity employed	87.3	83.4	78.8
LT interest rate	8.6	8.0	6.3
Share index (CDAX 88=100)	114.7	104.5	148.0
<b>AUSTRIA **</b>			
% change in GDP	2.8	2.0	0.4
% change in inventory	6.3	1.7	-1.6
Change in industrial production	1.9	-1.2	-1.5
Equity employed	81.0	82.0	81.0
LT interest rate	8.7	8.4	6.7
Share index (ATX 90=1000)	883.3	747.7	1 128.8
Share index (WBI 88=100)	172.6	143.6	199.3
<b>SPAIN **</b>			
% change in GDP	2.3	0.7	-1.2
% change in inventory	1.1	-3.8	-14.0
Change in industrial production	1.7	-1.6	-3.8
Equity employed	77.2	73.7	70.7
LT interest rate	17.8	17.2	16.2
Share index (Madrid Stock Exchange index 88=100)	95.8	83.2	97.7
<b>FRANCE **</b>			
% change in GDP	0.8	1.2	-1.3
% change in inventory	-	-2.8	-6.7
Change in industrial production	-1.6	-0.2	-3.7
Equity employed	85.2	83.4	80.5
LT interest rate	9.0	8.6	6.7
Share index (CAC 88=100)	141.5	148.2	161.9
<b>ITALY **</b>			
% change in GDP	1.1	0.6	-1.2
% change in inventory	0.8	-1.8	-12.8
Change in industrial production	-0.9	-0.2	-2.4
Equity employed	91.2	90.1	87.1
LT interest rate	13.1	13.7	11.3
Share index (HIB 88=100)	105.5	87.5	104.1

\* in nominal terms

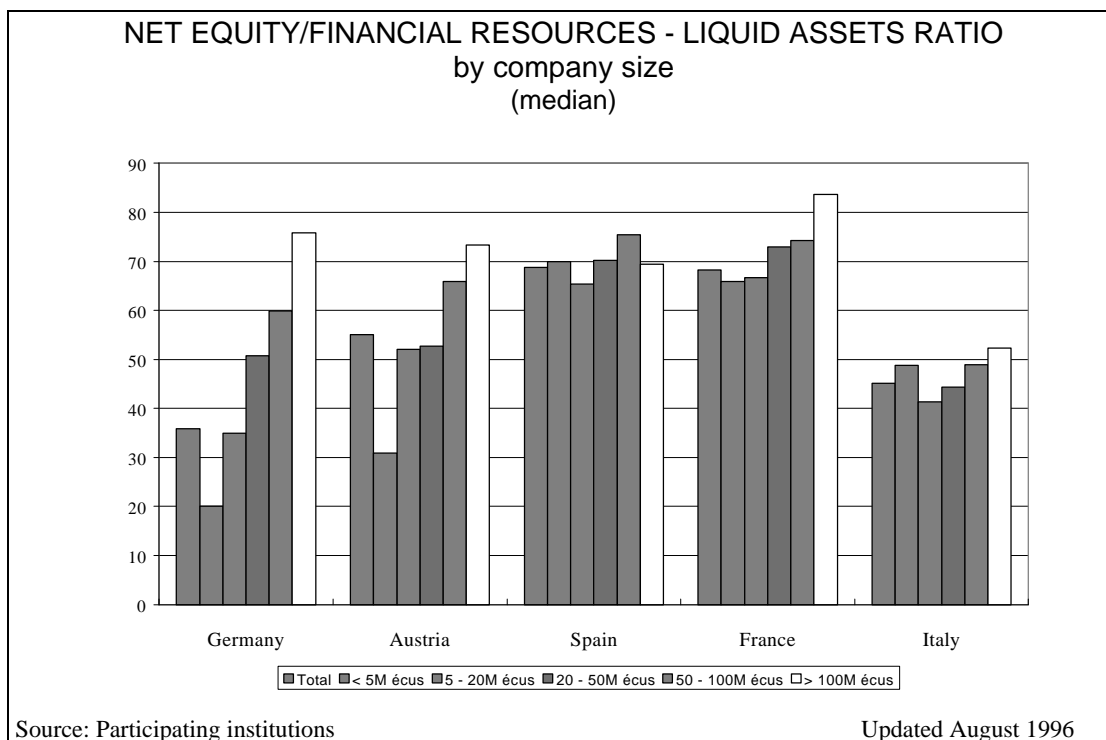
\*\* in real terms

**The above findings do not appear to be related to the sectoral composition of each sample.** In each of the three broad sectors examined - intermediate products, investment goods and consumer durables and non-durable consumer goods - the country rankings are the same as the rankings for the industry as a whole, regardless of which key indicator is used. According to the median, net equity is highest in France and Spain and lowest in Italy and Germany. The situation in Austria is more difficult to assess on account of the under-representation of small companies. The conclusions drawn from the size effect are also confirmed.

Moreover, in all the countries except France companies in the intermediate product sector have the highest net equity/financial resources ratio. The differentials between sectors within the same country are nevertheless relatively minor. The largest variation is observed in Germany (a 15-point differential between the intermediate product and non-durable consumer goods sectors), and the smallest in Spain (a gap of 4.1 points between the intermediate product and non-durable consumer goods sectors).



**The methodological choices made by the working group do not affect the findings.** Thus, the country rankings do not change if liquid assets and marketable securities are deducted from debts to obtain **net debt**. For example, the findings by corporate size are the same as those for the net equity/financial resources ratio — in other words, the size effect varies according to country and there is more uniformity among large corporations than among SMEs. Whereas in terms of the median the ratio generally improves with corporate size (Annex 1, Table 1.4), the findings differ for the third quartile. For reasons difficult to discern, in Spain, and particularly in France, the biggest improvements are shown by the small and very small companies (Annex 1, Table 1.9). This may be because in these countries the smallest companies use the resources provided by their liquid assets to ease their financial constraints and/or can only obtain credit from banks if they maintain large amounts of cash as collateral in case of difficulty.



The inclusion of trade bills discounted in financial resources also has little effect on the overall result, as this means of financing is not very common. Leaving Austria out of account<sup>32</sup>, for which no, or insignificant, figures were available, the use of discounting is marginal except in Spain, where it amounts to 14.1% of financial debt (Annex 1, Table 1.6). It is used chiefly by Spanish companies with net turnover in the range ECU 5m - ECU 100m, trading mainly in the intermediate products and investment goods/consumer durables sectors. In Italy, according to balance sheet figures, most companies seem to make little or no use of discounting. The situation is more variable in France (Annex 1, Table 1.11). Extensive use is made of discounting by a quarter of companies with net turnover of under ECU 5 million and by a quarter of companies in the ECU 5m - ECU 20m band for net turnover (the respective figures being 31.6% and 28.4% of corporate financing). The findings are similar in Germany for a quarter of companies with net turnover exceeding ECU 100 million, where the ratio is 12.5%.

The countries fall into the same rankings for the **net equity/total assets** ratio (Annex 1, Table 1.18). This ratio enables implicit account to be taken of the revaluation process applied in certain countries (see 3.3.1).

All in all, these results show that differences related to size are more important in explaining inter-country differentials than sectoral differences. They confirm the findings of Laudy and Szpiro (1988) who observed that national differences between companies are more marked than sectoral characteristics of debt, or in other words, that sectoral specifications are far less clear-cut than specific national features. In addition, as has been explained, the apparent contradiction between ranking by weighted mean and ranking by median in Germany stems from the very substantial impact of a few very large companies in the ECU 100m-plus turnover bracket concentrated in the upper part of the distribution of the ratio. Overall, the German companies in the first, second (median) and third quartile are in a more unfavourable position than their foreign competitors. Germany's situation in terms of the median derives

<sup>32</sup> It should be recalled that figures for discounted trade bills are not available for Austria in the balance sheet data, but have been shown to be of little significance by a check based on risk data.

from the low equity of companies generating less than ECU 20 million in net turnover. Beyond this limit, Italian companies are those in the most unfavourable position.

In conclusion, as is underscored by the Deutsche Bundesbank report, the findings confirm the importance of a rigorous approach for both the selection and definition of indicators and the composition of the samples. The influence of the very large companies on research findings is usually underestimated and taken to apply to all unlisted companies, especially SMEs. The conclusions drawn by Borio (1990) are highly dependent on the indicator used, i.e. the weighted mean for the indicators applied. Rajan and Zingales (1994) looked at very large companies alone, which explains their positive correlation between corporate size and financial autonomy in France. In addition, as Kneeshaw (1995) does not give a precise definition of financial autonomy, he introduces a variety of indicators without coming to any clear conclusion.

## 4.2. Substitutes for equity and debt<sup>33</sup>

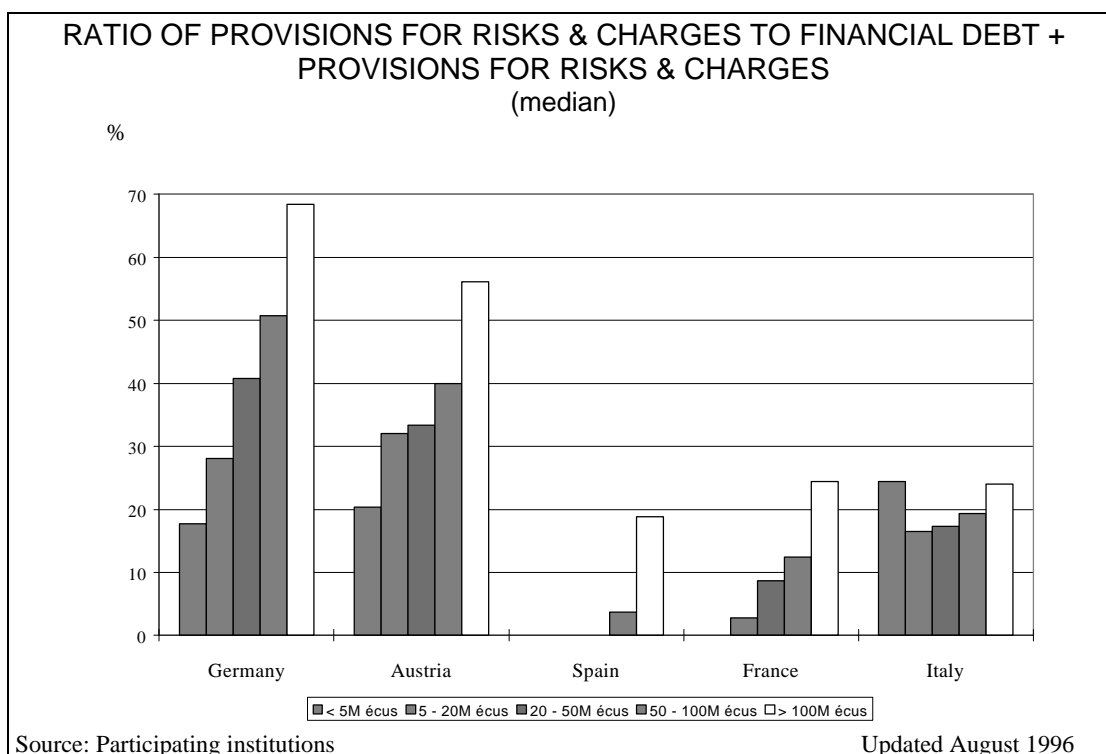
The comments up to this point apply to only two sources of financing: net equity and financial debt. Other means of financing must also be examined, such as provisions for risks and charges<sup>34</sup> or loans from groups and associates.

**Provisions for risks and charges** play a major role in the financing of German and Austrian companies, where in some cases they may even total more than net equity. In Italy, provisioning levels are also quite high, as a large portion comprises severance pay. Every year, these companies set aside a percentage of labour costs, and the cumulative sum is paid to the employees upon their departure from the company. The amount of these liabilities therefore depends on the capital intensity and the staffing structure of the company (seniority, qualifications, and so on). The ratio of provisions for risks and charges to financial resources + provisions for risks and charges consequently varies considerably from country to country (Annex 1, Table 1.5). It is very high in Austria and Germany and very low, or even nil, in most French and Spanish firms. Nevertheless, it is extremely difficult or even impossible to determine which portion of these provisions should be considered as quasi-equity — which they in fact are from a financing point of view — and which, analysed from a solvency perspective, are liabilities. In other words, it is impossible for any outside observer to estimate the amount of hidden reserves formed in this manner.

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<sup>33</sup> As defined for this study.

<sup>34</sup> The other means of financing are not examined, either due to the absence of accounting data or their lack of impact on the ranking as previously established.



The differences noted above continue to hold for all corporate sizes. In addition:

- in all countries, these provisions are much higher in large and very large corporations (net turnover of over ECU 100 million) than in SMEs. The only exception is Italy, where the figure for these provisions does not seem to be related to the size of the company;

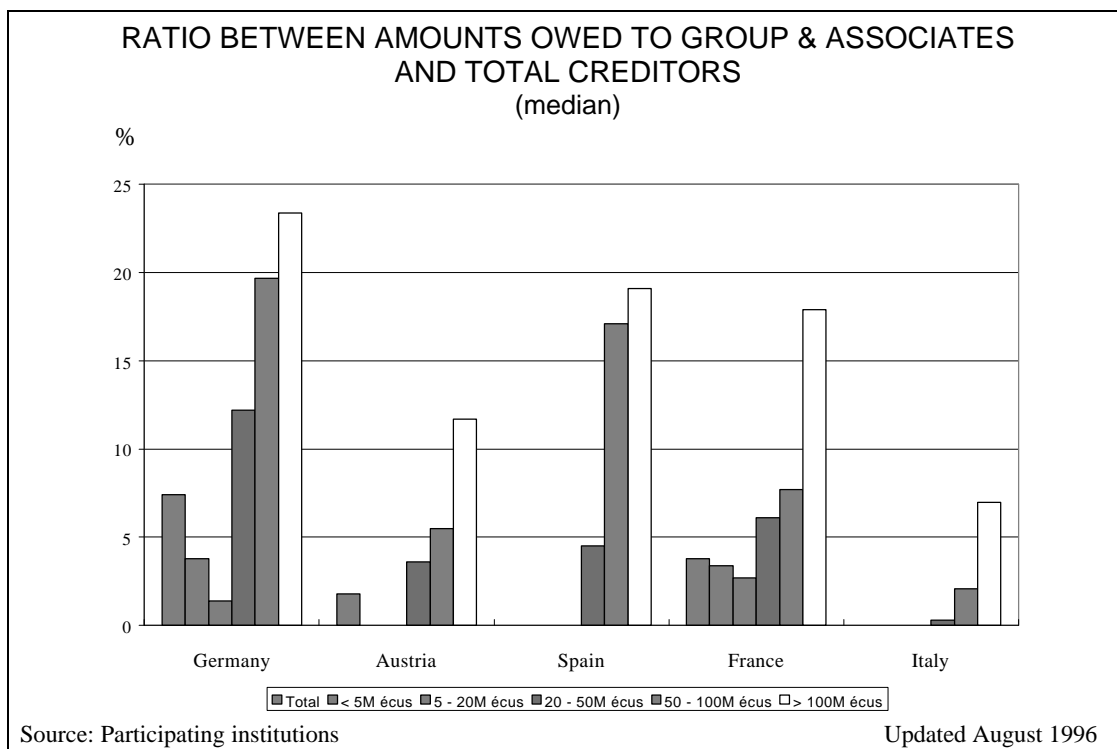
- in the very large Austrian and German companies, the figure for these provisions exceeds that for financial creditors.

All types of **loans from groups and associated companies** are highest in Germany and France. On the other hand, for companies with net turnover exceeding ECU 50 million, such loans are higher in Spain<sup>35</sup> than in France (Annex 1, Table 1.7). They are almost non-existent in Italy for companies with net turnover of under ECU 50 million. Contributions from groups and associates increase with size of company and appear to be concentrated in the upper quartile of the population, in particular in Germany and Spain (Annex 1, Table 1.12).

In Italy, the group phenomenon relates primarily to large companies and in part also to medium-sized companies. The amount of financial debt incurred towards the group arises chiefly on short-term liabilities. In larger companies, liabilities to group and associates represent between 42% and 46% of total short-term liabilities. This percentage falls rapidly in the other categories. Where long-term financial debt is concerned, however, the percentage of loans from groups and associates is low.<sup>36</sup>

<sup>35</sup> See 3.3.2.b) for Spain.

<sup>36</sup> See 3.3.2.g).



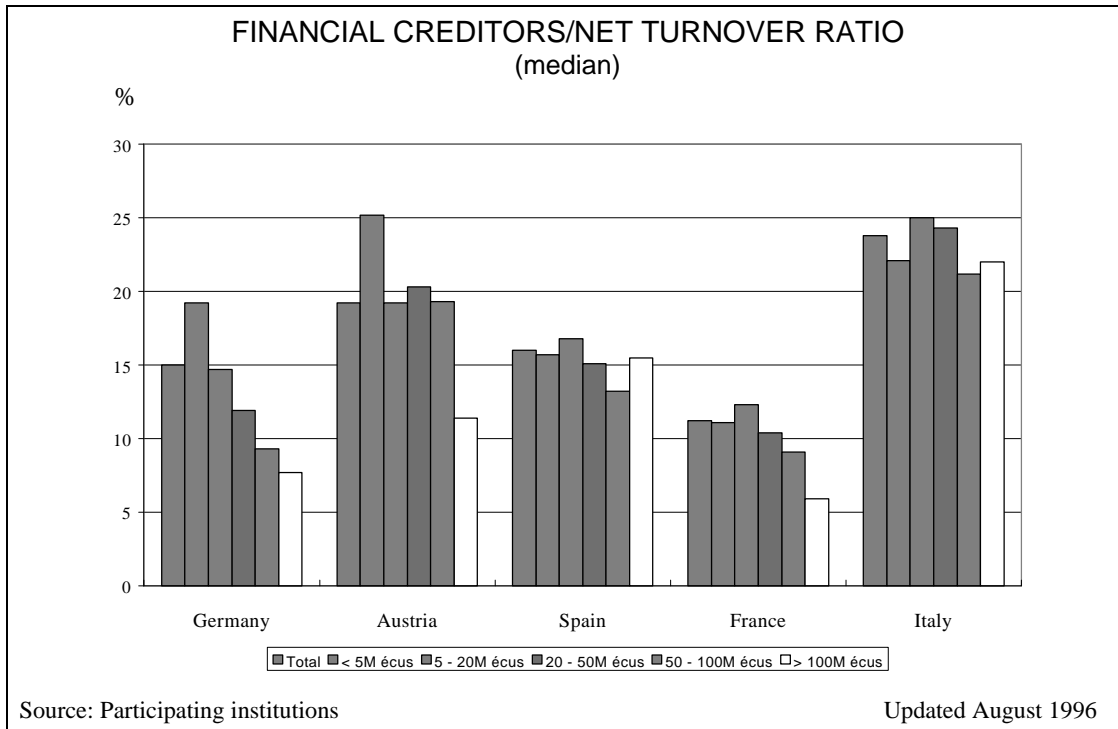
A detailed examination of intra-group financial relations will be necessary in the future, especially regarding the significance, on the asset side, of the claims of this nature.

The substitutes available to companies vary widely according to country and company size. Analysis of them leads to three clear conclusions:

- The use of provisions for risks and charges as a supplementary source of financing is very frequent in Germany, Austria and, to a lesser extent, Italy, while Spanish companies tend to use discounting and larger Spanish companies loans and advances from groups and associated companies.
- Equity financing and financing substitutes do not conflict. In Germany and Austria, provisions are far larger in companies with net turnover of over ECU 20 million, whilst their equity level is higher than in the case of smaller companies. Similarly, in France the commitments for groups and associates are large, whilst their equity level is high. Consequently, recourse to financing using the substitutes considered here does not fully explain why small German companies can survive with far lower equity levels than similar companies in other European countries.
- Groups and associates play an important role in Germany and France for companies in all size bands, whereas in the other countries, debts to them become significant only at a net turnover threshold of ECU 20 million, and even ECU 50 million in the case of Italy, which shows the differences in the dissemination of the group phenomenon in the countries studied. In France, and especially in Germany, the existence of such debts in companies with net turnover of less than ECU 20 million, when they are independent, may indicate a specific method of financing involving calling on associates or, in the contrary case, reflect a particular method of managing commercial relations within the group. They may also explain in part why the very small German companies linked financially may have recourse to bank loans despite their low level of net equity. Debts to groups and associates may well reflect the existence of guarantees.

### 4.3. Controlling the business cycle

An examination of the net equity/financial resources ratio demonstrates that on the median (Annex 1, Table 1.2), the position of very small Austrian companies, German companies with less than ECU 20 million in net turnover and Italian companies, especially those with turnover over ECU 5 million, is the least favourable. At the other end of the spectrum, French and Spanish companies and very large German companies enjoy the most advantageous situation.



Analysis of the **ratio between financial creditors and net turnover**, regardless of the key indicator chosen, confirms that:

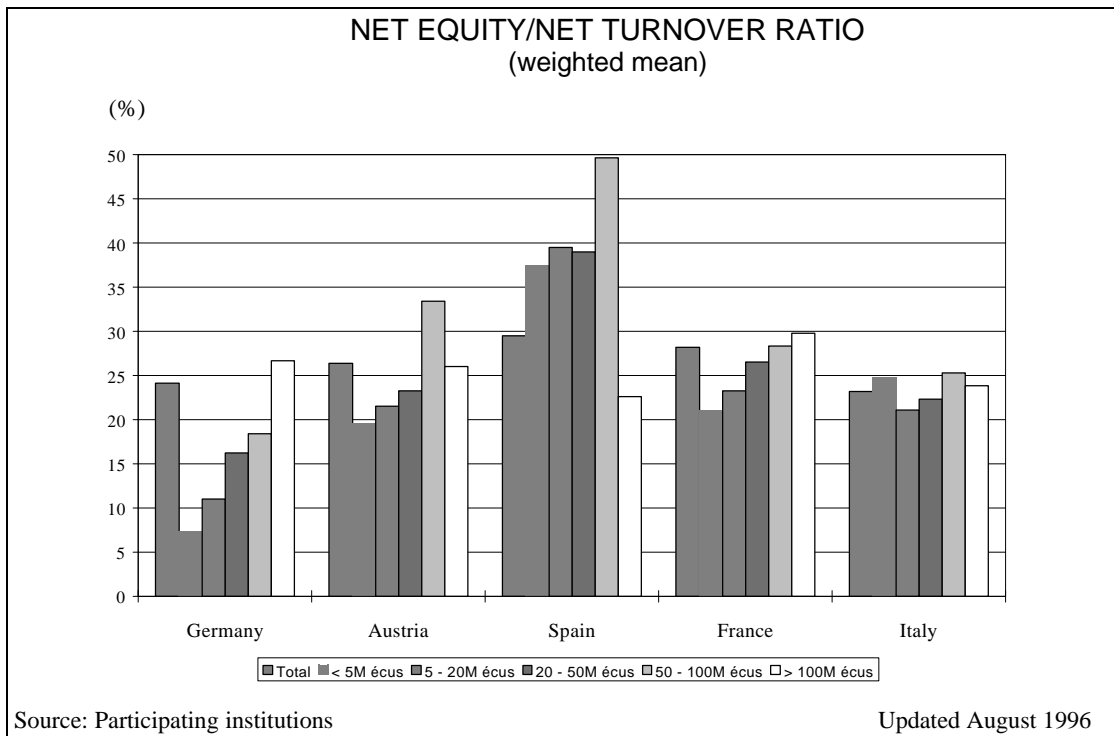
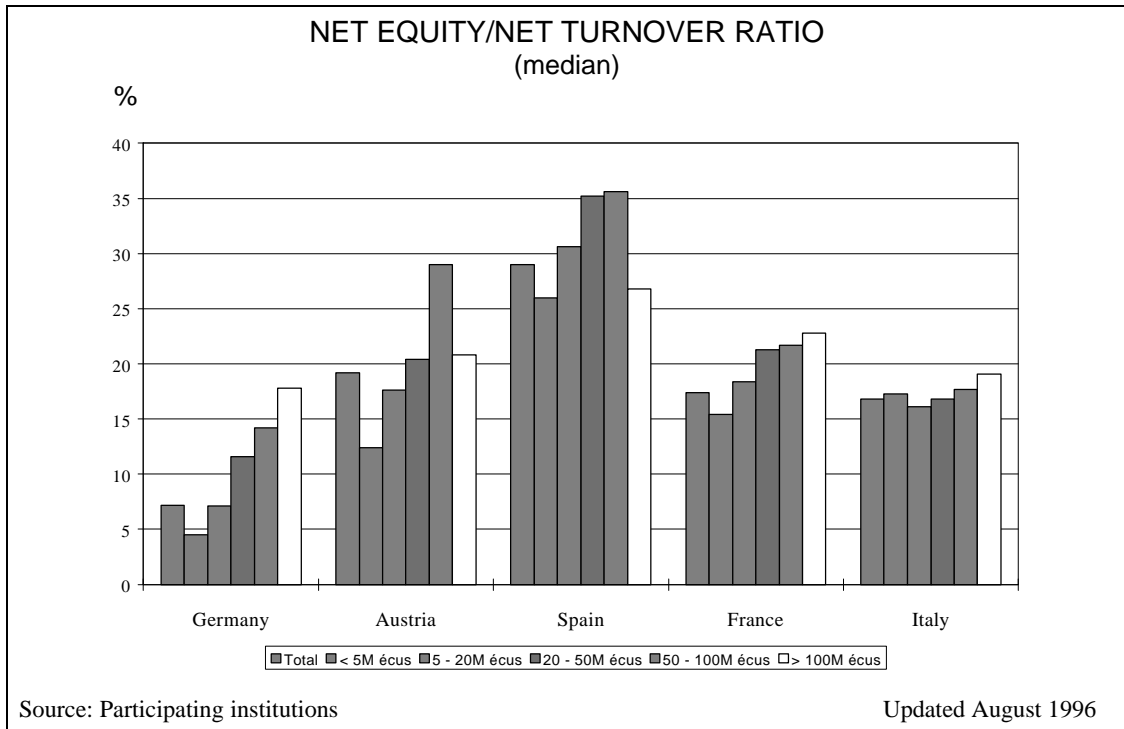
- Italian and, in particular, very small Austrian companies are in the weakest position;
- French companies are well placed.

The position of the Spanish companies, on the other hand, is not as advantageous as their high equity levels would indicate. Above all, contrary to the initial findings, German companies with net turnover of less than ECU 20 million are in an intermediate position with a higher financial creditors/net turnover ratio than their French and Spanish counterparts but lower than Austrian and Italian companies of the same size.

However, this last finding should not be considered definitive in the light of the fact that the ranking changes again when the **net equity/net turnover ratio** is examined (Annex 1, Table 1.13).

This ratio puts German companies with net turnover of less than ECU 100 million and small Austrian companies in the same unfavourable position as the ranking by the median for the ratio between net equity and financial resources. Italian companies are in an intermediate

position, not too distant from that of French firms, while Spanish companies showed the highest net equity to net turnover ratio in 1993 and throughout the period under review.



To sum up:

- most of the indicators place the Italian companies in an unfavourable position;
- the Spanish companies have high net equity and debt to net turnover ratio;
- French firms have low debt levels and good net equity levels;
- German undertakings have a low level of debt;
- finally, the Austrian companies occupy an intermediate position between Spain, France and Germany.

The variations in the results obtained with the different ratios, such as the net equity/net turnover and the debt/net turnover ratios in Germany or the net equity/financial resources and net equity/net turnover ratios in Italy, relate mainly to the significant differences in the amount of financial resources employed in each country for the relevant business. In this study, financial resources are defined as the sum of net equity and financial debt, net of loans from groups and associates.

The following breakdown provides an explanation of this link:<sup>37</sup>

$$\frac{NE}{TO} = \frac{NE}{FR} \times \frac{FR}{TO}$$

and

$$\frac{FD}{TO} = \left(1 - \frac{NE}{TO}\right) \times \frac{FR}{TO}$$

where:

NE = net equity  
TO = turnover  
FR = financial resources  
FD = financial debt

Despite slight differences related to the size of the companies, the **financial resources/net turnover ratio** (Annex 1, Table 1.6) appears to be weaker in France and Germany than in the other countries. In other words, fewer financial resources are needed to produce one ecu of net turnover in these two countries.

The situation appears to be more uniform in Germany, Italy and France than in the other two countries. In Austria, companies in the ECU 50m - ECU 100m turnover bracket have a high ratio. In Spain, the financial resources/net turnover ratio is particularly high, except in the case of companies whose net turnover exceeds ECU 100 million. The ratio is highest in the Spanish intermediate products sector and lowest in the German consumer goods sector.

Differences in the financial resources/net turnover ratio between countries are due to the existence of resources other than the financial resources defined in this study (that is net

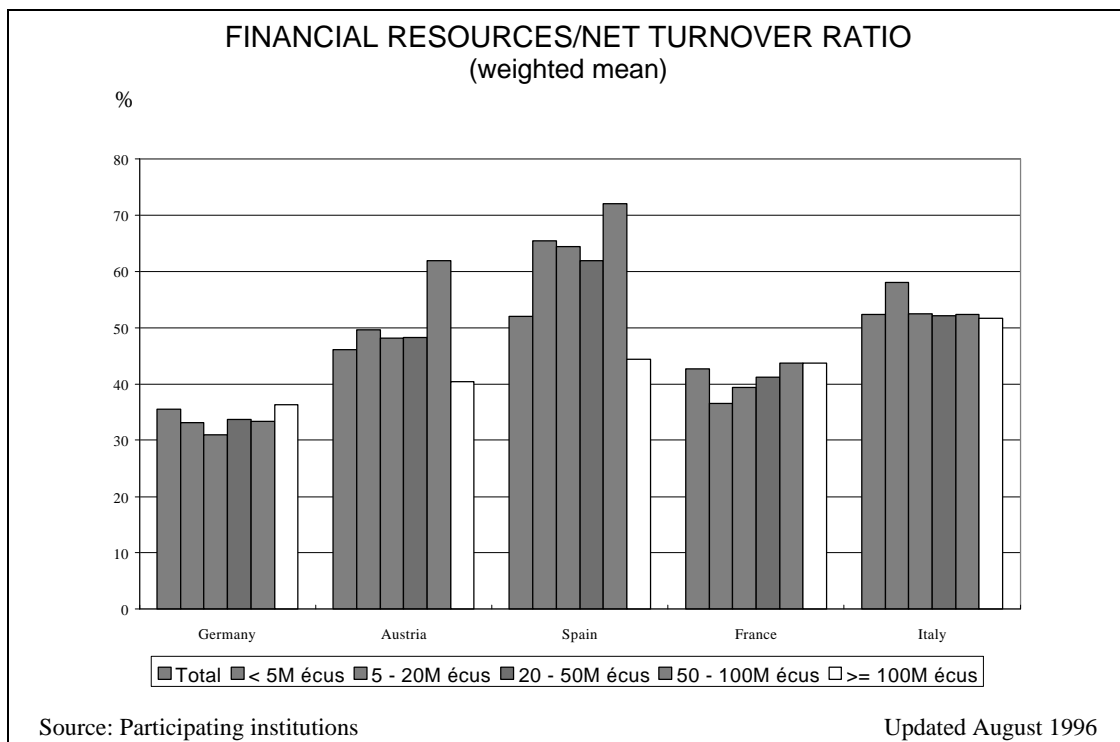
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<sup>37</sup> The weighted mean is taken in order to be able to calculate each ratio directly on the basis of the breakdown. In fact, it is not possible to proceed in this way using the median.

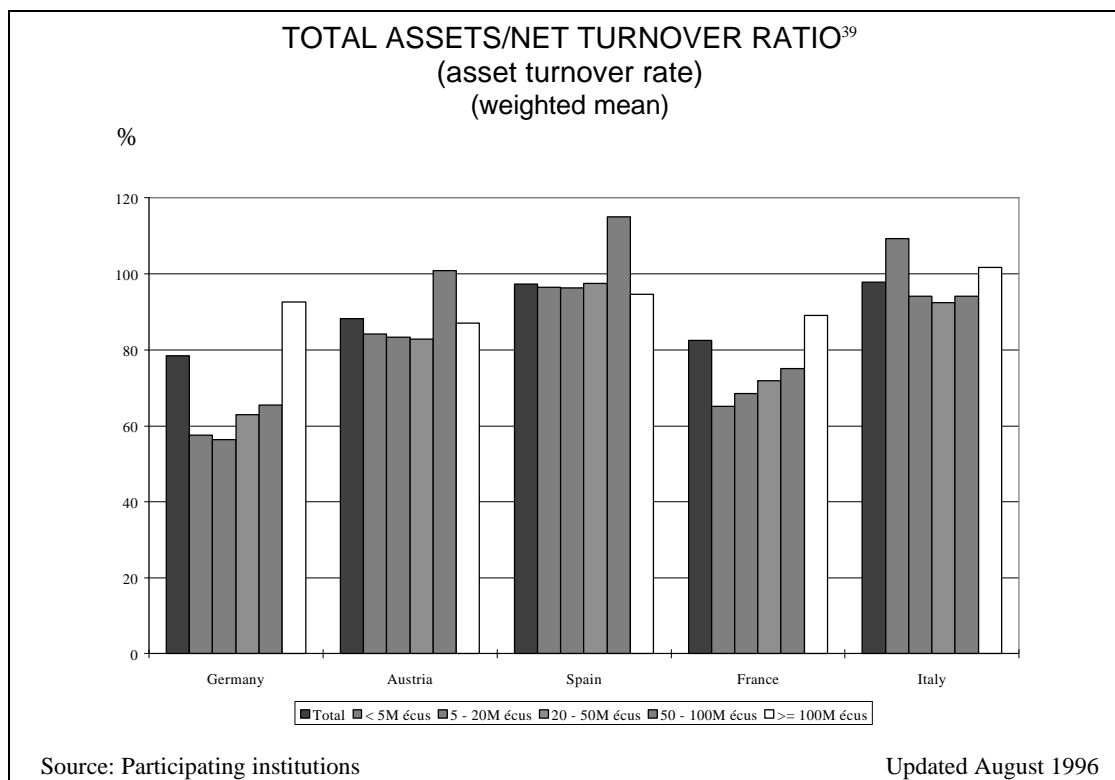
equity + financial debt) and/or the scale of the borrowing requirements which determine the scale of the resources to be employed to satisfy them. These requirements can be assessed through the asset/net turnover ratio, a yardstick for the asset turnover rate (Annex 1, Table 1.17).<sup>38</sup>

Overall, the asset turnover rate appears to be faster in Germany and France than in Austria, Italy and Spain. This phenomenon is particularly noticeable in small and medium-sized enterprises. For example, German firms posting net turnover between ECU 5 million and ECU 20 million had an asset to net turnover ratio of 56% in 1993 (in other words, they needed 56 ecus in assets for every 100 ecus of net turnover). In France, this ratio was 68%, in Austria 83%, in Italy 94% and in Spain 96%. However, the variations are fairly small between the very large companies of the different countries, with a minimum of 87% in Austria and a maximum of 102% in Italy.

In this respect, the asset turnover rate decreases with the size of the company in Germany and France, with a marked downturn when net turnover of ECU 100 million is reached. The situation comes out as more uniform in Spain, Austria and Italy. Nevertheless, the very small Italian companies report the slowest asset turnover rate. In Italy, this finding reflects the position of very small companies in the industrial sector, notably the specific ways in which inter-company relations are managed.



<sup>38</sup> See footnote **Erreur! Signet non défini.** on page 24.



A number of important conclusions can be drawn from the examination of the above-mentioned ratios:

- The apparent contradiction between the low equity and the moderate debt levels of small and medium-sized German enterprises may be attributed in part to pension provisions, but even more to a rapid asset turnover rate leading to limited borrowing requirements.

- The low debt-to-net turnover ratio in France is caused by high equity levels, as well as low borrowing requirements associated with high asset turnover rates, which may be attributable to the lesser need for working capital and, possibly, to relatively weak asset formation during the period under review.

- Italy's generally unfavourable position on the basis of the various indicators examined, except for the net equity/net turnover ratio, is due for the most part to a slower rate of asset turnover, associated with sizeable working capital requirements. In any event, the method of financing depends largely on inter-company relations in Italy.

- The very high net equity/net turnover ratio in Spain stems essentially from a combination of high equity levels and slower asset turnover rates; this slow rotation, which is more perceptible in certain sectors and for certain sizes of undertaking, explains why Spanish companies perform less well on the debt/net turnover ratio. As in Italy, the means of financing is also largely based on inter-company relations, especially where SMEs are concerned.

- The apparently less favourable situation of the Austrian companies with net turnover of less than ECU million vis-à-vis their German counterparts, as seen in their higher debt/net turnover ratio, coinciding with a high level of net equity, does not derive from lower provisions, but solely from their higher asset levels compared to net turnover.

<sup>39</sup> Total assets: assets - subscribed capital uncalled - bond redemption premium - intangible fixed assets - investment grants + trade bills discounted

## PRELIMINARY CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

The main purpose of the working group set up by Austria, France, Germany, Italy, Spain and DG II of the European Commission was to make an objective assessment of financing structures in the various countries concerned. Unlike previous research, which has usually covered limited populations (listed companies for the most part), the group was able to work with samples which were sufficiently representative of the national industrial fabric. Its findings are reliable and robust, especially since they are based on considerable methodological work in the accounting and statistics fields.

Firstly, this work shows that levels of net equity seem to vary considerably from one country to another, although bank loans continue to play an important role in every economy despite recent developments. Differences emerge, depending on whether the weighted mean or the median is examined, but the country ranking changes with choice of key indicator. The study then showed that a generalized analysis is insufficient and must be supplemented by an examination of corporate size. The differences observed, depending on whether SMEs or large companies are looked at, are significant in this respect. The effect of corporate size is specific to each country; it is, for example, strong in Germany and weak in Spain and Italy.

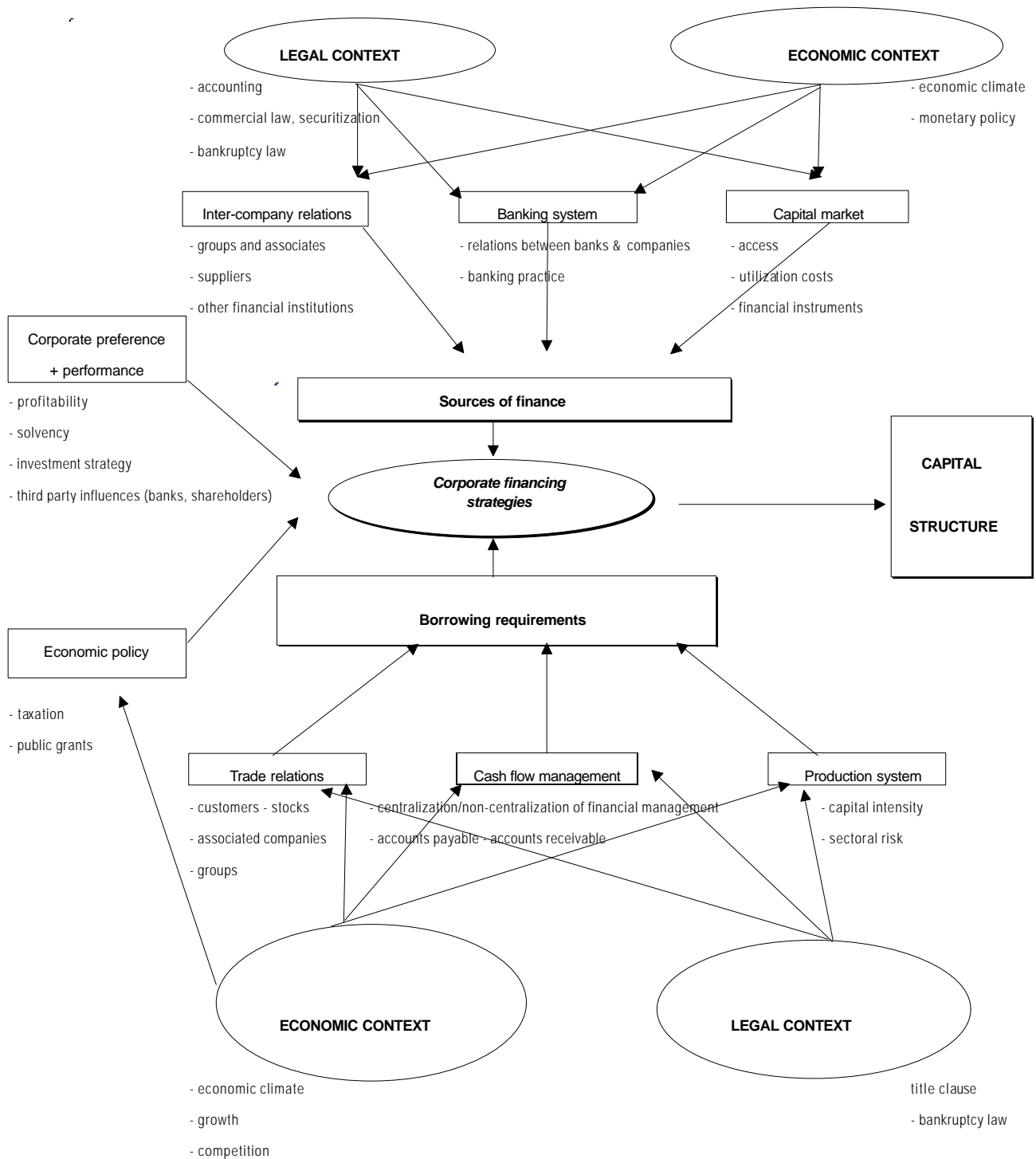
The factors explaining the differences observed between countries in companies' financing structures are numerous, although their effects are neither easily separable nor directly quantifiable. In each country, they determine the financial strategy followed by the companies and are presented on page 52.

The precise role of these various factors will be considered in greater detail at a future stage in the research. Nevertheless, a certain number of possible lines for analysis and questions should be suggested.

- €Contrary to what might be thought on the basis of hypotheses derived from the theory of optimal financing structures, the results obtained show that the financial requirements reflected in asset turnover rate have an important impact on capital structure.

- €The work carried out also confirms that no study of net equity is valid if it disregards financing practice in the country concerned — the scale of the provisions in Austria and Germany or of amounts owed to groups and associates in the German, Spanish and French companies are proof of this. The group will look at these substitution phenomena in greater detail in its future research. In particular, it intends to undertake a detailed analysis of the effects of trade financing. For a company, this leads both to the appearance of resources due to the credit periods obtained from suppliers (which are often quite long when the company is in difficulty), and to requirements for resources due to credit periods granted to customers. In actual fact, it is only possible to obtain a good understanding of the methods of financing in trade and their consequences for financial structures by calculating the difference in level between the trade accounts receivable and payable. This balance, together with inventory, is one of the components of the working capital requirements.

# CORPORATE CAPITAL STRUCTURE: EXPLANATORY FACTORS



• Differences in companies' sensitivity to business cycles and cyclical lags between countries may explain the variations between countries as described above. For instance, the under-capitalization of Italian companies may stem from greater sensitivity than in other countries to the depressive effects of the economic climate on their results and therefore on their net equity. Similarly, the relatively favourable equity levels of French companies during the period under review may be at least partially due to the improvement in mark-up ratios and profitability in France from 1985 to 1989, and subsequent decisions to invest, to reduce debt levels and/or to capitalize profit. This position is no doubt also linked to the various measures taken by the public authorities, such as, for example, those relating to the modernization of capital markets. However, the consequence of the globalization of the latter is that the differences between large and very large companies from one country to another are more limited than those observed between their smaller counterparts.

• Both theorists (see part 1) and financial analysts agree that taxation plays a major role in the structure of companies' capital. The fact that interest charges on borrowings may be deducted from taxable income is generally considered to encourage financial debt. Since such deductions are allowed in all the countries under review, differences in net equity levels may be at least partially attributable to variations in effective corporate tax rates. They could also be due to the fact that in some countries the corporate tax rate applied to earnings is higher if they are retained than if they are distributed. Another factor to be considered is that, in some cases, a difference between the maximum marginal personal income tax rate and the tax rate on the retained earnings of companies may lead shareholders, depending on their personal situation, to opt in favour of banks allocating income to retained earnings (notwithstanding however the existence of other measures: a partial or total tax credit, for example). Finally, tax regimes undoubtedly also influence the structure of capital through the way in which the taxable profit is calculated (scale of amounts allotted to tax-deductible provisions and depreciation). In some specific cases, such allocations to provisions allow the tax burden to be reduced, which may explain the varying significance from one country to another of provisions for risks and charges.

• The differences in the net equity endowment of SMEs in Germany and Austria compared to their counterparts may well also derive from the different role played by the banking system in a given economic context.

Traditionally, the economies of the five countries covered by the survey are more highly intermediated than those of the English-speaking countries, which are strongly oriented towards the capital markets. Despite this similarity, relations between banks and companies have developed in very different ways on the basis of history, industrial structures and differing institutional factors.<sup>40</sup>

For instance, in the case of Spain, France and Italy, the relationship between banks and companies is traditionally based on multi-banking. The company obtains the means of financing by making banks compete to obtain the most favourable contractual conditions in terms of interest rate, services, term, and so on. The bank, for its part, spreads its risk over commitments of limited individual size. It promotes the liquidity of its credit portfolio by avoiding excessive involvement and concentration. In principle, it can easily recover its funds in so far as the company will in general be able to obtain another loan from another bank. However, this model results at macroeconomic level in low efficiency of allocation of financial

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<sup>40</sup> This finding indicates the need for more detailed historical analysis of business organization and, in particular, of the relationship between banks and companies.

resources, and at microeconomic level in a lack of mutual detailed comprehension on the part of banks and companies, which does not allow asymmetric information to be reduced and heightens the risk of opportunist behaviour.

In Germany and Austria, the role of banks in the process of financing SMEs is characterized by the "Hausbank" relationship (the "company" bank or main bank). As a result, the majority of small and medium-sized enterprises maintain very close, stable relations with a single credit institution (in particular the bank of first resort), to which they entrust the majority of their financial transactions throughout their life cycle. This privileged commercial relationship thus establishes confidence and long-term co-operation in dealings with the Hausbank, which is considered more or less as a partner. As a result, it has available to it extensive information on the company's position, its strategy, its technical and economic characteristics and its environment to supplement its data on movements in the company's bank accounts and net worth. These factors reduce the cost of asymmetries of information, especially for the banks. As a result, there is no discrimination against SMEs on rates and access to loans and they have no incentive to find other sources of finance, such as net equity.

This system nevertheless has the disadvantage of increasing companies' dependence on banks and creates a quasi-monopoly situation, reinforced by the companies themselves which do not take advantage of competition.

•€The foundations of this relationship are at least partly to be found in the specific features of banking practice in Germany and Austria, which is governed by commercial law protecting creditors. In particular, under this law, almost all the assets of a company may be pledged as collateral for loans without formalities such as publication and registration. The guarantees are also protected under bankruptcy law. Consequently, the transfer of assets, especially in the form of an total assignment, is a type of guarantee widely used in the German financing system. For SMEs, an overdraft (in the form of permanent credit facilities or a general operating loan) consequently provides great flexibility in short-term financing. For the banks, the system is also efficient on account of the speed of realization, its lack of cumbersome formal requirements, its low cost and the minimization of risk. As a result, the reduction of the credit risk resulting from the assets pledged to the banks reduces the need for a company to hold a high level of net equity.

Furthermore, traditional German law on bankruptcy and insolvency proceedings is likewise very important for the access of small and medium-sized enterprises to outside finance, in so far as it protects creditors in the event of bankruptcy. The latter benefit from a claim or a preferential right to payment. According to the German and Austrian law, the operating rights to the pledged items always devolve to the creditor.

The creditors' position is quite different in the other European countries. Notably, the legal framework governing credit collateral is more complex. There are formal disclosure requirements (obligatory inscription in a special ledger and public disclosure of pledges) which in practice limit the possibilities for using this procedure within the economy. In addition, in the event of bankruptcy, priority is not given to protecting the rights of secured creditors, but to salvaging companies in the interests of economic policy and employment. As a result, the rights of creditors are "frozen" to avoid premature disposal of the assets of the failed company.

In France, for example, before the promulgation of the law of 1994 and in Spain to a certain extent, it was almost impossible for creditors to retrieve asset items disposed of during insolvency proceedings. According to the experts, during these proceedings the *in rem* security

rights were practically worthless, as the outstanding salaries, general body of creditors and taxes payable during the period were senior to claims collateralized by *in rem* security rights.

It remains to be noted that banking practice for the collateralization of credits in Germany deriving from the Hausbank system and the contractual guarantee techniques of commercial law have their limits. Apart from the banks and principal suppliers, the other creditors who are not protected by *in rem* securities interests in movables are those who bear the costs of the bankruptcy of the debtors. The banking risk is in this case transferred almost completely to the unsecured creditors.

All in all, financing and capitalization parameters are revealed as entirely different in Spain, Italy and France, on the one hand, compared with Germany and Austria, on the other. Given that the terms for collateralizing real and financial assets are less favourable, the solvency of companies in the first three countries depends first and foremost on their reputation and balance sheet, and in particular their net equity. Small and medium-sized enterprises thus have to compete on the same footing as large firms when they go to the money and capital markets to increase their equity.

The legislation and in particular the existence in Germany of a right of retention of title provides at least a partial explanation for the higher asset turnover rate in German companies and therefore of their lesser financial requirements than in the other countries. Above and beyond straightforward retention of title, which is the guarantee par excellence used in the field of supplier credit, practitioners have also introduced more complex and more flexible forms without burdening them with special formalities such as the disclosure requirement. Thus on the one hand an extended form of retention of title has been introduced which guarantees the creditors' right to seize the products made or the claims arising from their sale and, on the other hand, a broader-based retention of title which guarantees a group of claims, with the goods delivered remaining the property of the supplier until all the purchaser's debts have been settled. This special legislative and regulatory context has the effect of expediting the settlement of business debts and explains why, with the existence of specific customs and developed cash discounting practice, the actual credit periods are distinctly shorter in Germany than in the other countries.

It should be noted however that major as they are, the differences in the institutional and legal environment are insufficient to explain all the differences in financing structures from one country to another. They do not, for example, explain why, in a similar context, Italian SMEs are less highly capitalized than French companies. One can however point out that Italian business managers are very anxious about their independence and are therefore quite reluctant to open up their capital to new shareholders, which can explain the low level of equity.

The roles of all these factors (on which the group obviously passes no normative judgement) will be examined in more detail in future research by constructing relevant (proxy) variables capable of expressing and developing models suited to corporate data. The group also plans to extend the period under review to permit better comprehension of the various phenomena under consideration. It is convinced that this research will confirm that Central Balance Sheet Offices can make a major contribution to understanding the real economies in the participating countries and their sensitivity to the financial and monetary environment.

In view of the conference on 10 October 1997 in Paris, the study group calculated the ratios for 1995. The results were consistent with those of 1991-1993.

On the whole, the country classification resulting from the different ratios was confirmed.

There is nevertheless an overall improvement in the various indicators of autonomy and activity, in particular in Spain regarding the "total assets/net turnover" and the "financial debts/net turnover" ratios. The latter ratio fell sharply on the previous period, and Spanish firms are in a situation similar to that of their French counterparts, with a lower ratio than that of firms in other countries, in particular in Germany and Italy.

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# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES. Moyenne pondérée

### Manufacturing industries – NET EQUITY / FINANCIAL RESOURCES(\*) . Weighted mean

Table 1-1

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	54,3	57,8	57,1	2,8	62,3	66,0	66,1	3,8	65,8	65,4	67,8	2,0	46,8	43,4	44,3	-2,5	62,1	59,1	56,7	-5,4
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	60,8	63,6	60,9	0,1	61,2	66,0	67,8	6,6	73,2	72,3	73,2	0,0	54,8	24,1	44,1	-10,7	62,8	59,4	57,9	-4,9
2.2. Investment goods and consumer durable	52,8	58,0	59,7	6,9	64,2	67,3	63,7	-0,5	64,8	65,3	68,3	3,5	43,9	40,6	45,0	1,1	57,4	52,4	46,2	-11,2
2.3. Non-durable consumption goods	48,0	50,0	50,0	2,0	62,1	64,5	67,4	5,3	51,3	50,3	54,1	2,8	43,7	42,1	43,9	0,2	66,3	65,6	64,8	-1,5
3. <b>By size of company :</b>																				
< 5 m. ECU	32,2	31,6	38,6	6,4	53,1	54,4	57,5	4,4	23,3	22,7	22,2	-1,1	42,5	40,4	42,6	0,1	58,8	55,4	57,1	1,7
5 - 20 m. ECU	40,8	44,0	44,7	3,9	54,6	56,1	59,0	4,4	35,3	34,5	35,5	0,2	41,2	39,4	40,2	-1,0	60,9	61,3	61,3	0,4
20 - 50 m. ECU	47,8	48,8	48,3	0,5	58,9	60,6	64,3	5,4	46,0	46,2	48,1	2,1	42,6	40,8	42,9	0,3	63,7	64,0	63,0	-0,7
50 - 100 m. ECU	51,0	50,8	53,9	2,9	63,7	63,9	64,8	1,1	54,1	53,1	55,1	1,0	44,0	43,3	48,2	4,2	67,4	61,2	69,0	1,6
> 100 m. ECU	60,1	65,9	64,4	4,3	65,2	69,7	68,2	3,0	72,1	71,7	73,6	0,4	52,0	46,8	46,0	-6,0	60,5	57,3	50,9	-9,6

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES. Médiane

### Manufacturing industries– NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup>. Median

Table 1-2

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	49,5	49,9	50,9	1,4	56,2	58,1	62,1	5,9	34,2	33,3	34,1	-0,1	42,3	39,3	42,6	0,3	66,5	65,1	65,1	-1,4
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	56,9	58,6	60,3	3,4	55,8	58,0	62,3	6,5	43,7	44,7	45,6	1,9	48,3	44,9	47,8	-0,5	71,1	68,7	68,1	-3,0
2.2 Investment goods and consumer durables	46,8	47,9	48,4	1,6	61,4	63,6	66,5	5,1	34,9	34,0	33,8	-1,1	43,5	39,7	43,9	0,4	66,7	64,9	65,5	1,2
2.3 Non-durable consumption goods	47,3	45,7	49,6	2,3	53,7	55,4	59,8	6,1	29,9	29,1	30,2	0,3	38,7	36,3	39,3	0,6	66,5	63,5	64,0	-2,5
3. <b>By size of company :</b>																				
< 5 m. ECU	31,1	35,1	30,7	-0,4	54,5	56,1	60,4	5,9	23,0	22,2	20,3	-2,7	43,7	40,1	47,9	4,2	69,7	65,2	65,1	-4,6
5 - 20 m. ECU	42,4	44,4	48,7	6,3	55,0	56,5	60,2	5,2	34,8	33,9	33,5	-1,3	40,5	37,8	38,4	-2,1	62,9	62,8	61,1	-1,8
20 - 50 m. ECU	52,3	49,4	48,3	-4,0	60,5	61,6	67,1	6,6	47,1	46,6	48,2	1,1	40,8	38,7	39,9	-0,9	66,5	65,1	66,3	-0,2
50 - 100 m. ECU	56,6	50,4	57,9	1,3	65,5	66,7	69,0	3,5	54,7	55,2	56,1	1,4	42,6	41,6	45,6	3,0	64,2	70,4	72,9	8,7
> 100 m. ECU	56,5	62,8	67,4	10,9	71,2	74,3	78,5	7,3	67,0	66,9	71,1	4,1	53,7	51,1	47,8	-5,9	70,8	68,4	67,3	-3,5

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES – LIQUIDITÉ. Moyenne pondérée

### Manufacturing industries. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup> - LIQUIDITY. Weighted mean

Table 1-3

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	64,1	67,9	65,5	1,4	71,4	75,1	76,7	5,3	79,7	78,1	82,3	2,6	52,1	48,0	49,3	-2,8	67,5	63,0	61,1	-6,4
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 .Intermediate products	67,8	69,4	66,2	-1,6	66,5	71,2	66,3	-0,2	82,8	81,2	83,5	-0,3	59,7	52,7	47,5	-12,2	65,9	61,5	60,5	-5,4
2.2. Investment goods and consumer durable	68,4	79,8	76,8	8,4	75,5	79,7	63,8	-11,7	85,0	83,3	89,0	4,0	49,1	45,5	50,9	1,8	65,1	57,6	51,5	-13,6
2.3 Non-durable consumption goods	55,3	56,3	54,9	-0,4	71,0	74,2	79,3	8,3	57,8	56,0	60,2	2,4	49,1	47,1	49,0	-0,1	72,0	69,9	69,8	-2,2
3. <b>By size of company :</b>																				
< 5 m. ECU	35,8	34,7	43,3	7,5	65,7	67,9	73,4	7,7	26,5	25,8	24,9	-1,6	48,0	44,9	48,0	0,0	67,3	60,9	62,6	-4,7
5 - 20 m. ECU	46,3	49,7	50,7	4,4	64,3	66,6	71,3	7,0	40,4	39,4	39,9	-0,5	46,5	44,6	45,6	0,1	67,2	66,1	67,1	-0,1
20 - 50 m. ECU	56,2	56,7	55,4	-0,8	67,7	70,5	76,9	9,2	52,1	52,8	54,2	2,1	47,8	45,7	48,7	-0,1	69,7	68,6	68,5	-1,2
50 - 100 m. ECU	58,6	58,2	61,2	2,6	72,3	71,9	74,7	2,4	59,5	58,6	61,9	2,4	49,2	48,0	53,7	4,5	73,0	65,4	75,4	2,4
> 100 m. ECU	72,3	79,3	74,2	1,9	73,4	78,2	78,0	4,6	89,5	86,9	91,3	1,8	57,1	51,1	50,2	-6,9	65,4	60,7	54,3	-11,1

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES – LIQUIDITÉ. Médiane

### Manufacturing industries. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup> - LIQUIDITY. Median

Table 1-4

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	53,3	54,3	55,0	1,7	61,0	63,4	68,3	7,3	35,9	34,6	35,8	-0,1	45,1	41,6	45,1	0,0	72,0	68,9	68,7	-3,3
2. By BACH sector of activity <sup>(a)</sup> :																				
2.1 Intermediate products	61,0	62,4	64,7	3,7	62,2	64,1	68,6	6,4	46,1	46,1	48,5	2,4	52,1	48,1	50,4	-1,7	74,4	72,8	71,2	-3,2
2.2 Investment goods and consumer durables	50,8	50,8	51,7	0,9	64,5	68,4	71,7	7,2	36,3	34,7	35,8	-0,5	46,6	42,1	46,4	-0,2	70,5	67,9	67,8	-2,7
2.3 Non-durable consumption goods	52,2	50,0	52,1	-0,1	58,5	60,1	66,4	7,9	31,9	30,7	31,1	-0,8	41,0	38,6	41,4	0,4	70,8	68,0	67,8	-3,0
3. By size of company :																				
< 5 m. ECU	29,8	36,2	30,9	1,1	58,4	60,8	65,9	7,5	23,4	21,7	20,1	-3,3	46,3	42,3	48,8	2,5	77,1	70,0	69,9	-7,2
5 - 20 m. ECU	43,4	48,2	52,1	8,7	59,7	62,0	66,7	7,0	36,8	36,1	35,0	-1,8	43,3	40,2	41,4	-1,9	66,5	66,7	65,4	-1,1
20 - 50 m. ECU	54,9	55,1	52,7	-2,2	67,0	67,9	72,9	5,9	49,8	49,7	50,7	0,9	44,3	41,3	44,3	0,0	70,5	67,7	70,2	-1,3
50 - 100 m. ECU	61,5	55,7	65,9	4,4	71,1	72,9	74,3	3,2	57,8	59,2	59,9	2,1	46,1	45,2	48,9	2,8	68,3	74,5	75,5	7,2
> 100 m. ECU	61,8	70,2	73,3	11,5	76,9	79,4	83,7	6,8	70,4	69,9	75,8	5,4	56,8	53,1	52,3	-4,5	72,8	69,7	69,4	-3,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## PROVISIONS POUR RISQUES ET CHARGES / DETTES FINANCIÈRES + PROVISIONS POUR RISQUES ET CHARGES. Médiane

### Manufacturing industries. PROVISIONS FOR R & CH / FINANCIAL CREDITORS<sup>(\*)</sup> + PROV. R & CH. Median

Table 1-5

	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	33,9	34,8	34,7	0,8	1,2	1,3	1,7	0,5	28,7	27,8	28,4	-0,3	16,8	16,4	19,8	3,0	0,0	0,0	0,0	0,0
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	42,5	41,0	41,5	-1,0	1,3	1,4	1,7	0,4	36,6	36,3	37,5	0,9	17,6	17,1	19,8	2,2	0,0	0,0	0,0	0,0
2.2 Investment goods and consumer durables	34,1	35,4	34,9	0,8	4,5	4,6	5,1	0,6	30,8	30,2	30,6	-0,2	20,0	19,7	23,7	3,7	0,0	0,0	0,0	0,0
2.3 Non-durable consumption goods	29,6	30,7	21,0	-8,6	0,5	0,6	0,8	0,3	23,3	22,6	23,3	0,0	13,9	13,6	16,3	2,4	0,0	0,0	0,0	0,0
3. <b>By size of company :</b>																				
< 5 m. ECU	25,4	21,3	20,3	-5,1	0,0	0,0	0,0	0,0	18,4	17,8	17,7	0,7	18,1	18,0	24,4	6,3	0,0	0,0	0,0	0,0
5 - 20 m. ECU	30,4	32,9	32,0	1,6	2,2	2,4	2,8	0,6	30,4	29,2	28,1	-2,3	15,3	14,9	16,5	1,2	0,0	0,0	0,0	0,0
20 - 50 m. ECU	36,0	35,8	33,4	-2,6	5,1	5,8	8,7	3,6	39,6	40,7	40,8	1,2	15,3	14,9	17,3	2,0	0,0	0,0	0,0	0,0
50 - 100 m. ECU	42,1	38,9	40,0	-2,1	9,1	9,2	12,4	3,3	50,8	49,1	50,7	-0,1	16,3	17,7	19,3	3,0	1,2	2,0	3,7	2,5
> 100 m. ECU	50,6	55,9	56,1	5,5	15,6	19,3	24,4	8,8	63,3	64,8	68,4	5,1	26,3	25,1	24,4	-1,9	9,6	11,4	18,8	9,2

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group & associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## EFFETS ESCOMPTÉS / DETTES FINANCIÈRES. Médiane

### Manufacturing industries. TRADE BILLS DISCOUNTED / FINANCIAL CREDITORS<sup>(\*)</sup>. Median

Table 1-6

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	N/A				0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	7,5	16,3	14,1	6,6
2. By BACH sector of activity <sup>(a)</sup> :																				
2.1 Intermediate products	N/A				0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	12,6	20,1	23,2	10,6
2.2 Investment goods and consumer durables					0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	11,2	16,7	12,0	0,8
2.3 Non-durable consumption goods					0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,8	13,5	11,8	11,0
3. By size of company :																				
< 5 m. ECU	N/A				0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5 - 20 m. ECU					0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	27,8	33,8	31,5	3,7
20 - 50 m. ECU					0,0	0,0	0,0	0,0	0,5	0,1	0,1	-0,4	0,0	0,0	0,0	0,0	27,1	28,9	29,6	2,5
50 - 100 m. ECU					0,0	0,0	0,0	0,0	0,9	1,0	1,1	0,2	0,0	0,0	0,0	0,0	14,6	17,3	19,3	4,7
> 100 m. ECU					0,0	0,0	0,0	0,0	2,8	2,6	1,4	1,4	0,0	0,0	0,0	0,0	6,5	4,2	4,0	-2,5

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group & associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## DETTES ENVERS LES GROUPES ET ASSOCIÉS / TOTAL DES DETTES. Médiane

### Manufacturing industries. AMOUNTS OWED TO GROUP & ASSOC. CO. / TOTAL CREDITORS. Median

Table 1-7

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	1,2	2,2	1,8	0,6	3,7	3,6	3,8	0,1	5,8	6,2	7,4	1,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2. By BACH sector of activity <sup>(a)</sup> :																				
2.1 Intermediate products	4,1	5,2	3,2	-0,9	3,1	3,2	3,6	0,5	10,8	10,5	12,3	1,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2.2 Investment goods and consumer durables	1,0	2,4	2,0	1,0	3,3	3,1	3,3	0,0	4,9	5,9	7,0	2,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2.3 Non-durable consumption goods	0,4	0,3	1,0	0,6	4,3	4,0	4,3	0,0	5,4	5,5	6,5	1,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
3. By size of company :																				
< 5 m. ECU	0,0	0,0	0,0	0,0	3,4	3,3	3,4	0,0	2,5	3,2	3,8	1,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
5 - 20 m. ECU	0,0	0,0	0,0	0,0	2,8	2,7	2,7	-0,1	6,0	6,2	7,4	1,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
20 - 50 m. ECU	4,9	5,7	3,6	-1,3	5,1	4,5	6,1	1,0	10,6	10,4	12,2	1,6	0,0	0,0	0,3	0,3	4,0	5,0	4,5	0,5
50 - 100 m. ECU	5,7	4,3	5,5	-0,2	7,1	7,5	7,7	0,6	15,5	16,0	19,7	4,2	0,9	0,9	2,1	1,2	7,2	10,8	17,1	9,9
> 100 m. ECU	7,4	12,1	11,7	4,3	15,5	17,2	17,9	2,4	20,9	20,4	23,4	2,5	7,6	7,3	7,0	-0,6	14,7	18,0	19,1	4,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES 1993

### Manufacturing industries. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup>. 1993

Table 1-8

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	26,3	50,9	79,6	1,0	36,3	62,1	85,7	0,8	12,1	34,1	63,7	1,5	21,7	42,6	73,8	1,2	39,6	65,1	90,6	0,8
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	30,7	60,3	83,4	0,9	37,2	62,3	84,6	0,8	17,3	45,6	75,6	1,3	25,6	47,8	77,6	1,1	44,9	68,1	92,7	0,7
2.2 Investment goods and consumer durables	28,5	48,4	75,4	1,0	39,3	66,5	87,5	0,7	11,7	33,8	64,6	1,6	21,4	43,9	76,9	1,3	38,8	65,5	92,4	0,8
2.3 Non-durable consumption goods	21,1	49,6	78,4	1,2	34,9	59,8	85,1	0,8	10,9	30,2	57,6	1,4	19,9	39,3	69,0	1,2	37,8	64,0	88,7	0,8
3. <b>By size of company :</b>																				
< 5 m. ECU	-4,5	30,7	70,9	2,5	33,0	60,4	85,9	0,9	5,3	20,3	47,6	2,1	21,4	47,9	91,6	1,5	36,8	65,1	93,1	0,9
5 - 20 m. ECU	23,6	48,7	80,5	1,2	36,5	60,2	84,4	0,8	13,7	33,5	59,7	1,4	20,9	38,4	62,4	1,1	40,2	61,1	87,9	0,8
20 - 50 m. ECU	28,2	48,3	72,3	0,9	44,9	67,1	86,0	0,6	25,9	48,2	75,6	1,0	22,8	39,9	66,9	1,1	44,1	66,3	90,0	0,7
50 - 100 m. ECU	35,1	57,9	83,0	0,8	44,6	69,0	88,4	0,6	35,2	56,1	80,4	0,8	25,1	45,6	71,3	1,0	47,6	72,9	90,8	0,6
> 100 m. ECU	44,5	67,4	87,3	0,6	56,6	78,5	91,6	0,4	49,4	71,1	84,4	0,5	27,3	47,8	72,8	1,0	42,2	67,3	88,8	0,7

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES – LIQUIDITÉ 1993

### Manufacturing industries. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup> - LIQUIDITY. 1993

Table 1-9

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	26,3	55,0	92,3	1,2	36,6	68,3	106,0	1,0	11,0	35,8	74,7	1,8	21,9	45,1	83,0	1,4	40,9	68,7	100,0	0,9
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	31,4	64,7	100,2	1,1	37,7	68,6	105,4	1,0	16,3	48,5	85,7	1,4	26,5	50,4	87,3	1,2	47,7	71,2	100,0	0,7
2.2 Investment goods and consumer durables	26,8	51,7	87,8	1,2	37,9	71,7	109,2	1,0	10,5	35,8	76,0	1,8	21,5	46,4	88,1	1,4	40,5	67,8	100,5	0,9
2.3 Non-durable consumption goods	20,8	52,1	88,6	1,3	35,7	66,4	105,4	1,0	10,1	31,1	65,8	1,8	20,1	41,4	76,7	1,4	38,9	67,8	9,4	0,9
3. <b>By size of company :</b>																				
< 5 m. ECU	-6,5	30,9	78,3	2,7	32,3	65,9	113,3	1,2	3,9	20,1	53,7	2,5	19,8	48,8	99,8	1,6	37,8	69,9	102,5	0,9
5 - 20 m. ECU	23,2	52,1	90,9	1,3	37,8	66,7	101,5	1,0	12,9	35,0	72,2	1,7	22,1	41,4	71,1	1,2	42,1	65,4	95,4	0,8
20 - 50 m. ECU	29,9	52,7	86,0	1,1	46,4	72,9	104,1	0,8	25,3	50,7	84,2	1,2	24,3	44,3	75,9	1,2	46,1	70,2	97,5	0,7
50 - 100 m. ECU	42,0	65,9	102,1	0,9	47,4	74,3	98,7	0,7	36,0	59,9	89,5	0,9	26,6	48,9	80,7	1,1	47,9	75,5	96,7	0,6
> 100 m. ECU	44,8	73,3	94,6	0,7	56,4	83,7	99,0	0,5	49,4	75,8	92,4	0,6	29,4	52,2	80,1	1,0	42,2	69,4	92,5	0,7

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

## INDUSTRIE MANUFACTURIÈRE

### PROVISIONS POUR RISQUES ET CHARGES / DETTES FINANCIÈRES + PROVISIONS POUR RISQUES ET CHARGES 1993

#### Manufacturing industries. PROVISIONS FOR R & CH / FINANCIAL CREDITORS + PROVISIONS R & CH. 1993

Table 1-10

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	18,7	34,7	65,7	1,4	0,0	1,7	13,8	8,1	10,9	28,4	56,5	1,6	9,6	19,8	43,4	1,7	0,0	0,0	1,2	-
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	20,6	41,5	69,7	1,2	0,0	1,7	13,2	7,8	14,1	37,5	68,1	1,4	10,2	19,8	43,9	1,7	0,0	0,0	9,1	-
2.2 Investment goods and consumer durables	20,9	34,9	67,4	1,3	0,0	5,1	27,9	5,5	12,9	30,6	59,2	1,5	12,5	23,7	50,8	1,6	0,0	0,0	3,9	-
2.3 Non-durable consumption goods	13,5	31,0	60,1	1,5	0,0	0,8	9,1	11,4	8,0	23,3	48,3	1,7	7,6	11,3	37,4	1,8	0,0	0,0	0,0	-
3. <b>By size of company :</b>																				
< 5 m. ECU	8,9	20,3	54,8	2,3	0,0	0,0	6,7	-	5,3	17,7	39,4	1,9	11,0	24,4	72,5	2,5	0,0	0,0	0,0	-
5 - 20 m. ECU	17,9	32,0	66,1	1,5	0,0	2,8	14,4	5,1	12,6	28,1	53,4	1,5	8,6	16,5	32,2	1,4	0,0	0,0	1,3	-
20 - 50 m. ECU	20,4	33,4	57,1	1,1	1,6	8,7	29,5	3,2	20,9	40,8	68,6	1,2	8,6	17,3	33,6	1,4	0,0	0,0	11,7	-
50 - 100 m. ECU	22,3	40,0	69,5	1,2	3,2	12,4	35,8	2,6	28,0	50,7	76,6	1,0	10,3	19,3	40,1	1,5	0,0	3,7	26,8	7,2
> 100 m. ECU	32,3	56,1	88,8	1,0	7,7	24,4	53,6	1,9	44,6	68,4	84,5	0,6	12,0	24,4	46,9	1,4	1,3	18,8	46,4	2,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España.

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## EFFETS ESCOMPTÉS / DETTES FINANCIÈRES 1993

### Manufacturing industries. TRADE BILLS DISCOUNTED / FINANCIAL CREDITORS. 1993

Table 1-11

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	N/A				0,0	0,0	26,1	-	0,0	0,0	1,2	-	0,0	0,0	0,0	-	0,0	14,1	56,3	4,0
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	N/A				0,0	0,0	30,4	-	0,0	0,0	4,1	-	0,0	0,0	0,0	-	0,0	23,2	60,7	2,6
2.2 Investment goods and consumer durables					0,0	0,0	20,1	-	0,0	0,0	0,7	-	0,0	0,0	0,0	-	0,0	12,0	60,3	5,0
2.3 Non-durable consumption goods					0,0	0,0	24,7	-	0,0	0,0	0,7	-	0,0	0,0	0,0	-	0,0	11,8	53,4	4,5
3. <b>By size of company :</b>																				
< 5 m. ECU	N/A				0,0	0,0	31,6	-	0,0	0,0	0,0	-	0,0	0,0	0,0	-	0,0	0,0	53,8	-
5 - 20 m. ECU					0,0	0,0	28,4	-	0,0	0,0	1,6	-	0,0	0,0	0,0	-	0,0	31,5	67,5	2,1
20 - 50 m. ECU					0,0	0,0	7,6	-	0,0	0,1	7,4	74,0	0,0	0,0	0,0	-	2,3	29,6	62,0	2,0
50 - 100 m. ECU					0,0	0,0	0,0	-	0,0	1,1	9,7	8,8	0,0	0,0	0,0	-	0,0	19,3	47,1	2,4
> 100 m. ECU					0,0	0,0	0,0	-	0,0	1,4	12,5	8,9	0,0	0,0	0,0	-	0,0	4,0	23,5	5,9

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## DETTES ENVERS LES GROUPES ET ASSOCIÉS / DETTES TOTALES <sup>41</sup> 1993

### Manufacturing industries. GROUP & ASSOCIATED CO. / TOTAL CREDITORS. 1993

Table 1-12

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	0,0	1,8	14,0	7,8	0,3	3,8	13,7	3,5	0,0	7,4	30,0	4,1	0,0	0,0	0,1	-	0,0	0,0	0,0	-
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	0,0	3,2	14,9	4,7	0,2	3,6	13,7	3,8	0,0	12,3	41,9	3,4	0,0	0,0	1,1	-	0,0	0,0	2,5	-
2.2 Investment goods and consumer durables	0,0	2,0	14,7	7,4	0,2	3,3	12,3	3,7	0,0	7,0	29,2	4,2	0,0	0,0	0,9	-	0,0	0,0	0,6	-
2.3 Non-durable consumption goods	0,0	1,0	12,1	12,1	0,3	4,3	14,3	3,3	0,0	6,5	27,3	4,2	0,0	0,0	0,0	-	0,0	0,0	0,0	-
3. <b>By size of company :</b>																				
< 5 m. ECU	0,0	0,0	2,8	-	0,1	3,4	14,0	3,5	0,0	3,8	21,2	5,6	0,0	0,0	0,0	-	0,0	0,0	0,0	-
5 - 20 m. ECU	0,0	0,0	8,6	-	0,2	4,3	11,2	4,8	0,0	7,4	28,5	3,9	0,0	0,0	0,4	-	0,0	0,0	0,0	-
20 - 50 m. ECU	0,1	3,6	15,6	4,3	1,1	6,1	20,4	3,2	1,0	12,2	42,0	3,4	0,0	0,3	6,6	22,0	0,0	4,5	21,0	4,7
50 - 100 m. ECU	1,1	5,5	17,0	2,9	1,8	7,7	24,5	4,9	2,8	19,7	50,8	2,4	0,0	2,1	12,9	6,1	1,0	17,1	40,8	2,3
> 100 m. ECU	2,7	11,7	28,3	2,2	3,9	17,9	37,6	1,8	5,2	23,4	53,8	2,1	1,4	7,0	19,1	2,5	5,0	19,1	46,1	2,2

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

<sup>41</sup> For France, the ratio contains financial creditors and sundry creditors alone.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / CHIFFRE D'AFFAIRES. Médiane

### Manufacturing industries. NET EQUITY / NET TURNOVER. Median

Table 1-13

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	17,4	19,4	19,2	1,8	15,3	16,2	17,4	2,1	6,7	6,7	7,2	0,5	17,3	16,6	16,8	-0,5	28,0	27,9	29,0	1,0
2. By BACH sector of activity <sup>(a)</sup> :																				
2.1 Intermediate products	19,6	23,0	23,9	4,3	16,8	18,1	19,5	2,7	8,9	8,9	9,9	1,0	20,9	20,1	20,3	-0,6	35,8	34,5	34,3	-1,5
2.2 Investment goods and consumer durables	16,6	17,1	18,2	1,6	15,7	16,6	17,6	1,9	7,0	6,8	7,4	0,4	17,4	16,7	16,8	-0,6	27,7	27,7	30,3	2,6
2.3 Non-durable consumption goods	16,5	17,3	17,7	1,2	13,9	14,6	15,7	1,8	5,7	5,7	6,1	0,4	15,4	14,8	15,1	-0,3	25,4	25,8	26,7	1,3
3. By size of company :																				
< 5 m. ECU	12,0	12,7	12,4	0,4	13,3	14,2	15,4	2,1	4,8	4,6	4,5	-0,3	17,7	17,0	17,3	-0,4	25,3	25,3	26,0	0,7
5 - 20 m. ECU	15,1	15,7	17,6	2,5	16,0	17,1	18,4	2,4	6,8	6,7	7,1	0,3	16,7	15,9	16,1	-0,6	28,7	29,5	30,6	1,9
20 - 50 m. ECU	19,0	19,6	20,4	1,4	18,4	20,4	21,3	2,9	10,7	11,0	11,6	0,9	16,9	16,8	16,8	-0,1	33,6	33,9	35,2	1,6
50 - 100 m. ECU	20,6	23,3	29,0	8,4	21,2	21,0	21,7	0,5	13,4	13,3	14,2	0,8	17,4	17,3	17,7	0,3	36,4	35,7	35,6	-0,8
> 100 m. ECU	23,4	23,7	20,8	-2,6	21,0	22,0	22,8	1,8	16,4	16,1	17,8	1,4	19,7	18,2	19,1	-0,6	31,9	27,3	26,8	-5,1

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## DETTES FINANCIÈRES / CHIFFRE D'AFFAIRES. Médiane

### Manufacturing industries. FINANCIAL CREDITORS<sup>(\*)</sup> / NET TURNOVER. Median

Table 1-14

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	19,5	20,2	19,2	-0,3	12,2	12,1	11,2	-1,0	14,0	14,3	15,0	1,0	23,4	25,6	23,8	0,4	14,4	15,4	16,0	1,6
2. By BACH sector of activity <sup>(a)</sup> :																	14,9			
2.1 Intermediate products	17,3	18,1	19,1	1,8	13,7	13,9	12,6	-1,1	12,0	12,0	12,6	0,6	22,5	24,6	23,4	0,9		16,0	16,7	1,8
2.2 Investment goods and consumer durables	21,8	20,5	19,6	-2,2	10,9	10,7	10,4	-0,5	14,3	14,5	15,4	1,1	22,3	25,3	23,3	1,0	14,4	16,3	16,7	2,3
2.3 Non-durable consumption goods	18,9	20,1	18,6	-0,3	11,8	11,6	10,5	-1,3	14,3	14,9	15,4	1,1	24,6	26,2	24,3	-0,3	14,1	14,8	15,4	1,3
3. By size of company :																				
< 5 m. ECU	27,9	29,0	25,2	-2,7	12,2	12,0	11,1	-1,1	16,5	17,2	19,2	2,7	23,1	25,8	22,1	-1,0	11,6	14,2	15,7	4,1
5 - 20 m. ECU	19,9	19,8	19,2	-0,7	13,1	13,0	12,3	-0,8	13,1	13,7	14,7	1,6	23,6	25,4	25,0	1,4	17,7	17,5	16,8	-0,9
20 - 50 m. ECU	18,3	20,3	20,3	2,0	11,9	12,1	10,4	-1,5	11,8	11,7	11,9	0,1	24,4	26,1	24,3	-0,1	16,7	17,5	15,1	-1,6
50 - 100 m. ECU	16,9	21,8	19,3	2,4	9,9	9,6	9,1	-0,8	9,8	9,6	9,3	-0,5	23,5	25,4	21,2	-2,3	18,0	15,0	13,2	-4,8
> 100 m. ECU	15,7	10,9	11,4	-4,3	8,5	7,3	5,9	-2,6	8,7	8,3	7,8	-0,9	18,9	20,0	22,0	3,1	16,5	17,5	15,5	-1,0

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group & associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / CHIFFRE D'AFFAIRES 1993

### Manufacturing industries. NET EQUITY / NET TURNOVER. 1993

Table 1-15

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	9,0	19,2	33,6	1,3	8,5	17,4	31,1	1,3	2,5	7,2	15,6	1,9	7,4	16,8	31,3	1,4	14,5	29,0	49,8	1,2
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	12,0	23,9	40,4	1,2	9,8	19,5	33,7	1,2	3,7	9,9	20,4	1,7	9,6	20,3	36,9	1,3	18,1	34,3	58,1	1,2
2.2 Investment goods and consumer durables	9,0	18,2	31,9	1,3	9,1	17,6	32,4	1,3	2,6	7,4	16,3	1,9	7,6	16,8	31,0	1,4	16,0	30,3	50,0	1,1
2.3 Non-durable consumption goods	7,4	17,7	30,8	1,3	7,4	15,7	28,7	1,4	2,1	6,1	13,6	1,9	6,6	15,1	28,4	1,4	13,2	26,7	46,5	1,2
3. <b>By size of company :</b>																				
< 5 m. ECU	-1,5	12,4	28,7	2,4	7,1	15,4	28,9	1,4	1,1	4,5	10,2	2,0	6,5	17,3	34,3	1,6	13,5	26,9	48,2	1,3
5 - 20 m. ECU	8,1	17,6	31,2	1,3	9,4	18,4	31,7	1,2	2,7	7,1	14,5	1,7	7,8	16,1	28,8	1,3	16,1	30,6	50,4	1,1
20 - 50 m. ECU	9,3	20,4	33,6	1,2	11,1	21,3	35,9	1,2	5,0	11,6	21,2	1,4	8,4	16,8	29,4	1,3	18,7	35,2	49,8	0,9
50 - 100 m. ECU	14,8	29,0	43,7	1,0	11,6	21,7	36,9	1,2	7,1	14,2	24,8	1,2	9,4	17,7	31,6	1,3	16,0	35,6	64,0	1,3
> 100 m. ECU	14,5	20,8	35,4	1,0	12,7	22,8	38,6	1,1	10,1	17,8	30,0	1,1	9,2	19,1	33,5	1,3	13,0	26,8	43,1	1,1

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## RESSOURCES FINANCIÈRES / CHIFFRE D'AFFAIRES. Moyenne pondérée

### Manufacturing industries. FINANCIAL RESOURCES<sup>(\*)</sup> / NET TURNOVER. Weighted mean

Table 1-16

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	43,5	46,2	46,1	2,6	40,5	41,4	42,7	2,2	33,0	33,2	35,5	2,5	51,7	52,6	52,4	0,7	56,7	55,4	52,0	-4,7
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	45,4	47,3	47,0	1,6	46,4	42,9	51,9	5,5	44,5	46,6	48,1	3,6	55,9	56,8	55,1	-0,8	83,0	80,0	69,9	-13,1
2.2. Investment goods and consumer durable	39,0	40,5	42,8	3,8	38,6	38,5	41,0	2,4	29,1	29,1	31,9	2,8	54,1	54,0	53,8	1,7	42,7	41,8	38,5	-4,2
2.3. Non-durable consumption goods	46,9	51,9	48,7	1,5	38,9	39,0	38,0	-0,9	13,6	28,4	29,7	16,1	48,2	48,2	49,3	1,1	54,1	55,5	55,9	1,8
3. <b>By size of company :</b>																				
< 5 m. ECU	50,1	48,4	49,6	-0,5	34,8	35,5	36,5	1,7	29,3	30,1	33,1	3,8	57,7	59,4	58,0	0,3	60,2	65,9	65,4	5,2
5 - 20 m. ECU	43,9	44,7	48,1	4,2	36,8	38,0	39,4	2,6	28,0	28,9	31,0	3,0	51,5	52,9	52,5	1,0	61,9	62,0	64,4	2,5
20 - 50 m. ECU	45,0	47,8	48,2	3,2	39,4	40,9	41,2	1,8	30,6	31,8	33,7	3,1	54,0	54,7	52,1	-1,9	63,9	68,0	61,9	-2,0
50 - 100 m. ECU	51,3	56,7	61,9	10,6	40,2	42,5	43,7	3,5	32,4	33,2	33,4	1,0	52,3	56,4	52,4	0,1	76,6	65,1	72,0	-4,6
> 100 m. ECU	40,6	42,8	40,4	-0,2	41,9	42,3	43,7	1,8	33,8	33,8	36,3	2,5	50,0	49,8	51,7	1,7	50,2	49,6	44,4	-5,8

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## ACTIF CORRIGÉ / CHIFFRE D'AFFAIRES. Moyenne pondérée

### Manufacturing industries. TOTAL ASSETS / NET TURNOVER. Weighted mean

Table 1-17

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	89,1	89,8	88,2	-0,9	79,4	79,6	82,5	3,1	70,7	72,4	78,5	7,8	95,7	99,6	97,9	2,2	91,9	93,7	97,4	5,5
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	89,3	91,8	92,3	3,0	81,1	85,9	89,1	8,0	84,0	87,5	94,9	10,9	101,3	108,2	100,4	-0,9	123,2	130,1	129,8	6,6
2.2. Investment goods and consumer durable	92,0	88,3	88,6	-3,4	89,5	86,9	92,6	3,1	70,8	72,5	79,6	8,8	104,1	110,1	110,0	5,9	82,5	81,1	86,4	3,9
2.3 Non-durable consumption goods	85,8	89,3	82,4	-3,9	67,6	67,4	66,5	-1,1	50,9	50,4	53,1	2,2	83,1	83,5	85,4	2,3	79,6	83,1	86,8	7,2
3. <b>By size of company :</b>																				
< 5 m. ECU	86,6	82,2	84,2	-2,4	63,6	63,9	65,2	1,6	51,9	52,3	57,5	5,6	100,4	104,3	109,3	8,9	87,0	94,6	96,4	9,4
5 - 20 m. ECU	77,2	77,3	83,3	6,1	65,3	66,1	68,5	3,2	47,6	53,5	56,4	8,8	90,6	93,7	94,2	3,6	90,4	89,2	96,3	5,9
20 - 50 m. ECU	79,6	84,1	82,9	3,3	69,5	70,7	71,8	2,3	60,0	62,0	63,0	3,0	93,9	97,0	92,5	-1,4	95,3	102,6	97,5	2,2
50 - 100 m. ECU	90,0	97,0	100,9	10,9	71,7	74,9	75,1	3,4	63,6	55,7	65,5	1,9	93,5	101,2	94,1	0,6	109,3	105,0	115,0	5,7
> 100 m. ECU	93,5	91,3	87,0	-6,5	86,4	86,0	89,0	2,6	74,6	80,7	92,7	18,1	98,1	102,6	101,7	3,6	88,4	90,2	94,6	6,2

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / ACTIF CORRIGÉ. Moyenne pondérée

### Manufacturing industries. NET EQUITY / TOTAL ASSETS. Weighted mean

Table 1-18

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	26,5	29,7	29,8	3,3	32,0	34,3	34,2	2,2	30,7	30,1	30,7	0,0	25,3	22,9	23,7	-1,6	38,3	35,0	30,3	-8,0
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	30,9	32,8	31,0	0,1	35,0	37,6	39,5	4,5	38,8	38,5	37,1	-1,7	30,2	25,7	24,2	-6,0	42,3	35,5	31,2	-11,1
2.2. Investment goods and consumer durable	22,4	26,6	28,8	6,4	27,7	29,8	28,2	0,5	26,7	26,2	27,4	0,7	22,0	19,9	22,0	0,0	29,7	27,0	20,6	-9,1
2.3 Non-durable consumption goods	26,3	29,1	29,6	3,3	35,8	37,4	38,5	2,7	28,3	28,4	30,3	2,0	25,4	24,3	25,3	-0,1	45,1	43,8	41,7	-3,4
3. <b>By size of company :</b>																				
< 5 m. ECU	18,6	18,6	22,7	4,1	29,1	30,2	32,2	3,1	13,1	13,0	12,7	-0,4	24,4	23,0	22,6	2,2	40,7	38,6	38,8	-1,9
5 - 20 m. ECU	23,2	25,5	25,8	2,6	30,8	32,2	34,0	3,2	18,9	18,7	19,5	0,6	23,4	22,2	22,4	-1,0	41,7	42,6	41,0	-0,7
20 - 50 m. ECU	27,0	27,7	28,1	1,1	33,4	35,1	36,9	3,5	23,5	23,7	25,7	2,2	24,5	23,0	24,1	-0,4	42,7	42,4	40,0	-2,7
50 - 100 m. ECU	29,1	29,7	33,1	4,0	35,7	36,3	37,7	2,0	27,5	31,8	28,1	0,6	24,6	24,1	26,9	2,3	47,2	38,0	43,2	-4,0
> 100 m. ECU	26,1	30,9	29,9	3,8	31,6	34,3	33,5	1,9	32,7	30,1	28,8	-3,9	26,5	22,7	23,4	-3,1	34,4	31,5	23,9	-10,5

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## DETTES FINANCIÈRES / CHIFFRE D'AFFAIRES. Moyenne pondérée

### Manufacturing industries. FINANCIAL CREDITORS<sup>(\*)</sup> / NET TURNOVER. Weighted mean

Table 1-19

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	19,9	19,5	19,8	-0,1	15,1	14,1	14,5	-0,6	11,3	11,5	11,4	0,1	27,5	29,8	29,2	1,7	21,5	22,6	22,5	1,0
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	17,8	17,2	18,4	0,6	18,0	16,6	16,7	0,9	11,9	12,9	12,9	1,0	25,3	29,0	30,8	5,5	30,9	32,5	29,4	-1,5
2.2. Investment goods and consumer durable	18,4	17,0	17,3	-1,1	13,8	12,6	14,9	0,0	10,2	10,1	10,1	-0,1	29,2	32,1	29,6	0,4	18,2	19,9	20,7	2,5
2.3 Non-durable consumption goods	24,5	25,9	24,3	-0,2	14,7	13,8	12,4	-1,1	13,6	14,1	13,6	0,0	27,1	27,9	27,7	0,6	18,2	19,1	19,7	1,5
3. <b>By size of company :</b>																				
< 5 m. ECU	34,0	33,1	30,5	-3,5	16,3	16,2	15,5	-0,8	22,5	23,3	25,7	3,2	33,2	35,4	33,3	0,1	24,8	29,4	28,0	3,2
5 - 20 m. ECU	26,0	25,0	26,6	0,6	16,7	16,7	16,1	-0,6	18,1	19,0	20,0	1,9	30,3	32,1	31,4	1,1	24,2	24,0	24,9	0,7
20 - 50 m. ECU	23,5	24,5	24,9	1,4	16,2	16,1	14,7	-1,5	16,5	17,1	17,5	1,0	31,0	32,4	29,8	-1,2	23,2	24,5	22,9	-0,3
50 - 100 m. ECU	25,1	27,9	28,5	3,4	14,6	15,3	15,4	0,8	14,9	15,6	15,0	0,1	29,3	32,0	27,1	-2,2	25,0	25,2	22,3	-2,7
> 100 m. ECU	16,2	14,6	14,4	-1,8	14,6	12,8	13,9	-0,7	9,4	9,6	9,6	0,2	24,0	26,5	27,9	3,2	19,8	21,2	21,8	2,0

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group & associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / CHIFFRE D'AFFAIRES. Moyenne pondérée

### Manufacturing industries. NET EQUITY / NET TURNOVER. Weighted mean

Table 1-20

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	23,6	26,6	26,3	2,7	25,4	27,3	28,2	2,8	21,7	21,8	24,1	2,4	24,2	22,8	23,2	-1,0	35,2	32,8	29,5	-5,7
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	27,6	30,1	28,6	1,0	28,4	32,3	35,2	6,8	32,6	33,7	35,2	2,6	30,6	27,8	24,3	-6,3	52,1	47,5	40,5	-11,6
2.2. Investment goods and consumer durable	20,6	23,5	25,5	4,9	24,8	25,9	26,1	1,3	18,9	19,0	21,8	2,9	22,9	21,9	24,2	1,3	24,5	21,9	17,8	-6,7
2.3. Non-durable consumption goods	22,4	26,0	24,4	1,7	24,2	25,2	25,6	1,4	14,4	14,3	16,1	1,7	21,1	20,3	21,6	0,5	35,9	36,4	36,2	0,3
3. <b>By size of company :</b>																				
< 5 m. ECU	16,1	15,3	19,1	3,0	18,5	19,3	21,0	2,5	6,8	6,8	7,3	0,5	24,5	24,0	24,7	0,2	35,4	36,5	37,4	2,0
5 - 20 m. ECU	17,9	19,7	21,5	3,6	20,1	21,3	23,3	3,2	9,9	10,0	11,0	1,1	21,2	20,8	21,1	-0,1	37,7	38,0	39,5	1,8
20 - 50 m. ECU	21,5	23,3	23,3	1,8	23,2	24,8	26,5	3,3	14,1	14,7	16,2	2,1	23,0	22,3	22,3	-0,7	40,7	43,5	39,0	-1,7
50 - 100 m. ECU	26,2	28,8	33,4	7,2	25,6	27,2	28,3	2,7	17,5	17,7	18,4	0,9	23,0	24,4	25,3	2,3	51,6	39,9	49,7	-1,9
> 100 m. ECU	24,4	28,2	26,0	1,6	27,3	29,5	29,8	2,5	24,4	24,3	26,7	2,3	26,0	23,3	23,8	2,2	30,4	28,4	22,6	-7,8

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

## INDUSTRIE MANUFACTURIÈRE

### PROVISIONS POUR RISQUES ET CHARGES / DETTES FINANCIÈRES + PROVISIONS POUR RISQUES ET CHARGES. Moyenne pondérée

#### Manufacturing industries. PROVISIONS FOR R & CH / FINANCIAL CREDITORS<sup>(\*)</sup> + PROV. R & CH. Weighted mean

Table

1-21

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	48,7	49,3	47,4	-1,3	22,5	24,2	24,9	2,4	65,5	66,2	68,6	-0,9	20,9	20,2	21,8	0,9	15,9	16,7	20,3	4,4
2. By BACH sector of activity <sup>(a)</sup> :																				
2.1. Intermediate products	52,7	53,3	53,8	1,1	16,3	22,9	23,7	7,4	67,5	67,2	69,1	1,6	21,1	20,5	20,9	-0,2	15,8	18,6	21,8	6,0
2.2. Investment goods and consumer durable	55,7	57,9	52,5	-3,2	34,1	34,7	32,6	-1,5	69,5	70,9	73,3	3,8	24,1	23,1	25,9	1,8	17,9	16,5	21,5	3,6
2.3 Non-durable consumption goods	33,0	32,8	32,5	-0,5	12,1	11,2	13,1	1,0	42,9	42,0	45,3	2,4	16,6	16,5	18,0	1,4	13,4	14,5	16,7	3,3
3. By size of company :																				
< 5 m. ECU	22,3	21,5	21,3	-1,0	5,0	5,3	6,3	1,3	22,6	22,1	21,8	-0,8	16,3	16,4	19,4	3,1	1,3	1,7	1,9	0,6
5 - 20 m. ECU	29,0	32,0	31,8	2,8	7,1	8,0	9,1	2,0	31,0	30,5	31,0	0,0	15,4	15,2	17,1	1,7	2,8	4,1	5,4	3,6
20 - 50 m. ECU	34,0	35,0	34,0	0,0	10,8	11,3	14,2	3,4	40,0	40,8	40,9	0,9	15,8	16,1	18,2	2,4	5,4	7,1	10,3	4,9
50 - 100 m. ECU	37,0	38,1	37,3	0,3	15,1	16,3	16,8	1,7	47,6	46,6	49,8	2,2	18,0	18,3	21,4	3,4	9,0	11,2	13,8	4,8
> 100 m. ECU	59,1	60,6	58,7	-0,4	29,3	31,9	31,1	1,8	72,5	73,1	75,1	2,6	26,6	25,3	25,7	-0,9	22,1	22,2	25,4	3,3

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group &amp; associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## DETTES ENVERS LES GROUPE ET ASSOCIÉS / DETTES TOTALES. Moyenne pondérée

### Manufacturing industries. AMOUNTS OWED TO GROUP & ASSOC. CO. / TOTAL CREDITORS<sup>(\*)</sup>. Weighted mean

Table 1-22

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	12,6	15,6	14,9	2,3	18,8	21,2	20,9	2,1	26,7	27,1	29,4	2,7	12,3	13,6	11,6	-0,7	19,8	22,3	28,9	9,1
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	13,2	19,2	16,7	3,5	22,8	21,1	26,3	3,5	37,1	35,3	42,9	5,8	21,8	22,5	16,3	-5,5	20,2	26,4	35,0	14,8
2.2. Investment goods and consumer durable	13,8	16,7	16,6	2,8	16,4	17,8	17,4	1,0	22,6	24,4	24,1	1,5	11,0	12,7	11,5	0,5	24,5	24,8	32,1	7,6
2.3. Non-durable consumption goods	10,5	10,2	10,9	0,4	19,4	20,9	22,0	2,6	25,2	24,9	26,5	1,3	6,5	7,5	8,2	1,7	11,3	13,1	15,4	4,1
3. <b>By size of company :</b>																				
< 5 m. ECU	5,6	8,3	7,4	1,8	8,6	8,8	9,4	0,8	13,0	14,0	15,3	2,3	2,8	3,6	4,3	1,5	6,8	3,3	2,7	-4,1
5 - 20 m. ECU	7,5	7,2	9,2	1,7	9,7	10,3	11,6	1,8	19,4	20,5	20,4	1,0	3,4	4,1	5,4	2,0	7,6	5,8	9,2	1,6
20 - 50 m. ECU	12,7	14,4	11,3	-1,4	13,3	14,3	14,4	1,9	24,4	23,5	25,8	-0,6	5,9	7,6	8,1	2,2	14,1	13,5	16,7	2,6
50 - 100 m. ECU	12,0	11,7	13,5	1,5	16,3	18,2	18,2	1,9	28,2	26,7	30,7	2,5	11,2	13,4	12,3	1,1	15,7	24,0	31,5	15,8
> 100 m. ECU	13,8	19,1	17,8	4,0	22,2	25,3	23,7	1,5	28,4	29,0	31,1	2,7	19,6	21,1	16,5	-3,1	24,5	26,7	34,2	0,7

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Commercial and non-commercial; group & associated included.

# INDUSTRIE MANUFACTURIÈRE

## EFFETS ESCOMPTÉS / DETTES FINANCIÈRES. Moyenne pondérée

### Manufacturing industries. TRADE BILLS DISCOUNTED / FINANCIAL CREDITORS<sup>(\*)</sup>. Weighted mean

Table 1-23

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. <b>Total firms</b>	N/A				8,8	8,7	8,3	-0,5	11,4	12,1	10,9	-0,5	9,1	8,6	7,5	-1,6	16,1	14,9	15,3	-0,8
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1. Intermediate products	N/A				12,5	10,8	10,4	-2,1	7,7	8,0	6,7	-1,0	5,6	4,9	3,4	-2,2	13,8	13,9	14,3	0,5
2.2. Investment goods and consumer durable	N/A				6,0	6,2	5,7	-0,3	15,8	16,3	15,4	-0,4	13,6	13,5	13,5	-0,1	13,3	10,6	12,8	-0,5
2.3. Non-durable consumption goods	N/A				8,8	9,4	9,8	1,0	5,8	7,7	5,7	-0,1	6,1	5,6	4,4	1,7	22,5	22,0	19,9	-2,6
3. <b>By size of company :</b>																				
< 5 m. ECU	N/A				23,0	22,6	22,1	-0,9	2,6	2,6	2,5	-0,1	4,7	4,9	4,7	0,0	21,5	22,0	24,3	2,8
5 - 20 m. ECU	N/A				18,6	19,0	19,3	0,7	4,5	4,6	4,1	-0,4	9,0	8,3	6,0	-3,0	30,3	31,7	29,1	-1,2
20 - 50 m. ECU	N/A				12,5	11,2	11,5	-1,0	6,2	6,9	6,1	-0,1	8,9	8,3	5,8	-3,1	27,9	28,1	25,8	-2,1
50 - 100 m. ECU	N/A				9,3	8,9	8,3	-1,0	5,9	7,2	7,7	-1,8	8,8	6,6	5,7	-3,1	18,2	19,6	17,5	-0,7
> 100 m. ECU	N/A				4,6	4,3	4,4	-0,2	15,1	15,6	13,7	-1,4	10,0	10,2	9,9	-0,1	9,7	7,6	10,1	0,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Group & associated companies and amounts owed to leasing companies excluded.

# INDUSTRIE MANUFACTURIÈRE

## DETTES FINANCIÈRES / CHIFFRE D'AFFAIRES 1993

### Manufacturing industries. FINANCIAL CREDITORS / NET TURNOVER. 1993

Table 1-24

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	7,2	19,2	34,8	1,4	4,3	11,2	21,3	1,5	6,4	15,0	29,5	1,5	8,6	23,8	42,7	1,4	4,4	16,0	33,5	1,8
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	6,9	19,1	35,7	1,5	5,2	12,6	22,9	1,4	4,8	12,6	28,1	1,8	8,4	23,4	41,5	1,4	4,2	16,7	33,7	1,8
2.2 Investment goods and consumer durables	7,9	19,6	35,4	1,4	3,9	10,4	20,0	1,5	6,6	15,4	30,4	1,5	7,6	23,3	42,4	1,5	3,8	16,7	34,8	1,9
2.3 Non-durable consumption goods	6,7	18,6	33,6	1,4	4,0	10,5	20,6	1,6	6,9	15,4	28,8	1,4	9,5	24,3	43,2	1,4	4,6	15,4	32,1	1,8
3. <b>By size of company :</b>																				
< 5 m. ECU	9,3	25,2	49,9	1,6	4,3	11,1	21,2	1,5	8,9	19,2	35,6	1,4	2,9	22,1	45,2	1,9	3,3	15,7	34,4	2,0
5 - 20 m. ECU	6,4	19,2	34,5	1,5	5,0	12,3	22,2	1,4	6,5	14,7	27,8	1,4	12,4	25,0	41,6	1,2	6,1	16,8	33,4	1,6
20 - 50 m. ECU	10,0	20,3	33,9	1,2	4,3	10,4	20,7	1,6	4,9	11,9	25,0	1,7	11,3	24,3	40,2	1,2	5,2	15,1	30,8	1,7
50 - 100 m. ECU	7,2	19,3	42,2	1,8	3,4	9,1	19,2	1,7	3,9	9,3	21,7	1,9	10,3	21,2	37,2	1,3	4,2	13,2	28,4	1,8
> 100 m. ECU	3,4	11,4	26,5	2,0	2,4	5,9	17,2	2,5	3,3	7,7	18,2	1,9	8,1	22,0	37,1	1,3	3,7	15,5	32,2	1,8

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / ACTIF CORRIGÉ 1993

### Manufacturing industries. NET EQUITY / TOTAL ASSETS. 1993

Table 1-25

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$	Q1	MED	Q3	$\frac{Q3 - Q1}{MED.}$
1. <b>Total firms</b>	13,4	26,0	41,3	1,1	16,1	30,0	46,7	1,0	5,6	15,6	30,6	1,6	9,7	19,9	33,0	1,2	22,0	39,5	59,2	0,9
2. <b>By BACH sector of activity<sup>(a)</sup>:</b>																				
2.1 Intermediate products	16,8	31,2	46,6	1,0	19,0	32,9	48,7	0,9	8,6	19,6	35,7	1,4	11,7	23,3	37,9	1,1	24,4	42,2	62,4	0,9
2.2 Investment goods and consumer durables	13,7	23,8	37,1	1,0	15,8	29,8	46,4	1,0	5,3	14,7	29,0	1,6	8,8	19,0	31,7	1,2	19,9	37,5	57,7	1,0
2.3 Non-durable consumption goods	11,2	27,4	42,5	1,1	15,5	29,2	45,8	1,0	5,3	14,8	30,1	1,7	9,6	19,5	31,7	1,1	21,6	38,9	58,9	1,0
3. <b>By size of company :</b>																				
< 5 m. ECU	-3,2	17,3	36,6	2,3	13,7	28,1	45,4	1,1	2,2	10,0	22,8	2,1	8,0	19,6	33,8	1,3	20,5	39,1	60,8	1,0
5 - 20 m. ECU	11,3	24,8	41,8	1,2	17,7	30,8	47,0	1,0	6,3	15,8	29,8	1,5	10,5	19,8	31,8	1,1	24,4	39,3	59,2	0,9
20 - 50 m. ECU	14,8	27,8	41,1	0,9	20,4	34,1	50,2	0,9	10,9	22,0	35,8	1,1	11,5	20,7	33,0	1,0	24,9	42,2	57,9	0,8
50 - 100 m. ECU	20,3	30,7	46,2	0,8	21,1	33,5	49,6	0,9	14,2	24,8	37,7	0,9	12,9	21,9	36,1	1,1	26,3	39,8	61,2	0,9
> 100 m. ECU	19,4	27,6	36,7	0,6	21,6	35,7	48,2	0,7	17,3	28,8	40,4	0,8	12,6	22,6	36,1	1,0	17,4	37,4	53,0	1,0

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

## INDUSTRIE MANUFACTURIÈRE

### FONDS PROPRES / RESSOURCES FINANCIÈRES. Médiane

**Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup>. Median.**

Table 1-26

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	49,5	49,9	50,9	1,4	56,2	58,1	62,1	5,9	34,2	33,3	34,1	-0,1	42,3	39,3	42,6	0,3	66,5	65,1	65,1	1,4
2.1 Intermediate products	56,9	58,6	60,3	3,4	55,8	58,0	62,3	6,5	43,7	44,7	45,6	1,9	48,2	44,9	47,7	-0,5	71,1	68,7	68,1	-3,0
< 5 m. ECU	44,5	52,4	42,0	-2,5	54,2	55,7	60,7	6,5	23,8	24,2	22,1	-1,7	50,6	46,7	54,0	3,4	70,9	67,0	66,5	-4,4
5 - 20 m. ECU	44,2	55,2	56,4	12,2	54,9	56,5	60,7	5,8	44,8	46,0	42,4	-2,4	46,4	43,1	43,3	-3,1	66,3	66,5	63,5	-2,8
20 - 50 m. ECU	70,4	70,4	64,2	-6,2	60,5	61,6	67,4	6,9	52,0	56,2	58,0	6,0	45,6	41,5	41,7	-3,9	75,6	74,0	73,2	-2,4
50 - 100 m. ECU	58,5	54,9	65,4	-0,1	72,6	76,8	75,4	2,8	62,4	59,0	56,0	-6,4	45,8	51,4	46,1	0,3	74,7	77,4	78,4	4,0
> 100 m. ECU	54,7	58,2	64,8	10,1	71,6	76,0	78,2	6,6	73,6	72,3	75,0	1,4	59,1	53,2	51,6	-7,5	70,8	68,7	68,6	-2,2
2.2 Investment goods and consumer durables	46,8	47,9	48,4	1,6	61,4	63,6	66,5	5,1	34,9	34,0	33,8	-1,1	43,5	39,7	43,9	0,4	66,7	64,9	65,5	-1,2
< 5 m. ECU	27,2	25,4	27,4	0,2	59,2	59,2	62,4	3,2	24,7	23,6	21,0	-3,7	45,2	40,7	48,9	3,7	73,3	70,4	66,0	-7,3
5 - 20 m. ECU	42,1	43,6	44,3	2,2	60,5	65,2	66,7	6,2	34,9	33,9	33,8	-1,1	41,6	37,9	39,1	-2,5	60,1	63,9	65,4	5,3
20 - 50 m. ECU	46,2	44,9	45,1	-1,1	66,0	67,9	72,6	6,6	47,5	48,0	48,3	0,8	43,7	39,6	41,4	-2,3	62,1	56,2	63,1	1,0
50 - 100 m. ECU	54,0	50,3	58,9	4,9	62,1	69,3	70,6	8,5	57,4	61,7	63,5	6,1	45,2	45,2	49,2	4,0	53,9	54,9	64,3	10,4
> 100 m. ECU	60,1	70,2	73,5	13,4	67,4	73,6	78,1	10,7	66,0	65,1	68,9	2,9	48,6	45,4	43,2	-5,4	67,7	56,9	60,8	-6,9
2.3. Non-durable consumption goods	47,3	45,7	49,6	2,3	53,7	55,4	59,8	6,1	29,9	29,1	30,2	0,3	38,7	36,2	39,2	0,5	65,1	63,5	64,0	-1,1
< 5 m. ECU	36,7	30,9	21,3	-15,4	52,0	54,6	58,9	6,9	20,8	19,6	19,2	-1,6	39,4	36,6	44,0	4,6	67,4	63,4	64,4	-3,0
5 - 20 m. ECU	42,0	40,8	50,3	8,3	50,7	53,1	57,1	6,4	30,7	30,8	29,1	-1,6	38,1	35,3	35,8	-2,3	62,6	61,2	59,8	-2,8
20 - 50 m. ECU	52,9	44,8	46,1	-6,8	56,0	56,8	63,1	7,1	44,1	41,3	43,2	-0,9	36,3	36,7	37,6	1,3	63,6	65,8	68,4	4,8
50 - 100 m. ECU	55,1	48,7	50,6	-4,5	60,9	60,6	61,7	0,8	48,3	44,2	47,1	-1,2	38,2	34,7	41,4	3,2	60,5	70,1	71,5	1,1
> 100 m. ECU	53,9	58,5	66,2	12,3	73,3	74,7	81,1	7,8	63,4	62,5	67,6	4,2	51,6	53,7	48,0	-3,6	72,9	73,6	70,8	-2,1

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / RESSOURCES FINANCIÈRES – LIQUIDITÉ. Médiane

Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. NET EQUITY / FINANCIAL RESOURCES<sup>(\*)</sup>-LIQUIDITY. Median.

Table 1-27

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	53,3	54,3	55,0	1,7	61,0	63,4	68,3	7,3	35,9	34,6	35,8	-0,1	45,1	41,6	45,1	0,0	72,0	68,9	68,7	-3,3
2.1 Intermediate products	61,0	62,4	64,7	3,7	62,1	64,0	68,6	6,5	46,1	46,1	48,5	2,4	52,1	48,1	50,4	-1,7	74,4	72,8	71,2	-3,2
< 5 m. ECU	37,6	55,3	42,0	4,4	60,2	61,9	66,8	6,6	22,1	23,6	21,8	-0,3	54,1	49,4	56,2	2,1	79,6	71,6	70,8	-8,8
5 - 20 m. ECU	46,1	58,8	65,5	19,4	59,0	60,8	66,9	7,9	46,8	46,7	45,4	-1,4	50,1	46,0	46,8	-3,3	68,9	70,9	66,9	-2,0
20 - 50 m. ECU	83,0	81,9	66,3	-16,7	69,1	69,6	71,8	2,7	56,8	61,5	64,6	7,8	47,7	44,4	44,8	-2,9	77,8	77,8	74,6	-3,2
50 - 100 m. ECU	61,5	62,3	71,5	10,0	80,1	80,9	87,6	7,5	66,0	65,1	63,6	-2,4	51,0	53,9	48,4	-2,6	77,9	80,3	79,8	1,9
> 100 m. ECU	62,8	60,4	57,7	-5,1	76,2	80,4	80,5	4,3	77,4	78,5	79,0	1,6	61,8	55,4	55,1	-6,7	70,1	69,8	69,5	-0,6
2.2 Investment goods and consumer durables	50,8	50,8	51,7	0,9	64,5	68,4	71,7	7,2	36,3	34,7	35,8	-0,5	46,6	42,1	46,4	-0,2	70,5	67,9	67,8	-2,7
< 5 m. ECU	27,5	26,9	30,3	2,8	60,2	61,4	66,0	5,8	24,6	22,6	20,8	-3,8	48,1	42,7	49,4	1,3	82,7	74,2	70,4	-12,3
5 - 20 m. ECU	47,6	48,2	44,6	-3,0	67,4	72,6	72,8	5,4	36,6	35,6	35,8	-0,8	44,6	40,4	42,7	-1,9	65,2	66,8	67,7	2,5
20 - 50 m. ECU	48,5	49,2	50,1	1,6	69,2	71,7	80,4	11,2	49,0	51,9	51,1	2,1	46,9	42,2	46,7	-0,2	66,0	58,3	63,2	-2,8
50 - 100 m. ECU	57,8	54,9	64,6	6,8	62,6	71,4	72,7	10,1	61,0	65,3	71,5	10,5	50,6	46,4	53,4	2,8	54,4	55,6	65,5	11,1
> 100 m. ECU	73,5	78,1	77,7	4,2	73,8	75,9	83,4	9,6	68,8	68,0	73,8	5,0	53,0	49,5	47,9	-5,1	69,6	56,9	62,2	-7,4
2.3. Non-durable consumption goods	52,2	50,0	52,1	-0,1	58,5	60,1	66,4	7,9	31,9	30,7	31,1	-0,8	41,0	38,6	41,4	0,4	70,8	68,0	67,8	-3,0
< 5 m. ECU	30,0	39,5	20,9	-9,1	56,3	59,1	65,0	8,7	20,7	19,6	18,7	-2,0	41,2	38,5	44,1	2,9	75,0	68,6	69,7	-5,3
5 - 20 m. ECU	46,0	42,4	51,7	5,7	56,4	57,7	63,1	6,7	32,8	33,3	30,3	-2,5	40,3	37,8	38,5	-1,8	65,8	65,1	64,3	-1,5
20 - 50 m. ECU	54,7	49,6	49,5	-5,2	64,9	61,5	69,4	4,5	47,5	45,4	45,5	-2,0	39,7	39,1	41,9	2,2	67,7	69,3	70,3	2,6
50 - 100 m. ECU	70,3	52,7	61,2	-9,1	69,1	67,5	69,5	0,4	50,3	47,3	48,7	-1,6	40,5	38,4	44,1	3,6	64,2	70,2	71,8	7,6
> 100 m. ECU	57,4	66,6	75,2	17,8	80,3	81,4	86,7	6,4	68,4	64,3	73,5	5,1	56,1	55,7	52,9	-3,2	74,7	76,8	71,2	-3,5

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

(\*) Net equity + Financial creditors (group & associated companies and amounts owed to leasing companies excluded).

# INDUSTRIE MANUFACTURIÈRE

## PROVISIONS POUR RISQUES ET CHARGES / DETTES FINANCIÈRES + PROVISIONS POUR RISQUES ET CHARGES. Médiane

### Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. PROV. FOR R & CH / FINANCIAL CREDITORS + PROV. R&CH. Median.

Table 1-28

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	33,9	34,8	34,7	0,76	1,2	1,3	1,7	0,5	28,7	34,9	35,3	6,6	16,8	16,4	19,8	3,1	0,0	0,0	0,0	0,0
2.1 Intermediate products	42,5	41,0	41,5	-1,0	1,3	1,4	1,7	0,4	36,6	36,3	37,5	0,9	17,6	17,1	19,8	2,3	0,0	0,0	0,0	0,0
< 5 m. ECU	37,5	23,2	21,1	-16,4	0,0	0,0	0,0	0,0	17,2	17,5	17,0	-0,2	18,9	18,7	25,0	6,1	0,0	0,0	0,0	0,0
5 - 20 m. ECU	35,5	36,1	34,5	-1,0	2,4	2,7	2,8	0,5	39,2	37,1	33,7	-5,5	16,1	15,3	17,0	0,9	0,0	0,0	0,0	0,0
20 - 50 m. ECU	54,3	47,2	43,9	-10,3	3,2	5,4	7,8	4,6	44,3	46,5	46,7	2,4	13,9	14,0	15,8	2,0	0,4	0,9	1,3	0,9
50 - 100 m. ECU	43,4	38,2	43,8	0,4	11,1	12,9	16,7	5,6	51,6	50,8	51,1	-0,5	16,2	19,9	18,8	2,6	6,0	7,4	11,8	5,8
> 100 m. ECU	55,9	59,1	55,4	-0,5	14,7	18,1	23,9	9,2	68,4	74,1	73,8	5,4	22,7	21,9	21,9	-0,8	11,2	15,7	27,8	16,6
2.2 Investment goods and consumer durables	34,1	35,4	34,9	0,7	4,5	4,6	5,1	0,6	30,8	30,2	30,6	-0,2	20,0	19,7	23,7	3,7	0,0	0,0	0,0	0,0
< 5 m. ECU	24,0	18,9	20,3	-3,6	0,1	0,3	0,6	0,4	21,3	20,0	19,7	-1,6	21,2	21,0	28,1	6,9	0,0	0,0	0,0	0,0
5 - 20 m. ECU	28,4	30,6	30,5	2,1	6,7	6,6	7,5	0,8	31,6	31,3	30,2	-1,4	18,3	17,7	20,1	1,8	0,0	0,0	0,0	0,0
20 - 50 m. ECU	31,4	35,4	34,6	3,3	13,0	17,1	21,6	8,6	43,3	45,6	44,3	1,0	18,8	18,3	21,5	2,7	0,0	0,0	0,1	0,1
50 - 100 m. ECU	48,5	45,8	43,0	-5,5	15,7	19,2	17,4	1,6	59,0	64,1	65,6	6,6	25,6	24,9	27,7	2,1	0,3	1,7	2,7	2,4
> 100 m. ECU	58,7	65,5	67,3	8,7	31,1	30,6	36,7	5,6	67,8	68,3	72,2	4,4	31,9	27,8	29,1	-2,8	13,6	10,2	13,2	-0,4
2.3. Non-durable consumption goods	29,6	30,7	31,0	1,4	0,5	0,6	0,8	0,4	23,3	22,6	23,3	0,0	13,9	13,6	16,3	2,4	0,0	0,0	0,0	0,0
< 5 m. ECU	22,6	22,2	18,6	-4,0	0,0	0,0	0,0	0,0	14,9	15,0	15,1	0,2	15,4	14,9	21,1	5,8	0,0	0,0	0,0	0,0
5 - 20 m. ECU	29,4	32,1	34,1	4,7	0,9	1,0	1,5	0,6	26,4	24,7	23,3	-3,1	12,8	12,1	13,8	1,0	0,0	0,0	0,0	0,0
20 - 50 m. ECU	30,3	27,1	28,8	-1,5	3,2	3,0	4,6	1,4	33,4	31,7	33,2	-0,2	12,9	13,0	13,9	1,1	0,0	0,0	0,0	0,0
50 - 100 m. ECU	30,2	32,8	38,6	8,5	5,9	5,7	5,6	-0,3	41,1	36,6	39,0	-2,1	13,6	12,9	16,4	2,9	0,7	0,9	2,1	1,4
> 100 m. ECU	41,8	38,9	43,9	2,2	8,8	13,0	16,1	7,3	54,0	55,9	58,8	4,8	21,1	22,9	22,3	1,3	5,7	11,1	17,1	11,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / CHIFFRE D'AFFAIRES. Médiane

### Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. NET EQUITY / NET TURNOVER. Median.

Table 1-29

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	17,4	19,4	19,2	1,8	15,3	16,2	17,4	2,1	6,7	6,7	7,2	0,5	17,3	16,6	16,8	-0,5	28,0	27,9	29,0	1,0
2.1 Intermediate products	19,6	23,0	23,9	4,3	16,8	18,1	19,5	2,7	8,9	8,9	9,9	1,0	20,9	20,1	20,2	-0,7	35,8	34,5	34,3	-1,5
< 5 m. ECU	12,1	18,4	14,0	1,9	14,8	15,6	16,9	2,1	5,4	5,2	5,3	-0,1	21,0	20,8	20,9	-0,1	30,5	28,2	29,6	-0,9
5 - 20 m. ECU	15,6	19,2	23,0	7,4	17,3	18,6	20,3	3,0	8,6	9,1	9,1	0,5	19,9	19,1	19,1	-0,8	38,2	38,5	34,8	-3,4
20 - 50 m. ECU	22,9	25,5	22,2	-0,7	21,3	23,3	24,8	3,5	11,8	13,4	11,4	-0,4	20,9	20,7	21,0	0,1	38,9	39,4	36,7	-2,2
50 - 100 m. ECU	28,4	31,8	37,3	8,9	26,8	25,8	28,6	1,8	17,2	12,6	12,9	-4,3	22,2	21,7	21,4	-0,8	39,5	38,9	38,8	-0,7
> 100 m. ECU	29,1	27,1	19,7	-9,4	25,3	28,1	30,0	1,7	19,6	19,5	19,6	0,0	25,8	21,2	23,4	-2,4	44,9	32,5	37,6	-7,3
2.2 Investment goods and consumer durables	16,6	17,1	18,2	1,6	15,7	16,6	17,6	1,9	7,0	6,8	7,4	0,4	17,4	16,7	16,8	-0,6	27,7	27,7	30,3	2,6
< 5 m. ECU	10,9	12,4	13,1	2,2	12,9	14,1	15,4	2,5	5,1	4,9	4,6	-0,5	17,6	16,9	16,7	-0,9	26,1	25,9	29,4	3,3
5 - 20 m. ECU	15,9	15,6	17,1	1,2	16,4	17,7	18,7	2,3	7,3	6,7	7,6	0,3	16,9	16,1	16,5	-0,4	28,3	30,1	33,3	5,0
20 - 50 m. ECU	17,4	18,2	20,3	2,9	19,8	23,0	24,4	4,6	11,1	11,2	12,1	1,0	18,3	17,3	18,2	-0,1	32,0	31,5	34,7	2,7
50 - 100 m. ECU	19,4	18,9	21,7	2,3	21,4	20,1	21,6	0,2	13,5	14,4	16,0	2,5	18,8	21,4	21,1	2,3	33,5	27,6	33,6	0,1
> 100 m. ECU	19,2	23,1	20,7	1,5	20,2	20,6	22,9	2,7	15,1	14,8	17,0	1,9	17,6	16,6	16,3	-1,3	22,8	23,9	24,7	1,9
2.3. Non-durable consumption goods	16,5	17,3	17,7	1,2	13,9	14,6	15,7	1,8	5,7	5,7	6,1	0,4	15,4	14,7	15,1	-0,3	25,4	25,8	26,7	1,3
< 5 m. ECU	12,2	12,6	7,1	-5,1	12,6	13,4	14,3	1,7	4,1	4,0	4,1	0,0	16,0	15,1	15,9	-0,1	23,6	23,9	24,8	1,2
5 - 20 m. ECU	14,2	14,2	16,1	1,9	14,6	15,5	16,6	2,0	5,9	5,9	6,0	0,1	14,9	14,4	14,4	-0,5	25,6	26,6	28,0	2,4
20 - 50 m. ECU	17,3	18,6	17,4	0,1	15,5	16,8	17,6	2,1	9,8	9,9	10,7	0,9	14,5	14,4	14,6	0,1	31,8	30,5	35,7	3,9
50 - 100 m. ECU	24,0	26,7	28,4	4,4	18,6	18,0	17,9	-0,7	11,1	11,6	12,7	1,6	13,6	13,6	14,1	0,5	36,6	37,3	35,1	-1,5
> 100 m. ECU	19,9	23,7	22,9	3,0	18,8	18,5	19,8	1,0	14,6	14,6	16,3	1,7	19,1	18,7	17,8	-1,3	28,8	28,9	26,1	-2,7

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## DETTES FINANCIÈRES / CHIFFRE D'AFFAIRES. Médiane

### Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. FINANCIAL CREDITORS / NET TURNOVER. Median.

Table 1-30

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	19,5	20,2	19,2	-0,3	12,2	12,1	11,2	-1,1	14,0	14,3	15,0	1,0	23,4	25,6	23,8	0,3	14,4	15,4	16,0	1,6
2.1 Intermediate products	17,3	18,1	19,1	1,8	13,7	13,9	12,6	-1,1	12,0	12,0	12,6	0,6	22,5	24,6	23,4	0,9	14,9	16,0	16,7	1,8
< 5 m. ECU	23,7	25,3	25,8	2,1	13,4	13,5	12,4	-1,0	17,3	16,3	18,7	1,4	20,9	23,3	20,4	-0,5	12,8	16,0	17,9	5,1
5 - 20 m. ECU	18,6	16,6	21,2	2,6	14,6	14,9	13,6	-1,0	10,6	10,8	12,0	1,4	23,5	24,9	24,5	1,0	19,5	17,8	18,2	-1,3
20 - 50 m. ECU	11,0	16,1	15,1	4,1	14,9	14,7	12,1	-2,8	8,5	8,8	9,0	0,5	24,9	27,3	25,9	1,0	12,5	14,1	18,4	5,9
50 - 100 m. ECU	18,6	26,4	20,7	2,2	10,5	9,6	7,5	-3,0	10,7	10,8	9,0	-1,7	25,7	26,4	27,5	1,8	14,7	12,3	7,2	-7,5
> 100 m. ECU	22,2	16,5	18,2	-4,0	11,2	8,8	8,9	-2,3	9,0	8,3	8,0	-1,0	19,8	23,4	23,5	3,7	21,2	19,6	21,0	-0,2
2.2 Investment goods and consumer durables	21,8	20,5	19,6	-2,2	10,9	10,7	10,4	-0,6	14,3	14,5	15,4	1,1	22,3	25,3	23,3	0,9	14,4	16,3	16,7	2,3
< 5 m. ECU	28,0	36,6	26,5	-1,4	10,7	11,1	10,5	-0,2	16,4	17,5	19,5	3,1	21,6	25,3	21,6	0,0	10,6	13,7	18,0	3,6
5 - 20 m. ECU	22,6	20,4	20,2	-2,4	11,3	10,7	10,8	-0,5	13,5	14,1	15,0	1,5	22,7	25,3	24,9	2,3	17,4	17,0	16,0	-1,4
20 - 50 m. ECU	24,1	23,6	21,0	-3,2	11,3	11,0	8,5	-2,8	12,5	11,5	12,1	-0,4	25,1	26,8	24,1	-1,1	20,0	21,7	14,9	-5,1
50 - 100 m. ECU	16,2	21,4	16,3	0,2	11,7	9,6	11,9	0,1	9,2	8,2	8,2	-1,0	22,8	26,0	20,6	-2,2	29,1	26,9	18,1	-11,0
> 100 m. ECU	12,6	8,0	7,4	-5,2	9,4	8,0	6,6	-2,8	7,8	7,5	6,6	-1,2	18,3	20,8	20,2	1,9	15,3	18,5	17,3	2,0
2.3. Non-durable consumption goods	18,9	20,1	18,6	-0,3	11,8	11,6	10,5	-1,3	14,3	14,9	15,4	1,1	24,6	26,2	24,3	-0,3	14,1	14,8	15,4	1,3
< 5 m. ECU	28,8	26,2	15,2	-13,6	12,0	11,4	10,5	-1,6	16,4	17,1	19,0	2,6	25,7	27,6	23,5	-2,2	11,8	13,9	14,5	2,7
5 - 20 m. ECU	18,0	19,8	18,2	0,2	12,8	12,8	12,0	-0,8	13,4	14,5	15,0	1,6	24,3	25,8	25,5	1,2	17,4	17,7	16,8	-0,6
20 - 50 m. ECU	19,0	20,0	20,3	1,3	10,6	10,9	9,9	-0,7	12,2	12,4	12,6	0,4	23,4	24,7	23,5	0,1	17,9	15,9	15,2	-2,7
50 - 100 m. ECU	17,2	15,7	19,2	2,0	8,6	10,4	8,3	-0,3	10,2	12,5	11,0	0,8	22,3	24,9	19,8	-2,6	17,5	11,1	18,1	0,6
> 100 m. ECU	14,7	12,5	11,9	-2,8	6,3	6,0	5,2	-1,1	10,1	9,0	9,0	-1,1	17,5	17,1	19,8	2,3	11,3	13,8	12,7	1,4

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España.

(a) BACH sectoral breakdown. European Commission, DG II.

# INDUSTRIE MANUFACTURIÈRE

## FONDS PROPRES / ACTIF CORRIGÉ. Médiane

### Manufacturing industries. Breakdown by sector and size<sup>(a)</sup>. NET EQUITY / TOTAL ASSETS. Median.

Table 1-31

AGGREGATION	AUSTRIA				FRANCE				GERMANY				ITALY				SPAIN			
	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91	1991	1992	1993	Variation 93-91
1. Total firms	25,0	25,6	26,0	1,0	26,6	28,2	30,0	3,4	15,6	15,3	15,6	-0,1	21,6	20,0	19,9	-1,6	24,8	40,1	39,5	14,7
2.1 Intermediate products	27,9	30,5	31,2	3,2	29,5	29,3	31,1	1,6	19,7	20,2	19,6	-0,1	23,1	23,4	23,3	0,1	46,3	44,0	42,2	-4,1
< 5 m. ECU	20,7	23,0	24,2	3,4	27,1	26,8	29,0	1,9	11,5	12,1	12,1	0,6	26,1	23,9	23,7	-2,4	46,5	43,2	41,8	-4,7
5 - 20 m. ECU	23,0	27,4	30,0	7,0	29,7	29,5	32,0	2,3	20,6	20,2	18,8	-1,8	24,2	22,3	22,2	-2,0	46,0	47,2	44,9	-1,1
20 - 50 m. ECU	31,2	35,8	35,8	4,5	33,1	33,8	36,5	3,4	24,1	25,9	25,7	1,6	24,3	23,3	24,1	-0,2	48,6	49,2	40,3	-8,3
50 - 100 m. ECU	30,8	30,6	37,2	6,4	39,6	37,2	40,0	0,5	29,3	27,0	24,0	-5,3	25,0	25,3	23,3	-1,8	46,7	38,2	37,1	-9,6
> 100 m. ECU	29,3	31,3	26,1	-3,2	35,9	35,8	36,9	1,0	32,6	30,8	30,2	-2,4	28,4	23,6	26,9	-1,5	42,2	39,1	42,2	0,0
2.2 Investment goods and consumer durables	23,3	22,9	23,8	0,5	26,4	28,2	29,8	3,4	15,4	14,8	14,7	-0,7	20,6	18,9	19,0	-1,6	40,0	38,6	37,5	-2,5
< 5 m. ECU	15,1	11,8	17,7	2,6	24,7	25,9	28,0	3,3	12,0	11,6	10,0	-2,0	21,0	19,1	18,9	-2,2	42,7	40,7	41,4	-1,3
5 - 20 m. ECU	23,4	21,3	22,0	-1,3	27,1	28,8	30,7	3,6	15,8	15,3	15,1	-0,7	20,1	18,8	18,9	-1,3	37,0	37,0	36,1	-0,9
20 - 50 m. ECU	23,6	25,2	25,2	1,6	29,0	32,2	35,0	6,0	20,0	19,6	20,8	0,8	20,6	18,3	19,8	-0,9	39,6	35,9	34,7	-4,9
50 - 100 m. ECU	27,7	23,4	25,0	-2,7	31,0	33,0	30,9	-1,0	21,9	23,7	24,6	2,7	20,6	20,8	22,1	1,5	32,4	29,4	35,4	3,0
> 100 m. ECU	24,1	27,5	25,5	1,4	30,0	33,2	31,0	1,0	24,7	22,9	25,6	0,9	19,5	18,2	18,9	-0,6	31,7	24,9	25,3	-6,4
2.3. Non-durable consumption goods	25,2	25,8	27,4	2,2	25,9	27,3	29,2	3,3	14,4	14,4	14,8	0,4	20,6	19,2	19,5	-1,1	40,8	39,6	38,9	-1,9
< 5 m. ECU	20,9	18,1	13,2	-7,7	23,7	24,9	27,3	3,6	10,3	9,9	9,5	-0,8	20,4	18,8	18,5	-1,9	38,8	38,0	37,6	-1,2
5 - 20 m. ECU	22,0	24,0	24,9	2,9	26,6	28,0	30,0	3,4	15,7	15,1	15,2	-0,5	20,5	19,3	19,5	-1,0	42,2	41,0	40,1	-2,1
20 - 50 m. ECU	28,1	26,6	28,2	0,1	28,7	30,3	31,8	3,1	21,8	21,4	21,6	-0,2	20,1	19,9	18,9	-1,2	44,6	40,4	43,7	-0,9
50 - 100 m. ECU	32,6	28,5	31,3	-1,3	31,5	31,2	31,5	0,1	24,1	24,7	25,6	1,5	19,1	17,9	21,1	1,9	46,1	47,9	39,9	-6,2
> 100 m. ECU	25,8	27,4	30,5	4,7	34,4	33,6	37,3	2,9	30,6	29,3	32,3	1,7	25,4	26,4	24,6	-0,8	41,3	42,7	41,9	0,6

Source: Oesterreichische Nationalbank, Banque de France, Deutsche Bundesbank, Centrale dei Bilanci and Banco de España

(a) BACH sectoral breakdown. European Commission, DG II.



## STATISTICAL REPROCESSING OF THE RATIOS

•€The various financial autonomy ratios were calculated without processing any case with a zero or negative denominator.<sup>42</sup> Three statistical indicators were selected:

- the mean obtained by dividing the sum of the ratios by the number of companies,
- the weighted mean (or mean ratio), which may be calculated by dividing the sum of the numerators by the sum of the denominators,
- the quartiles and, in particular, the median which, once the companies have been ranked in rising order of the ratios, separates the population examined into two equal parts.

•€These same statistical indicators were recalculated, excluding cases of zero or negative denominators.

•€In cases where the denominator is zero or negative, the ratio was calculated by assigning a predetermined external value according to the cases potentially arising. The latter were identified by examining the distribution of companies with a negative, zero or positive numerator respectively with a negative or zero denominator respectively. Then the case of ratios with both the numerator and the denominator zero or negative were distributed in the corresponding cases of positive, zero or negative debt.

After this, a ranking was established between the various case typologies and exogenous values allocated to each case so as to produce the same ranking of economic situations in numerical terms.

**For example**, for the indicator net equity/net equity + financial debt net of liquid assets:

- the case of positive net equity and negative net financial debt in excess of the absolute value of the net equity was considered representative of the best situation;
- the case of negative net equity with zero net debt was considered preferable to the case of negative net equity and positive net debt, but below the absolute value of net equity.

The first case was therefore assigned a higher numerical value than the second.

The numerical values were defined by studying the distribution of the indicators with a positive denominator only.

•€The mean ratios and quartiles were calculated on the basis of the new values of the indicators adjusted in this way. In fact, apart from the influence on the mean values, this

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<sup>42</sup> The net equity/net turnover ratio being excluded because negative turnover is impossible (cases of zero turnover were excluded at the company pre-selection stage).

reprocessing of the ratios with negative denominators and with positive numerators radically changes the company's relative position. It may also affect the values of the quartiles. It should not be forgotten however that the absence of reprocessing in the same case gives rise to a reduction of the mean whereas in fact, from an economic point of view, there is a reinforcement of the financial autonomy.

• Recalculating the mean ratios representative of the individual situations of firms is more complex. In fact, to maintain consistency between the mean of the numerators and the mean of the denominators<sup>43</sup> and the processing of the individual data, it was necessary to recalculate the denominators in order to make them consistent with the exogenous numerical values assigned, on the basis of the effective numerators. After having adjusted the denominators in this way, it was possible to calculate the mean ratios of the indicators.

The comparison between the mean values and the quartiles before and after adjustment showed that the few cases of indicators with zero or negative denominators had only a limited impact in the case of Italy (see below).

The presence of outliers also gives rise to problems, especially for the calculation of mean values for ratios.

The traditional technique, adopted in this study, involves retaining the companies with extreme values, but leaving aside the calculation of the means of the ratios and keeping to mean ratios and quartiles. In fact, the companies with extreme values are not generally so numerous that they affect the extreme quartiles.

On the other hand, they do influence the mean ratios, albeit slightly. To assess the actual impact, a second experiment was conducted (co-ordinated with the previous one) using the Italian data:

• The distributions of the indicators with positive denominators were studied and economically significant lower and upper thresholds were established;

• Using the same methodology, the denominator of the indicators with values below or above the respective thresholds was adjusted;

• The data with the denominator adjusted in this way was included with the adjustments of the first experiment (zero or negative denominators) and all the statistical parameters were recalculated.

The results obtained showed, in this case also, that the effect of the outliers on the mean ratios is limited.

For example, the indicator net equity/net equity + financial debt - liquid assets was calculated using 1991 data. The 19,953 Italian companies are distributed as follows on the basis of the signs of the numerator and the denominator.

<sup>43</sup> The mean ratio is a weighted mean:

$$\frac{\sum N(i)}{\sum D(i)} = \frac{\sum N(i)/n}{\sum D(i)/n} = \frac{N \text{ mean}}{D \text{ mean}} = \sum \frac{N(i) * D(i)}{D(i) \sum D(i)} = \sum r(i) * w(i)$$

where:

N = Numerator; D = Denominator; r = ratio N/D; w = the relative weight of the company in terms of the denominator; n = number of companies; i = indicates the i-th company

After having assigned r(i), given N(i), the compatible D(i) is calculated; then w(i) is determined and finally the mean ratio.

The presence of zero or negative denominators must be dealt with by substituting for those numerical values which cannot be calculated, or which are economically insignificant, predetermined values which reflect the actual position of the company.

Alternatively, it is possible to ignore these phenomena once their frequency has been reduced given that their impact on the final results of the processing is marginal and therefore unimportant.

Denominator	Numerator			Total	Percentage
	< 0	= 0	> 0		
< 0	113	0	302	415	2.1
= 0	0	0	1	1	
> 0	1,011	1	18,525	19,537	97.9
<b>TOTAL</b>	<b>1,124</b>	<b>1</b>	<b>18,828</b>	<b>19,953</b>	<b>100.0</b>

Source : Centrale dei bilanci

To deal with the outliers, the distribution of the 19,537 ratios with a positive denominator was studied by setting the lower and upper thresholds at -60% and +400% respectively. All the outliers were reduced to these thresholds.

Numerical values were assigned to the remaining 416 (= 415 + 1) companies in order to adhere to a ranking of situations: positive values in the cases of positive net equity (302 + 1) and negative values in the cases of negative net equity (113), differentiated on the basis of the sign for net debt.

After having adjusted the data and recalculated the denominators either because they were zero or negative, or because of extreme values, the following results were obtained for **all** the companies:

Percentage	Raw data (a)	Adjusted data (b)	Difference (a-b)	Percentage (a-b)/b
Mean ratios	59.66	59.20	0.46	0.8
Q1	28.81	29.44	-0.63	-2.1
Q2	52.13	52.94	-0.81	-1.5
Q3	83.25	85.19	-1.94	-2.3

Source : Centrale dei bilanci

The raw data and the adjusted data are very similar: the differences are very limited and do not alter the conclusions of the analysis.

This result naturally depends on the very low frequency of the companies with zero or negative denominators (2.1% of the total of some 20,000 companies) or with outlying values.

In the case of the other indicators, the frequency of the abnormal cases is even lower, cancelling out in fact the differences between raw and adjusted data.



## NON-PARAMETRIC TEST ON THE MEDIAN OF CERTAIN RATIOS<sup>44</sup>

The basic procedure for this test is as follows: a sample is formed from two sub-populations (size-country, sector-country, sector-size, etc.). The number of observations where the value of the ratio exceeds the median of the sample is then counted. The significance of the frequency observed for each of the sub-populations is tested using Chi<sup>2</sup>, which compares the observed frequency with the theoretical frequency. The latter is that obtained if the frequency in each sub-population is identical to that found in the sample as a whole.

R1: NET EQUITY/FINANCIAL RESOURCES (1)  
All industry

	AUSTRIA	ITALY	FRANCE	GERMANY
AUSTRIA		> (58.9/49.1)	< (41.3/51.4)	> (63.4/47.1)
ITALY	-		< (41.8/62.5)	> (52.4/45.0)
FRANCE	-	-		> (61.2/34.8)
GERMANY	-	-	-	

(1) Reading the table: from left to right - line by line. The frequency of companies (bracketed percentages) for which ratio R1 exceeds the median of the sample Austria + Italy is higher in Austria than in Italy (58.9% as opposed to 49.1% respectively), the differential being significant at the threshold of 5%. Ratio R1 is therefore higher (more often) in Austrian companies than in Italian companies (sign >).

The test therefore confirms the significance of the differentials observed between countries on the basis of the median and the distribution of ratio R1 as a whole.

The French companies have the highest level of capitalization of all those in the countries surveyed, followed by the Austrian companies, then the Italian and finally the German.

This general finding masks a small number of differences according to company size.

<sup>44</sup> Apart from Spain, for which no information was available at the time of the test.

	AUSTRIA	ITALY	FRANCE	GERMANY
<b>Size 1</b>				
AUSTRIA		< (41.4/50.2)	< (29.9/50.5)	> (59.8/49.5)
ITALY	-		< (44/58.2)	> (56.8/33.2)
FRANCE	-	-		> (63.5/25.9)
GERMANY	-	-	-	
<b>Size 2</b>				
AUSTRIA		> (59.4/48.9)	< (42.4/51.7)	> (60.9/47)
ITALY	-		< (41.8/65.8)	> (51.6/46.1)
FRANCE	-	-		> (62.0/35.4)
GERMANY	-	-	-	
<b>Size 3</b>				
AUSTRIA		> (59.1/47.2)	< (35.8/56.5)	NS *
ITALY	-		< (37.4/68.9)	< (46.5/55.0)
FRANCE	-	-		> (60.3/39.9)
GERMANY	-	-	-	
<b>Size 4</b>				
AUSTRIA		> (63.2/44.2)	< (42.7/53.9)	NS *
ITALY	-		< (37.4/65.7)	< (42.2/58.0)
FRANCE	-	-		< (57.6/43.7)
GERMANY	-	-	-	
<b>Size 5</b>				
AUSTRIA		> (64.1/43.7)	< (39.1/54.1)	NS *
ITALY	-		< (32.7/65.1)	< (37.5/58.2)
FRANCE	-	-		> (56.4/45.1)
GERMANY	-	-	-	

NS \* : not significant

The smallest Austrian companies (size 1) are less highly capitalized than their Italian counterparts, contrary to the finding from the sample as a whole. The ranking remains the same between the other countries.

No change is made to the overall analysis as regards the size 2 companies.

On the other hand, although no change appears in the ranking between Austria, Italy and France regarding size 3, it can be seen that the ratio is similar in Germany and Austria and that the German size 3 companies have greater financial autonomy than their Italian counterparts. This partial change in the ranking between companies of the different countries also appears in size 4 and size 5.

Overall, the small German companies (sizes 1 and 2) are the least autonomous. On the other hand, the larger German companies (sizes 3, 4 and 5), although still less autonomous than French companies of the same size, are in a similar situation to that of the Austrian firms and more autonomous than the Italian companies of comparable size.

BACH sector	AUSTRIA	ITALY	FRANCE	GERMANY
21				
AUSTRIA		> (59.1/48.9)	NS	> (58.6/46.7)
ITALY	-		< (42.1/55.8)	NS
FRANCE	-	-		> (52.3/39.1)
GERMANY	-	-	-	
22				
AUSTRIA		> (56.0/49.3)	< (37.5/52.4)	> (62.2/47.9)
ITALY	-		< (42.5/62.4)	> (53.4/44.9)
FRANCE	-	-		> (64.3/37.4)
GERMANY	-	-	-	
23				
AUSTRIA		> (59.4/49.1)	< (38.3/53.0)	> (64.8/46.7)
ITALY	-		< (42.8/70.6)	> (52.3/43.8)
FRANCE	-	-		> (68.6/34.1)
GERMANY	-	-	-	

The general finding holds for the investment goods and consumer durables and non-durable consumer goods sectors (22 and 23). Conversely, in the intermediate products sector, the Austrian and French companies, on the one hand, and the Italian and German companies, on the other, are in similar positions.

R 3 : NET EQUITY/NET TURNOVER  
All industries

	AUSTRIA	ITALY	FRANCE	GERMANY
AUSTRIA		> (60.1/48.9)	> (54.1/49.3)	> (75.9/44.4)
ITALY	-		< (46.9/54.7)	> (58.1/33.3)
FRANCE	-	-		> (63.0/32.3)
GERMANY	-	-	-	

The net equity turnover rate is slowest in Austria (Austrian companies need more net equity to produce 1 ecu of net turnover than their counterparts in the other countries) and, conversely, it is fastest in Germany.

The share of provisions in the total "provisions + financial creditors" is greater in the Austrian and German companies than in the Italian and French companies. It is higher in Italy than in France and in Austria than in Germany.