

BANCO DE ESPAÑA  
central de balances

French and Spanish  
industrial corporations  
over the period 1991-1999:  
a comparative study based  
on their financial statements

Common research Banco de España / Banque de France

BANCO DE ESPAÑA

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French and Spanish industrial  
corporations over the period 1991-1999:  
a comparative study based on their  
financial statements. Financial structure,  
performance and investment

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These represent the authors' personal opinions and do not necessarily  
reflect the views of the Banque de France and Banco de España

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This Central Balance Sheet Data Office monograph comprises a main text and two groups of annexes:

- Main text: *Introduction* and *Chapters I to IV*.
- Annexes: *Institutional factors*.
- Statistical annexes (available only at [www.bde.es](http://www.bde.es)).

The most relevant tables and graphs of the statistical annexes are also included in the main text, albeit retaining the numbering given to them in the annexes.

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## GENERAL INTRODUCTION

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## I. THE NEED FOR THE ANALYSIS OF EUROPEAN INDUSTRIAL CORPORATIONS

The 20<sup>th</sup> century, like those preceding it, has been marked by such significant milestones that it is difficult to agree on what is the phenomenon that has best characterised the flux of events over the past 100 years. Nonetheless, from the fresh perspective of the century in which this document has been drafted (with its accompanying information and communications technologies), it would not be out of place in the economic sphere to highlight the *paramount importance of industry during the recently concluded last century*. A straightforward comparison between 1900 and 2000 of citizens' daily life and of the societies in which they are organised offers clear evidence of the impact that industrial activity has had. As it advanced the 20<sup>th</sup> century witnessed the gradual population shift from rural areas to the cities and, in parallel, from agriculture and animal husbandry to industrial activities, with a subsequent move from the latter to services. The slow loss of weight of industrial activity across the global economy in recent decades in favour of services does not lessen the significance of industry. This is because of the continuing interrelatedness between the two and the *great significance of the study of industrial activity, due to its link to the business cycle and to the fact it is the driving force of cyclical accelerations and slow-downs*. Further, it is industrial activities which have been most affected by the opening up of domestic economies and, in this respect, *they have been first in line to face the challenges that competition and market globalisation pose for corporate structures in terms of costs, margins and prices, and – in sum – of employment-generating capacity and competitiveness*.

This change and challenge has proven to be of key importance in Europe. The latter part of the century saw, as a feature distinguishing Europe from other economic areas, the construction of a single market culminating in the emergence of a common currency. That more than justifies interest in gaining detailed knowledge of how European industrial corporations have evolved, from both an aggregate and macroeconomic perspective, and from a microeconomic or business standpoint. The latter may be done on the basis of the individual information available on the companies that report to the European Central Balance Sheet Data Offices, a task in fact pursued by the Committee of European Central Balance Sheet Data Offices (ECCB) since it was set up in 1987. The experience gained from the creation and use of the BACH (1) project, which revealed the problems of homogeneity in European accounting information, spurred the ECCB to undertake comparative studies among its member countries with a different methodological base. The documents "Equity of European Industrial Corporations. CECEB,

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(1) The BACH (Bank for the Accounts of Companies Harmonized) project was launched and promoted by the European Commission. Its participants are the central balance sheet offices or corresponding statistical services of the European Union countries, the United States and Japan.

1997” and “Corporate Finance in Europe from 1986 to 1996. CECB, 2000” looked into the differences in the level of capitalisation of German, Austrian, French, Spanish and Italian manufacturing companies, and the relation to the assets in which companies invest. These papers highlighted the *importance of analysing, along with the annual accounts of the non-financial corporations available, the information on the economic scenario*, which is important when explaining the differences found among countries and, in particular, on institutional factors. Briefly, these studies, which are available to those readers interested, revealed the existence of significant differences in financial structures, which are linked rather to the size of corporations than to their sector of activity. Finally, as stated, institutional factors (tax regime, bankruptcy law, access to financing from the banking system and bank-company relationships, etc.) were seen to exert considerable influence, providing, summing up, for the division of the countries analysed into two behavioural blocks [France and Spain share many aspects, compared with the group made up of Austria, Germany and Italy (the latter to a lesser extent)], although these factors could not be analysed in detail.

The findings of the studies confirmed the validity of the approach of using the data in the hands of central balance sheet data offices (CBSDO) (although these, as will later be seen, do not constitute a sample in statistical terms) and the advisability of pursuing the analysis of the corporate environment by means of bilateral country studies. The French and German central banks decided to build on prior studies, preparing in this connection the document “Corporate Finance in Germany and France. 1999”. The findings of this work have been widely disseminated through full editions and also in abridged versions in the economic bulletins of the two institutions.

## 2. FRENCH AND SPANISH INDUSTRIAL CORPORATIONS

Following the substantive approach described in the previous section, i.e. using corporations’ individual annual accounts and studying significant institutional factors, the Banque de France and Banco de España Central Balance Sheet Data Offices have analysed the aggregate of both countries’ industrial corporations over the period 1991-1999. The study did not confine itself to analysing financial structure, as was previously the case in the above-mentioned references. Rather, it widened the subject of study to analysing corporations’ results, in the broad sense of the term, namely the content of the profit and loss account (income, expenditure and surpluses), and derived ratios (from the P&L account directly or through comparing balance sheet data, as is the case with profitability or average collection and payment periods). To give a full picture of the position of and developments in industrial businesses, information on employment is included in the study, relating it to the significant accounting variables. Work has had to be conducted using a highly detailed volume of information. Thus, although on one hand previously undisclosed data have been provided, on the other, this means the timeframe of the study is restricted to 1999, and that data for 2000 are not included despite being available at the time of publication at both central balance sheet offices, since such data were being edited when the document was being drafted. The absence of data for 2000 in this study does not affect the main results obtained, given the nature of the work: *the aim of the analysis is to detect the differences and similarities between both countries’ industrial corporations, rather than to conduct a short-term economic study on recent developments relating to the aggregate.*

It was considered preferable to provide potential interested readers with all the information compiled on drafting the document and, at the same time, to minimise as far as possible the content of the main body of the text. Accordingly, the four chapters into which the document is divided, which are presented in the following points, have been relieved to some extent of references to the long-term macroeconomic environment, the descriptive sections relating

to institutional factors and the detailed statistics (the main statistics are included twice: in the text alongside the commentary and in the statistical annex), which are published at the end of the text in the form of annexes. The statistical annex is only published in the electronic version.

## 2.1. Gradual convergence between Spain and France. The macroeconomic environment

The analysis of both countries' Balance of Payments data highlights both the growing degree of interdependence between both economies and the need to acquire information about the similarities and differences between the two countries' non-financial corporations. While France is Spain's most important trading partner (in 1999, 13% of Spanish goods exports were for France and 15% of Spain's goods imports were from its neighbour), it is no less notable that bilateral trade between the two countries in the nineties was clearly in France's favour. At the end of the nineties, Spanish economy was more opened up than French economy. In Spain the weight of the exports over Spanish GDP was 27% and the weight of the imports was 29% while in France, these figures were 26% and 24% respectively. Chapter I ("The French and Spanish economies: a macroeconomic perspective") helps explain the rapid convergence between both economies over the past decade and offers some references that frame industrial corporations within their macroeconomic setting (economic growth, foreign trade, saving, investment and financing, the labour market, costs and prices, and monetary and financial conditions). Moreover, these references explain some of the reasons behind the balance sheet and ratio differences detected between both countries. However, the nominal convergence of the nineties has not prevented differential aspects remaining in place. Thus, for instance, the strong reduction in the price gap exists alongside the *dual inflation phenomenon*, which have a major intensity in the Spanish case. And net lending shown by the national accounts in the second half of the nineties, in a context of increase in national gross saving, came together with net financing to the external sector provided by the French economy, while in Spain, with the intense investment made by the Spanish economy, in step with the catching-up process. Annex I ("Fundamentals of the economic growth in France and Spain") briefly reviews the process of convergence between both countries over the last 30 years, which have seen Spain gradually catching France and Europe up. Connected with this process have been the changes in the Spanish labour market and the intensity of public investment in this period. Annex I addresses the conditioning factors of the process and underscores the determinant factors of competitiveness and of productivity in both countries (infrastructure, human capital and investment in technology), where France has a clear advantage in relation to Spain. Lastly, annex II summarises current French and Spanish labour market regulations, in those areas that may influence in the hiring process (minimum wage, collective bargaining arrangements, dismissal conditions, types of contract, regulation of the working day length, etc.). It further makes, in Spain's case, a historical reference to the main changes of recent years in connection with labour market liberalisation.

## 2.2. Population of corporations, samples and accounting standardisation

To analyse properly the results obtained from the study of the annual accounts reported by corporations to central balance sheet offices, the following should be defined beforehand: the portion of the differences attributable to the different composition of the population of corporations; the samples available (that are not statistically representative of the former); and lastly, the accounting practices used in both countries. Chapter II and its accompanying statistical annex provide full breakdowns of the composition of the population of French and Spanish non-financial corporations, of the industrial sector as a whole and, finally, of the samples used. It further addresses the general characteristics of the Spanish and French central balance sheet

## REAL GDP GROWTH



Source: OECD ADB database.

offices. Finally, it gives the methodological references on how the data for both countries have been homogenised to strip out the accounting differences in the underlying information, entailing the elimination of certain items and the estimation of others. As will later be seen in connection with the population structure, the study highlights both the bigger average dimension of French corporations compared with their Spanish counterparts, in all size brackets, and the slightly greater service-based orientation of French companies. The samples available show a bias in both countries towards large corporations and industries.

### 2.3. Results of the comparison between Spanish and French industrial corporations

Chapter III gives the results of the comparison of the information available in the French and Spanish central balance sheet offices on both countries' industries. The results are outlined in a text, a statistical annex and several text annexes (annexes III to VIII), allowing interested readers to learn of the degree of influence of the so-called institutional factors in the differences detected.

The chapter comprises two main sections, the first of which analyses the main differences between balance-sheet structures. Some of the conclusions reached in relation to this part of the study are highlighted:

- *Greater weight of tangible fixed assets in Spanish industries* compared with their French counterparts (13 percentage points on average). As will be seen, this does not affect the profitability ratios. Several factors account for this difference, including most notably the different weight of leased assets (this is greater in France) which, moreover,

have not been included in the balance sheet, so as to be able to homogenise the information between the two countries. Annex III offers a detailed review of the characteristics of asset leasing arrangements in both countries.

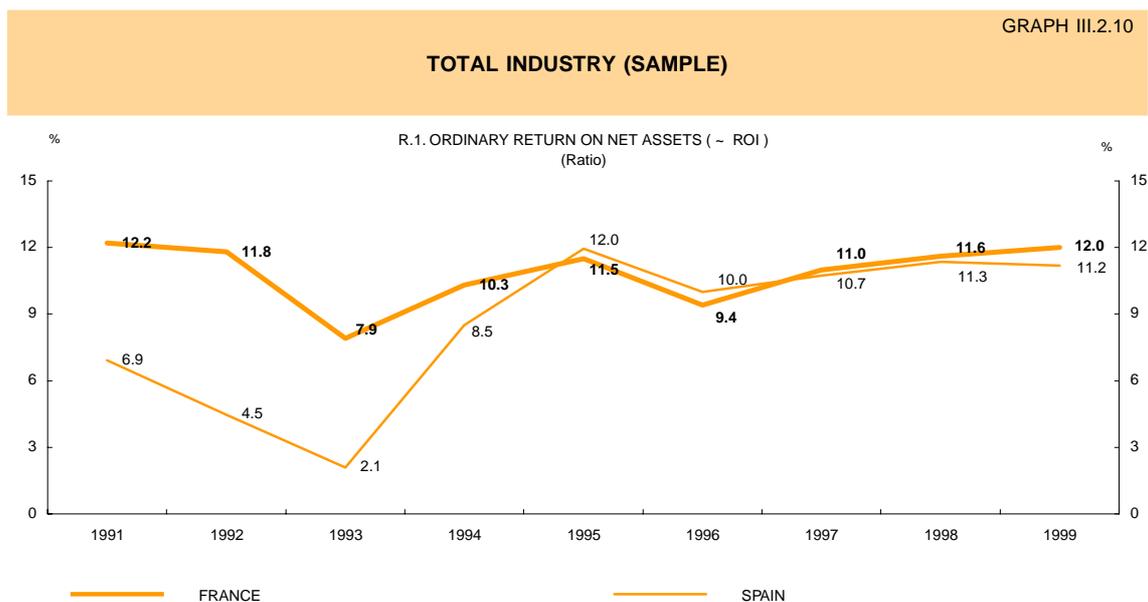
- *Greater maturity of French industries in organising French companies into corporate groupings.* Spanish corporations are lagging here, having only begun to follow this pattern at the end of the decade. The greater weight of financial investment in the shares and participations of French corporations (8 percentage points above Spain) would appear to demonstrate this. Annex IV, which gives an overview of the French and Spanish financial systems, may help clarify the interrelatedness of balance-sheet structural characteristics (on both the asset and liabilities sides) and how the respective financial systems are organised. Testifying to the improvement in *management techniques, inventory stocks have fallen uninterruptedly in both countries* over the period considered.
- *Gradual convergence in the weight of commercial assets and liabilities in both countries, with notable differences based on company size, owing to the favourable relative bargaining position of large corporations.*
- *Average maturity period collection from customers has not converged in all the sizes of corporations: it remains greater in small and medium corporations Spain's case.* That might be considered indicative of the commercial practices used in Spain, and represent an extra implicit financial cost arising for Spanish small and medium companies compared with their French counterparts.
- *Gradual convergence in both countries in their financing structures and in the division between fixed and current assets.*
- *Loss of weight of financial debt and, hereunder, bank-intermediated financing* in both economies. Annex V reviews legislation and specific procedures under bankruptcy law in both countries, the treatment of business failure and suspensions of payments to creditors, showing the similarity between both systems. Such is the similarity between both systems that it may be concluded that any differences in the financial structure of corporations will not arise from this factor.

Regarding financing structures, annex VI examines the social welfare systems financed or promoted by corporations for their employees (pension funds in both countries; *Épargne Salarial* in France), which explain the relatively low weight of these liabilities in companies' balance sheets.

The second section studies the current flows included in the profit and loss accounts, employment developments, performance and the data available on investment. The study does not set about analysing financing flows directly, though it does so indirectly through analysis of changes in the aforementioned balance sheets. As regards this second part of the chapter, the following aspects are of note:

- The two countries' industries show that their *activity and fund-generation capacity are tightly linked to developments in the general business cycle.* In Spain's case, fluctuations are relatively sharper than in France, during both growth phases and downturns.
- Both countries' industries have undergone *pressure on their surpluses owing to the fact that average compensation has outgrown the general level of prices.* Such behaviour, which





Despite its sound level, investment, which is theoretically influenced by these ratios, moved on a similar trend during the decade, and followed a dissimilar one in the two final years in both economies (in 1998 and 1999: on a rising trend in Spain and on a falling one in France). The data for 2000 and 2001 will show a decline in investment in the Spanish industries too, against a background of high profitability levels. This highlights two phenomena:

1. The path pursued by French industrial corporations, which have opted to invest outside their borders in meeting the challenge of internationalisation and globalisation, is one Spanish corporations are now beginning to follow. This may perhaps be a symptom of the maturity of the industries of these two economies, but it is doubtless also a warning of a change in the rules of the eminently domestic game, only too well known by these firms; the expected returns they find in these investments, could also be associated with a higher degree of uncertainty and risk. However, it is clearly not possible to stand back from this process of globalisation.
2. The picture given by the data provided by the firms qualifies the information obtained from the National Accounts aggregates, insofar as it refers specifically to certain particular firms (the larger firms which, as mentioned above, bias the aggregate studied). This fact, besides explaining the greater intensity of the rates of change of investment of these companies, confirms the interest in carrying out this kind of study, based on the annual accounts of the corporations, and serves as a contrast for business trends and for macroeconomic analysis.

#### **2.4. Investment and financial constraints in France and Spain: a study based on individual firm data**

A final aim of the joint research project presented in chapter IV has been to determine whether France and Spain share the same patterns of behaviour in the investment decisions of their industrial corporations, in the face of liquidity or financing constraints. To this end, a test of excess sensitivity of investment to the internal generation of funds based on the estimation of a standard Euler equation investment model derived from Bond and Meghir (1994) is presented.

The analysis performed uses as a source of information a significant sub-set of the corporations used in chapter III, enabling one of the main problems facing this kind of work to be avoided, namely, lack of homogeneity in the basic information of the countries subject to comparison which, as explained in chapter II, has been almost completely eliminated in this document. The study shows in both countries (for which no significant differences are found) the sensitivity of investment to the trend in the corporations' capacity to generate internal funds (cash-flow) and, at the same time, defines a useful signal for the analysis of business investment: the dividend policy (specifically, its absence), is an indicator of the potential presence of financial constraints affecting gross capital formation.

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## CHAPTER I

# THE FRENCH AND SPANISH ECONOMIES: A MACROECONOMIC PERSPECTIVE (\*)

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*All the tables and graphs in this work are part of a statistical annex disseminated separately on the Internet at [www.bde.es](http://www.bde.es). This chapter includes only those that are most relevant, but retains the same numbering as for the statistical annex. That explains any gaps in the numbering used in this chapter.*

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(\*) The authors of this chapter are Concha Artola and Teresa Sastre (Banco de España) and André Tiomo (Banque de France).



## **I. INTRODUCTION**

This chapter surveys the main macroeconomic features of the French and Spanish economies. It does not attempt to review the extensive macroeconomic background of the two economies. The performance of the French and Spanish economies is compared within the framework of the European economy, i.e. whenever the data are available, the relevant variable is shown for both France and Spain and also for the aggregate of the 12 countries making up the euro area in 1999. This comparison is carried out using data from the main macroeconomic indicators of both countries, including growth, foreign trade, inflation and unemployment. Over the last forty years there have been fundamental changes in both economies, but the change has been more dramatic in Spain, which has been going through a process of catching-up for most of the period. In fact, from 1986 to the early 1990s, Spain benefited strongly from a substantial improvement in the terms of trade and the economic upswing in Europe.

The chapter is organized as follows: section 2 sets out the growth performance of the two economies in the light of the changes that have taken place in the productive structure of the two countries; section 3 focuses on the foreign trade between the two countries over the last ten years; section 4 describes the patterns in saving, investment and financing in both the French and Spanish economies; the labour market in the two countries is presented in section 5; section 6 considers very briefly cost and price developments in the two countries; lastly, an overview of monetary and financial conditions is given in section 7.

## **2. GROWTH AND STRUCTURAL CHANGES**

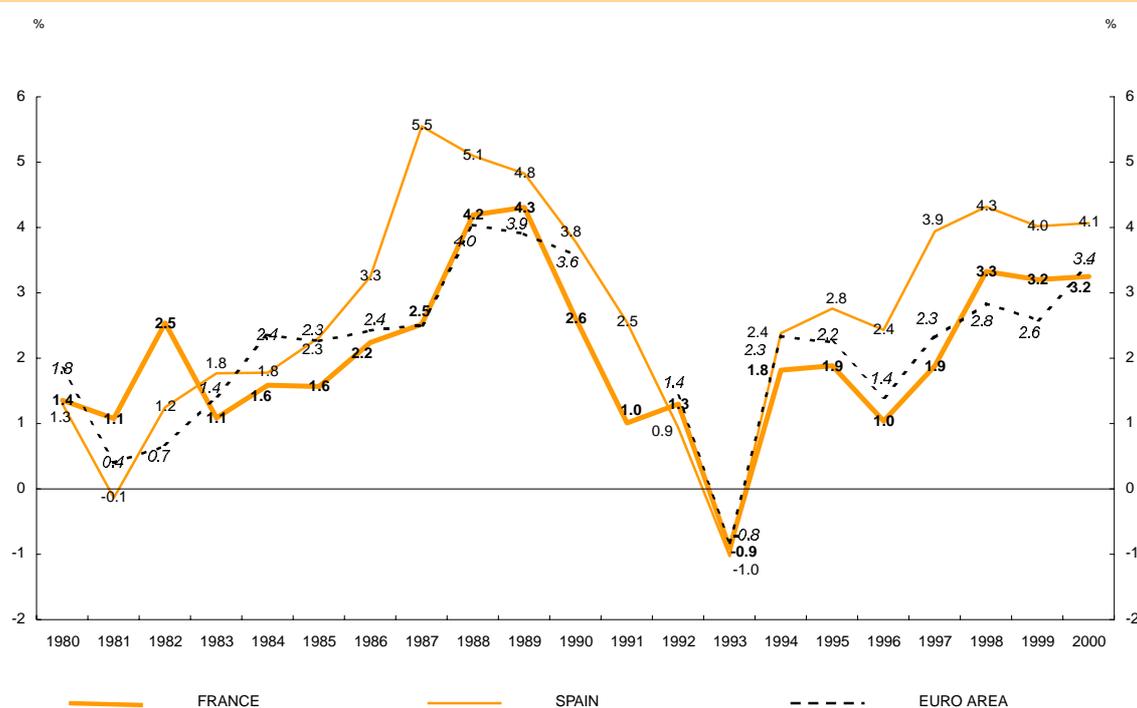
Since its accession to the European Union in 1986, the Spanish economy has experienced a significant growth, outpacing most of the European countries. This section analyses this positive growth differential in the light of the changes that have taken place in the Spanish and French productive structure.

Growth performance in Spain, France and the euro area during the last two decades is shown in graph I.1 where the common trends along all the period can be analysed. For the whole period, Spain has maintained a positive growth differential with the euro area, while the French economy closely followed the European pattern. While the 1992-1993 recession was deeper in Spain, the recovery from 1994 was very strong in relative terms; in the subsequent years the gap between the growth rate in Spain and its European partners widened up to 2000, when the gap substantially narrowed (1).

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(1) The growth differential with the euro area was 1.5 p.p. between 1997 and 1999 and 0.6 p.p. in 2000.

## REAL GDP GROWTH



Source: OECD ADB database.

Table I.1 presents the changes in the productive structure in Spain and France over the last twenty years. The main trend in the two countries is the move towards a service society, and the continuing decline in the importance of agriculture and industry. When measured in nominal terms, the increased in the weight of the service sector was the same size in both countries (around 10 p.p.). However during the nineties the advances towards a service society went further in Spain than in France (between 1990 and 1997 the share of service activities in total VA rose 5 p.p. in Spain and 3 p.p. in France). The increasing participation of the services sector in the generation of value added is much weaker when measured in real terms (less than 5 p.p. in both Spain and France), reflecting faster price increases in the service sector than in goods production. This «dual inflation» phenomenon reflects the large non-tradable component of services as well as a lower level of domestic competition than in other activities, and in particular in manufacturing.

Production specialisation differs in the two countries. As table I.1 shows, relative to Spain, France appears to be specialised in financial services, real estate and business services, and in other service activities (which include, *inter alia*, education, health and personal services). That said, the productive structures of these two economies have become more similar the last two decades.

### 3. FOREIGN TRADE

Joining the European Union has been beneficial for France and Spain's trade with the rest of the world. Most industrial sectors found themselves largely unprotected after customs tariffs were scrapped and trade barriers came down. Consequently, the two countries' economies opened up further. In the case of Spain, for example, exports rose from 17.1% of GDP in 1991,

TABLE I.1

## CHANGES IN THE STRUCTURE OF VALUE ADDED

VA Structure at current prices	SPAIN			FRANCE		
	1980	1990	1997	1980	1990	1997
Agriculture	7.4	5.4	4.5	4.6	3.7	3.1
Industry	28.6	24.6	22.2	28.0	22.7	21.0
Construction	8.2	8.7	7.1	6.6	5.7	4.7
Total Services	55.8	61.2	66.2	60.8	68.0	71.2
Wholesale, retail, hotels, transport	24.5	24.8	27.0	18.5	20.0	18.9
Financial intermediation, real estate	15.9	17.8	18.9	23.0	27.0	28.9
Other service activities	15.3	18.7	20.3	19.3	21.0	23.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

VA Structure at 1995 prices	SPAIN			FRANCE		
	1980	1990	1997	1980	1990	1997
Agriculture	5.4	4.8	5.1	3.6	3.2	3.4
Industry	26.3	22.8	22.5	23.1	20.8	21.4
Construction	7.8	8.4	7.2	6.8	5.9	4.6
Total Services	60.6	64.0	65.2	66.5	70.1	70.6
Wholesale, retail, hotels, transport	28.1	25.8	26.7	18.4	19.6	19.3
Financial intermediation, real estate	17.5	19.1	18.3	25.9	28.6	28.1
Other service activities	15.0	19.1	20.2	22.2	21.9	23.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Sources: OECD ANA database and INE (Spanish Statistical Institute).

to 27.5% in 1999, while imports increased from 20.3% to 28.8% over the same period. In France, there was also an opening trend; exports rose from 21.5% of GDP in 1991 to 25.9% in 1999 and imports from 22% to 23.7% of GDP in the same period (see table I.2.A). At the end of the nineties, the Spanish economy was more opened than the French one.

The table I.2.B shows the bilateral trade between the two countries. The most notable fact is that France is Spain's most important trading partner. A constant level of 13% of Spanish goods exports went to France in all the years analysed, while imports of French goods grew by almost two percentage points from 1991 to 1999, to 15.1%. From the viewpoint of France, trade with Spain almost doubled between 1991 and 1999; exports rose from 3.9% in 1991 to 7% in 1999, and imports from 3.2% to 6.3% in the same period. The bilateral trade balance has remained constantly positive for France, while in Spain it has been negative in every year. However, between 1994 and 1996 the Spanish deficit fell significantly owing to the successive devaluations of the peseta.

#### 4. SAVING, INVESTMENT AND FINANCING

The French and Spanish economies have displayed rather similar patterns of national saving and investment. The slowdown in economic activity during the period 1992-94 was mainly reflected in a decrease of gross national capital formation and of gross saving in relation to GDP (see graph I.2). As a result, the negative net lending to the rest of the world, characteristic of the early nineties, turned positive in 1993 in France, and in 1995 in Spain. In both countries the reduced domestic saving was mainly due to a lower level of general government gross saving (graph I.3) in accordance with the cyclical position. During the second half of the nineties, the net financing needs of the general government were progressively reduced in both coun-

TABLE I.2

## FOREIGN TRADE IN FRANCE AND SPAIN

<b>A. Exports and Imports as % of GDP</b>									
	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>Spain</b>									
Exports / GDP	17.1	17.6	19.4	22.3	22.6	23.9	26.7	27.2	27.5
Imports / GDP	20.3	20.4	20.0	22.1	22.8	23.4	25.7	27.2	28.8
<b>France</b>									
Exports / GDP	21.5	21.5	20.7	21.5	22.5	23.1	25.5	26.1	25.9
Imports / GDP	22.0	20.9	19.2	20.2	21.1	21.4	22.5	23.5	23.7
<b>B. Bilateral goods trade between Spain and France (%)</b>									
	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>Spain</b>									
Exports of goods to France/ Total Spanish exports	13.2	12.8	12.0	13.7	14.2	14.1	12.7	13.3	13.0
Imports of goods from France/ Total Spanish imports	13.2	13.4	13.7	15.0	14.8	14.3	14.8	15.1	15.1
<b>France</b>									
Exports of goods to Spain/ Total French exports	3.9	4.2	4.4	5.3	5.5	5.9	5.9	6.4	7.0
Imports of goods from Spain/ Total French imports	3.2	3.5	4.0	5.1	5.6	6.0	6.0	6.3	6.3
<b>Bilateral goods trade balance (%)</b> (as % of Spanish GDP/ French GDP)	-4.1/1.3	-4.8/1.6	-4/1.3	-2.8/1	-1.5/0.6	-2/0.8	-4.1/1.6	-4.9/2	-7.9/3.3

Sources: Balance of Payments of Banque de France and Banco de España, INSEE and INE (French and Spanish Statistical Institutes) and Customs Statistics.

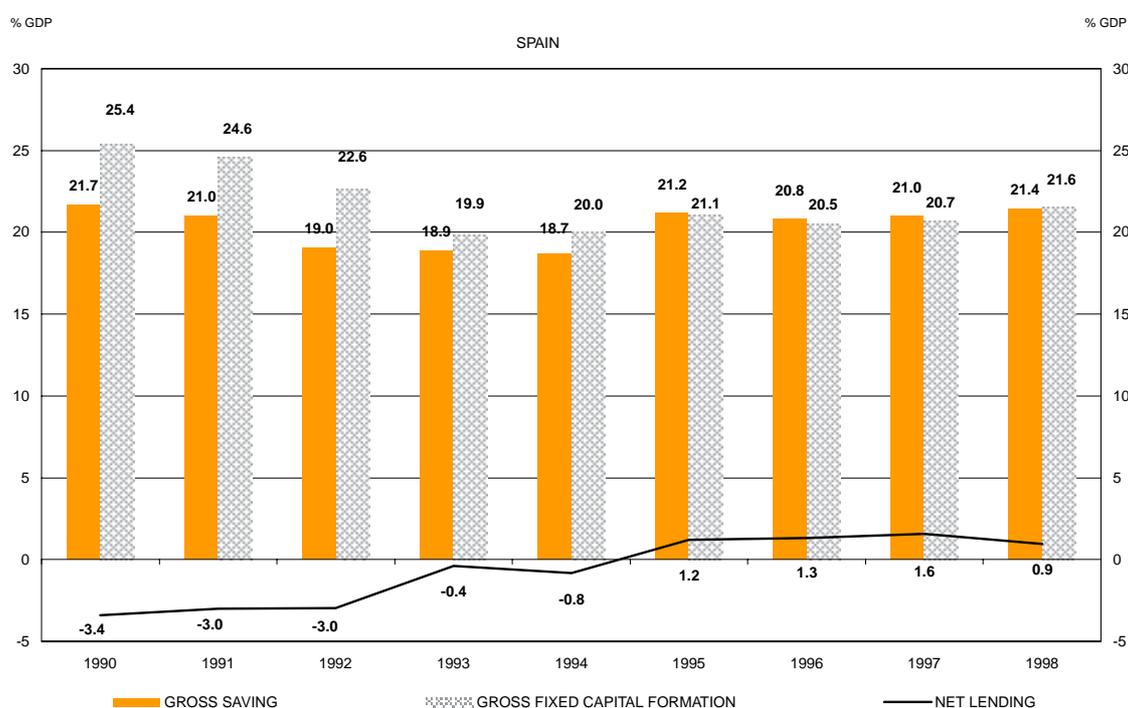
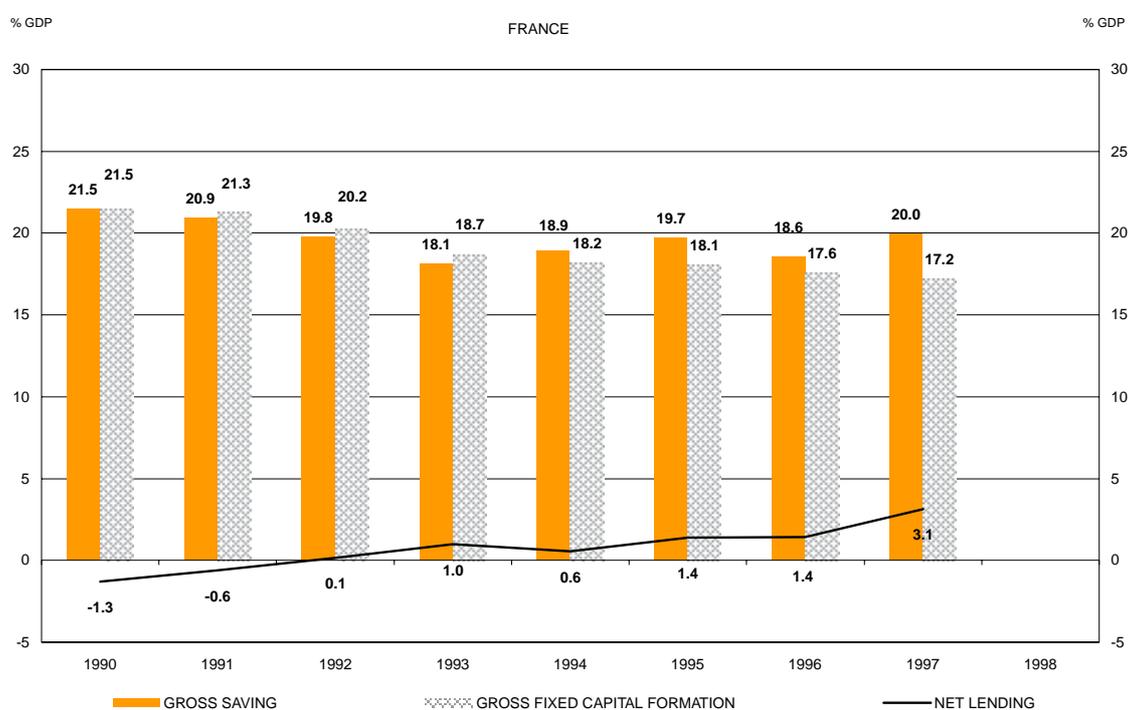
tries, in the context of fulfilment of the Maastricht criteria for public finances. This enabled gross national saving to increase, making room for higher levels of gross fixed capital formation by Spanish firms, while net lending to the rest of the world remained positive. In the case of France the increase in gross national saving pushed up net lending to the foreign sector. The reduction in the net financing needs of general government also led to a decline in public indebtedness during the second half of the nineties. Thus, the ratio of debt to GDP, which was 66.6% in Spain and 59.3% in France in 1997, was reduced to 60.4% and 57.6%, respectively, at the end of 2000.

When focussing on the sectoral breakdown of saving and investment (see graph I.3), there appear to be three main differences between France and Spain. Firstly, in the context of the catching-up process of the Spanish economy with respect to the main EU countries, gross fixed capital formation was generally higher in Spain during the nineties, as a proportion of GDP. Secondly, this higher level is attributable to investment by non-financial firms and general government, since households' capital formation remained at a lower level in Spain than in France during this period. Lastly, while gross national saving showed a similar pattern and similar levels in both countries, there were differences in its sectoral breakdown. On one hand, household saving was higher, as a proportion of GDP, in France than in Spain. On the other hand, Spanish non-financial firms significantly increased their saving from 1994, in an attempt to reduce their dependence on borrowed funds, while French firms maintained their saving fairly stable.

Graph I.4 looks at investment from a broader perspective, showing the evolution of its main components. From 1986 the private investment rate in Spain has been continuously above the French rate, the difference being particularly high since 1996, period when the average private non-residential investment rate was 14.3% of GDP in Spain as compared to 11.4% in France. The total investment rate in the two economies, which was very similar up to the mid-eighties, has diverged during the last fifteen years due to the speeding up of the investment

GRAPH I.2

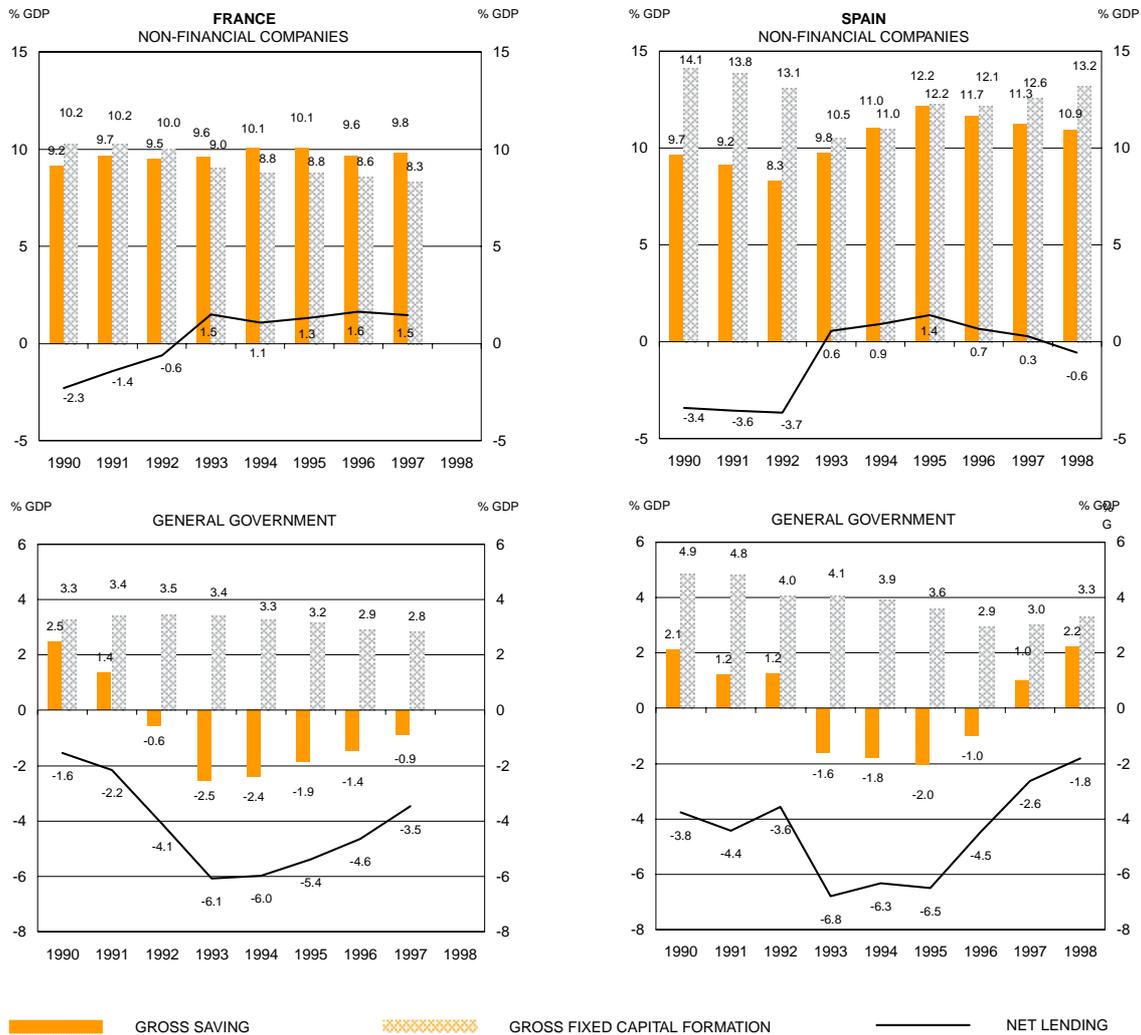
### SAVING, INVESTMENT AND FINANCING TOTAL ECONOMY



Source: OECD.

process in Spain. This development is partly explained by the relative dynamism of private non-residential investment, but also by the fast growth in government investment. As seen in table I.3 and graph I.4, the government investment rate was very low in Spain, relative to both France

### SAVING, INVESTMENT AND FINANCING BY ECONOMIC SECTORS



Source: OECD.

and the euro area, and followed a downward trend until 1980. From 1982, public investment surged, peaking in 1990-1991 when it reached 4.8% of GDP in real terms (2). The recent slowdown in Government investment, observed both in France and Spain since 1996, is related to the drive to reduce fiscal imbalances, in order to meet the requirements established in Maastricht to participate in Stage Three of EMU.

## 5. THE LABOUR MARKET

In 1970, employment in Spain as a percentage of the working-age population was about the same as in the euro area and only three percentage points lower than in France (table I.4). As seen in the statistical annex (graph I.6), until the mid-eighties this ratio de-

(2) The fast growth in the 1990-1991 period is associated with the events which took place in 1992; the Universal Exposition in Seville and the Olympics Games in Barcelona

TABLE I.3

## INVESTMENT RATE (GROSS CAPITAL FORMATION AS A % OF GDP. VOLUME)

SPAIN	1964-1975	1976-1985	1986-2000	1964-2000
<b>TOTAL</b>	<b>22.7</b>	<b>19.5</b>	<b>22.5</b>	<b>21.8</b>
Private	19.9	17.1	18.7	18.7
Non-Residential	10.1	10.6	13.1	11.5
Residential	9.7	6.5	5.6	7.2
Government	2.9	2.3	3.8	3.1
FRANCE	1964-1975	1976-1985	1986-2000	1964-2000
<b>TOTAL</b>	<b>22.1</b>	<b>19.8</b>	<b>19.5</b>	<b>20.4</b>
Private	18.2	16.7	16.3	17.0
Non-Residential	10.7	10.2	11.4	10.9
Residential	7.4	6.5	4.9	6.2
Government	3.9	3.1	3.2	3.4
EURO AREA	1964-1975	1976-1985	1986-2000	1964-2000
<b>TOTAL</b>	<b>24.0</b>	<b>20.3</b>	<b>20.3</b>	<b>21.5</b>
Private	20.2	17.2	17.5	18.3
Non-Residential	11.6	10.6	11.9	11.4
Residential	8.6	6.6	5.6	6.9
Government	3.8	3.1	2.8	3.2

Source: OECD ADB database.

clined steeply, recovering only slightly during the 1986-1992 expansion, experiencing a stronger recovery in recent years, after the 1992-1994 recession. Despite the strong employment growth of the last five years, the Spanish employment/working-age population ratio is still relatively low, both compared to the levels at the beginning of the seventies (56.4% in 2000, 63.3% in 1970), and to its European partners (almost 6 p.p. below both the French and the euro Area level in 2000).

The pattern of decline in the employment/working-age population ratio during the seventies and up to the mid-eighties is mainly accounted for by a huge increase in the unemployment rate and to a lesser extent, by a decrease in the participation rate. The unemployment rate, which was a mere three percent at the beginning of the seventies in Spain, France and the euro area, went up by 8 p.p. in the euro area. In France the unemployment closely followed the European pattern, while in Spain the unemployment rate increased by 18 p.p., over the same period. The singularity of the Spanish unemployment growth during these years is the result of two overlapping shocks of a very different nature; first, the oil crisis of the seventies, and second, the end of the dictatorship, which led to wholesale political reform followed by far-reaching changes in economic institutions. The participation rate fell by 5 p.p. in Spain during that period, in contrast with the small declines in France and the euro area (about one percentage point); this relatively big drop in the Spanish participation rate was mainly a consequence of the *discouraged worker effect*, reflecting the low probability of finding a job given the high unemployment rates. As seen in the statistical annex (graph I.6), both unemployment and participation rates have been more volatile in Spain than in its European counterparts, volatility that is partly accounted for by the relatively higher weight of fixed-term employment contracts (see graph I.8 in the statistical annex). This pattern is all the more noticeable during the fast unemployment growth which took place during the recession of the early nineties, when Spanish unemployment increased by 8 p.p. in only four years, reaching a peak of 24% in 1994. This was followed by a similarly fast recovery; in only six years, the unem-

INVESTMENT. EURO AREA = 100



Source: OECD ADB database.

TABLE I.4

## UNEMPLOYMENT AND PARTICIPATION RATES (%)

SPAIN	1970	1986	2000	1986-1970	2000-1986	2000-1970
Employment/Working-Age Population	63.3	47.9	56.4	-15.4	8.5	-6.9
<b>Participation rate</b>	<b>65.1</b>	<b>60.3</b>	<b>65.6</b>	<b>-4.8</b>	<b>5.4</b>	<b>0.6</b>
<b>Unemployment rate</b>	<b>2.7</b>	<b>20.5</b>	<b>14.1</b>	<b>17.8</b>	<b>-10.0</b>	<b>11.4</b>
FRANCE	1970	1986	2000	1986-1970	2000-1986	2000-1970
Employment/Working-Age Population	66.0	59.6	62.0	-6.3	2.4	-4.0
<b>Participation rate</b>	<b>67.6</b>	<b>66.5</b>	<b>68.6</b>	<b>-1.1</b>	<b>2.1</b>	<b>1.0</b>
<b>Unemployment rate</b>	<b>2.5</b>	<b>10.4</b>	<b>9.7</b>	<b>7.9</b>	<b>-0.7</b>	<b>7.2</b>
EURO AREA	1970	1986	2000	1986-1970	2000-1986	2000-1970
Employment/Working-Age Population	63.7	57.5	62.2	-6.3	4.7	-1.6
<b>Participation rate</b>	<b>65.2</b>	<b>64.1</b>	<b>68.3</b>	<b>-1.1</b>	<b>4.2</b>	<b>3.1</b>
<b>Unemployment rate</b>	<b>2.3</b>	<b>10.3</b>	<b>9.0</b>	<b>8.1</b>	<b>-1.4</b>	<b>6.7</b>

Sources: OECD ADB database.

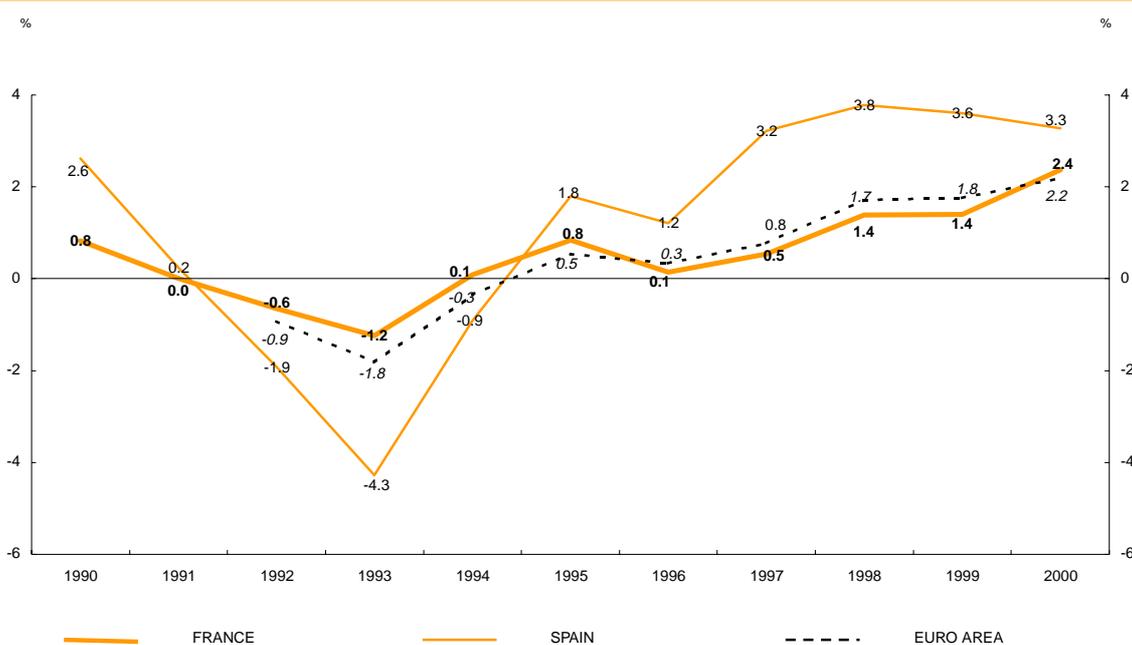
Note: The employment/working-age population figures for Spain are different from the variable shown in annex I.

The employment variable in annex I is consistent with National Accounts, whereas here the employment variable comes from the LFS.

ployment rate went down by ten p.p. to 14% in 2000. From a long-run perspective it is worth mentioning that the unemployment rate in 2000 both in France and in the euro area is still 7 p.p. higher than the rate prevailing at the beginning of the seventies. This difference amounts to 11 p.p. in the case of Spain.

GRAPH I.5

## EMPLOYMENT GROWTH



Source: OECD ADB database.

The other singular feature of Spanish labour market dynamics is the high variability of the participation rate. The strong decline in the participation rate up to the mid-eighties was due to a decrease in the male participation rate (3) (see graph I.7 in the statistical annex), this decline being particularly intense in the two extreme age groups; both youths and men over the age of 55 experienced sharper reductions in their participation in the labour market. This decline is to be seen, in part, as a consequence of more time being spent in education and partly as a consequence early retirement. These factors, while also being present in France, are nevertheless more acute in Spain, as the lack of opportunities in the labour market reinforced both of them. With the recovery of economic activity, in 1985, the Spanish participation rate started to increase rapidly, reflecting the end of the *discouraged worker effect* and, in particular, entry into the labour market of large numbers of women who had previously been discouraged by the gloomy labour market performance. The presence of women in the labour market has traditionally been very low in Spain when compared to European levels. This is to some extent a cultural feature; but the delayed growth in female participation in the labour market in Spain also reflected also the lack of opportunities that characterised the market at the time. Despite the faster growth in the female participation rate in Spain since 1986, the gap between Spain and France is still wide, amounting to 13 p.p. in 1997.

The fast economic growth experienced by the Spanish economy since 1994, and particularly during the last four years, with average GDP growth of 4%, well above the euro area average, has translated into a remarkable employment performance, with an average of around 500,000 net jobs created per year. In France, from 1995 onwards, particularly at the end of the period (1998-2000) an upward trend was observed, in terms of job creations. The growth of employment increased by 2,6 % in the manufacturing sector and 3,4 % in the service sector: 460 000 jobs might have been created or kept between 1994 and 1997. Net job creation further increased at the end of the period (4).

However, as shown in graph I.5, Spain maintained a positive differential with respect to France, which closely followed the pattern observed in the euro area, although with a narrowing gap. Graph I.5 depicts employment over a complete cycle, showing the relatively high volatility of job creation in Spain. This is one feature of the Spanish labour market that is closely linked to the high weight of fixed-term contracts in Spain. Until the mid-eighties, with the exception of temporary jobs in seasonal activities (agriculture, tourism), employment contracts were assumed to be open-ended and workers could be dismissed only under limited conditions entailing sizeable redundancy payments. This was considered to be as an important obstacle to the hiring of new workers. In order to overcome these rigidities in employment contracts, a new law was passed in 1984, which introduced a new type of contract namely, fixed-term contracts, with low severance payments. Since their introduction this type of contracts has been widely used by firms. In fact, the fast employment growth during the recovery that started in 1985 relied mainly on this type of temporary jobs (graph I.8 in the statistical annex), which very soon accounted for a high proportion of total employment (one-third). The effects of this type of contracts on the various labour market variables have been extensively studied. They seem to have increased labour turnover, lowered labour and total factor productivity owing to the lack of investment in human capital formation for workers on fixed-term contracts, and to have enhanced the bargaining power of workers with permanent contracts, leading to unjustified wage rises at the beginning of the nineties. With the aim of counterbalancing the negative effects of the high use of temporary contracts, reform initiatives were implemented in 1994 and 1997 and further measures were approved in March 2001 in order to encourage new

(3) The LFPR series shown in the statistical annex (graph I.7) comes from OECD Labour Force Statistics and differs from the one shown in graph I.6, which came from OECD ADB database. In the case of France these differences are unimportant. In the case of Spain the differences are wider.

(4) Crépon B, et Deplatz R. "Une nouvelle évaluation des effets des allègements de charges sociales sur les bas salaires" *Économie et Statistique*, n° 348, 2001-8.

permanent jobs and thereby reduce, the share of temporary contracts in the economy. The central element was a new type of permanent contract with lower firing costs for those groups with special difficulty finding permanent jobs (the long-term unemployed, temporary workers, young people and elderly workers and women in particular sectors). These contracts included, as an additional incentive, a two-year reduction in social security contributions of between 20 and 60 per cent depending on the targeted group. As shown in graph I.8 in the statistical annex, the impressive job creation in the Spanish economy during the last four years has been mainly based on the permanent segment, so that, from this viewpoint, the reform has been successful. Nevertheless, the use of fixed-term contracts has also expanded, and the reduction in the share of temporary contracts has been small declining from a peak of 35% of total employment in 1995 to 32% in 2000.

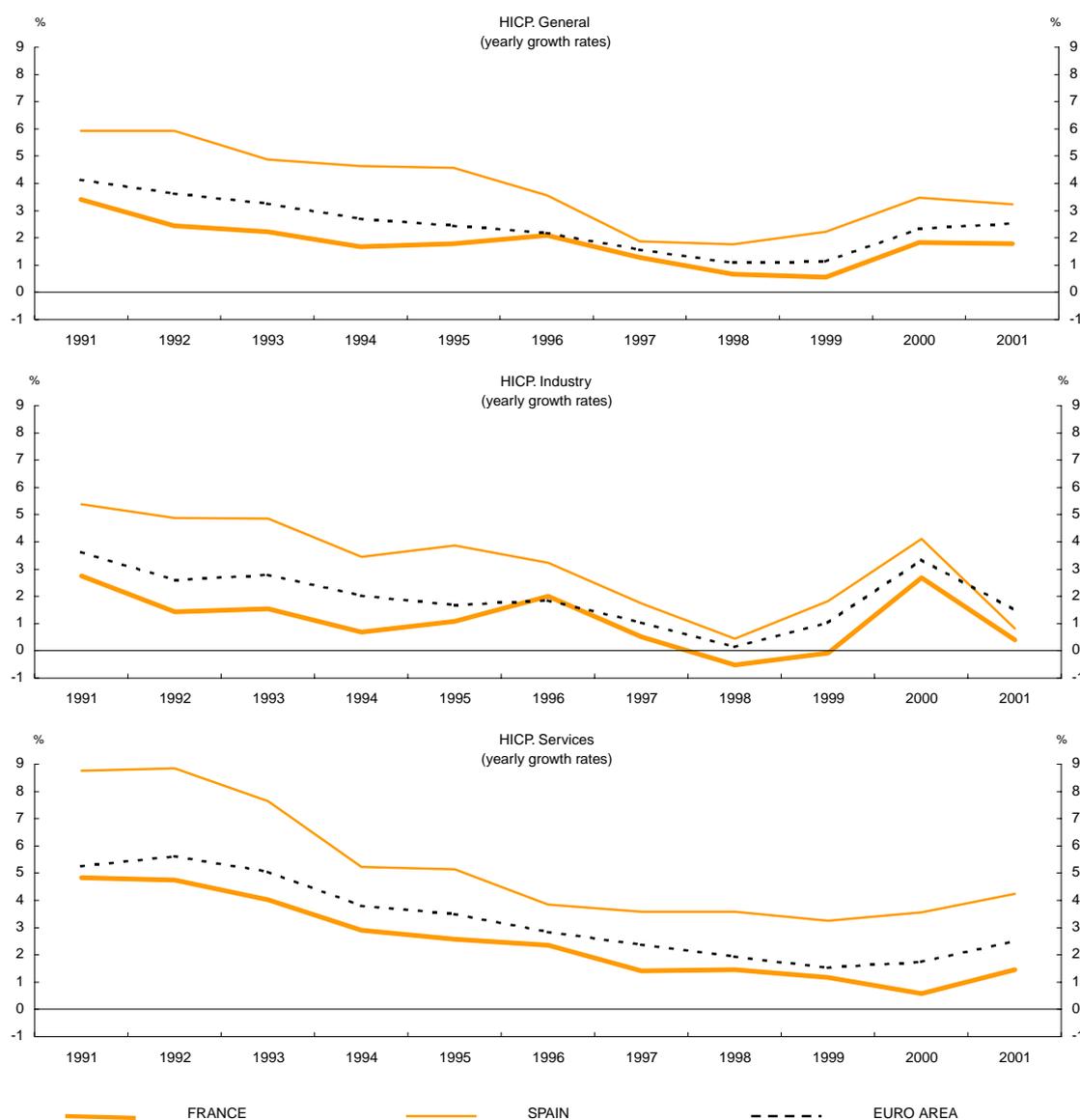
In France, over the whole period (1991-1999), the use of fixed-term contracts was not as developed as it was in the case of Spain: their proportion in the total employment only amounted to 4.1 % in 2000 (2.7 % in 1990). However, the high proportion of permanent jobs contracted during the 1998-2002 period contributed to the decrease in the number of precarious jobs. On the other hand, in terms of wages, the measures taken to reduce contributions on low salaries, implemented from 1993 onward have been developed, so as to play a key role in employment policy. The measures aimed at reducing the decrease in the number of unqualified jobs, which represented a high proportion of low paid employees. The gradual decrease in employers' contribution rates contributed to reducing the labour cost on low wages. For a worker earning the guaranteed minimum wage, the decrease in the rate of social security contributions was only 5.4 % of gross salary in July 1993, then it was 18.2 % in October 1996. Under the "Aubry" act, companies which implement a collective bargaining agreement with a 35 hour working week along with an undertaking to create new jobs or protect existing ones can get support measures in the form of a reduction in social security contributions especially on low and medium wages. For a worker earning the "guaranteed minimum wage" this reduction represents about 20 % of the labour cost. Such incentives contributed to the increase in job creations between 1994 and 1997. (See annex II on characteristics of the French and Spanish labour markets).

## 6. COSTS AND PRICES

At the beginning of the nineties the Spanish inflation rate was about 6%, two percentage points above the average rate in the euro area. This differential declined rapidly up to 1997, when it reached a minimum of 0.3 p.p. with respect to the euro area, reflecting the fast process of nominal convergence driven by the Maastricht treaty. During the following years, and particularly in 1999-2000, the relative performance of prices deteriorated somewhat with respect to the euro area, partly reflecting the rise in oil prices which began in 1999 and affected to a greater extent countries like Spain, with a higher degree of dependence on imported energy. In 2001 the inflation gap between Spain and the euro area amounted to 0.7 p.p. During the whole period the inflation rate in France was below the euro area average. There was a progressive narrowing of the gap until 1996, which was subsequently reversed. In 2001 the gap between inflation in France and the euro area was 0.7 p.p. (graph I.9).

The main reason for the persistence of a positive inflation differential between Spain and the euro area is to be found in the higher intensity of the *dual inflation* phenomenon in Spain, i.e. the tendency of inflation rates to be faster in the non-tradable goods sector than in tradable sector is more intense in Spain than in other European countries. This is shown in the last two panels of graph I.9, where prices of non-tradables are proxied by the service component of the HICP, while tradables are proxied by the HICP industrial goods component. During the first part of the past decade, the behaviour of goods prices rapidly converged with the pattern observed in the euro area as a whole. In 2001, a negative differential with respect to the euro area

## HARMONISED INDEX OF CONSUMER PRICES (HICP)



Sources: ECB and Banco de España.

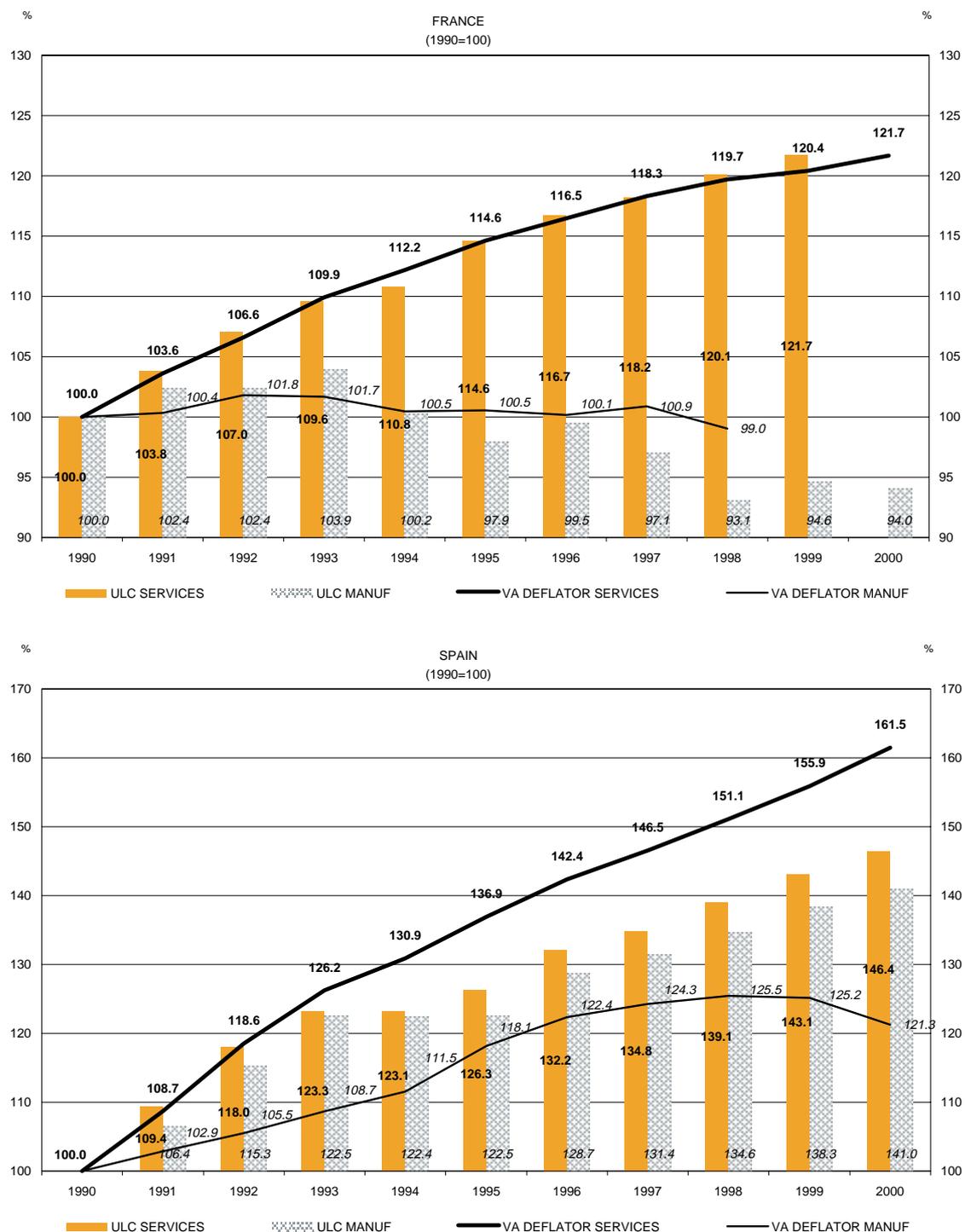
Spanish growth rates in 1991 and 1992 are those of CPI, as HICP data are not available.

was attained for the first time, of  $-0.7$ . Final prices of services also followed a pattern of convergence up to the mid-nineties, when the inflation differential reached a low of 1 p.p. with respect to the euro area. This development has stopped in the last few years, with the service component of inflation remaining stable at an average annual rate of 3.6%, while in the euro area it followed a declining trend up to 2000. In 2001, both in Spain and in the euro area, final prices of services experienced an acceleration of similar magnitude, so the service differential of inflation stood at 1.7 p.p.

The main features of cost and price developments in the two economies are shown in graph I.10, for both manufacturing and services sectors. Starting in the mid-nineties, unit labour costs in manufacturing declined in France, as compensation per employee grew less than the labour productivity. This decline in unit labour costs was partially passed through to prices, as

GRAPH I.10

## UNIT LABOUR COSTS AND VA DEFLATORS



Source: AMECO database.

measured by the GVA deflator, while also enabling unit margins to be widened. This contrasts with the developments in Spanish manufacturing, where unit labour costs have grown steadily since 1996, reflecting a rate of wage growth well above the slow pace of improvements in la-

bour productivity. Given the high degree of exposure of manufacturing to international competitiveness, this relative wage pressure has resulted in downward adjustment of unit margins (the GVA deflator increased by a yearly average of 1.4% from 1994, one percentage point below unit labour cost growth)

The higher unit labour costs observed in the service sector in both countries, relative to the manufacturing, which reflect the lower productivity performance of the former, have had different effects on prices in the two countries. In France, the GVA deflator in services has been closely linked to the growth path of unit labour costs (the average yearly growth of the GVA deflator was 2.3% in the period 1990-1998, which as the same growth experienced on average by unit labour costs). By contrast, in Spain, inflation in services has outpaced the growth of unit labour costs (the GVA deflator grew by 4.9% on average over the past decade, one p.p. above the growth rate experienced by unit labour costs). This resulted in a widening of unit margins, possibly reflecting the inadequate degree of competition in this type of activity.

## 7. MONETARY AND FINANCIAL CONDITIONS

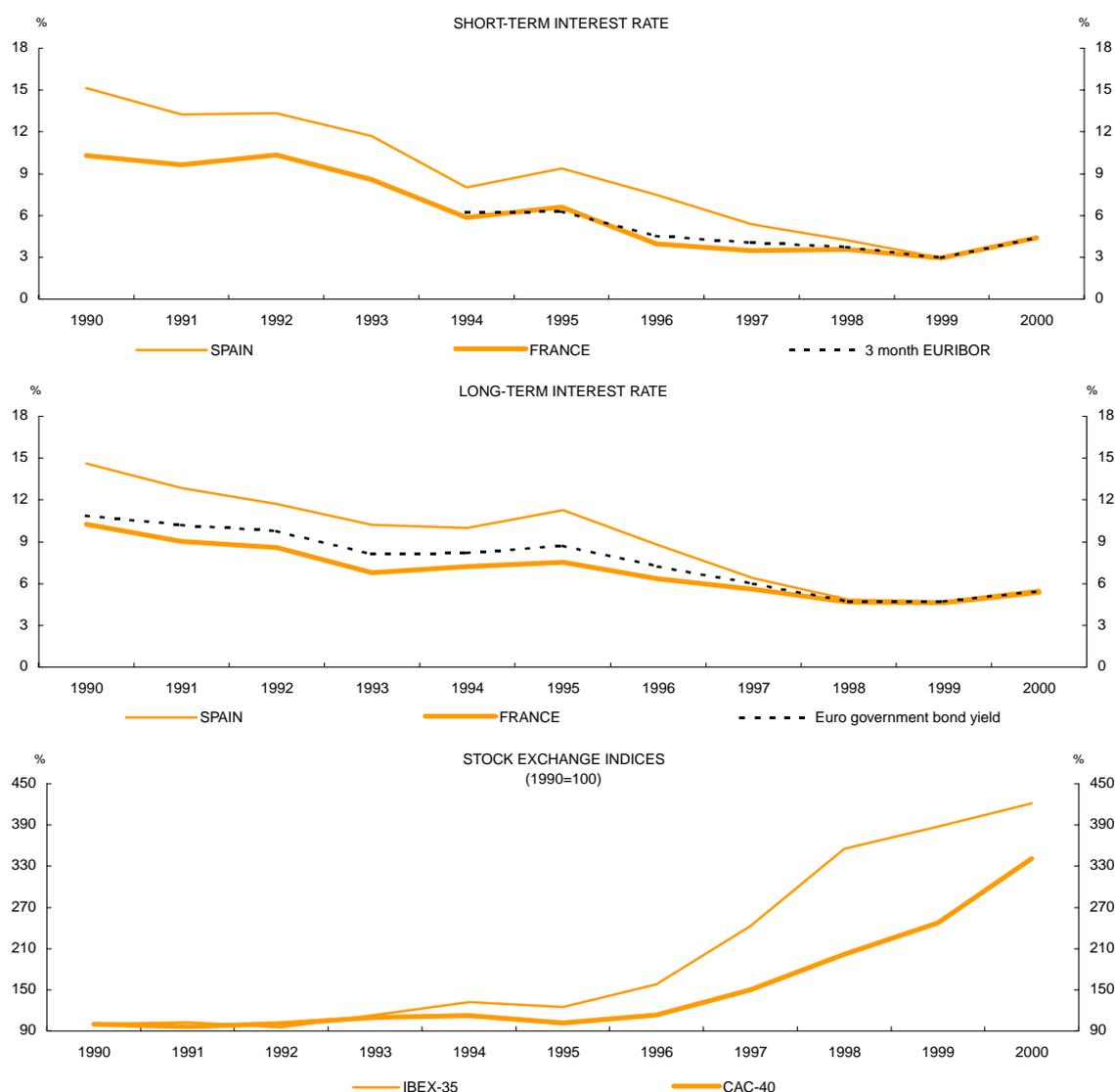
The nineties was a decade characterised by a progressive easing of monetary and financial conditions in both the Spanish and the French economies. During this period short-term interest rates saw significant reductions (see graph I.11), which in Spain amounted to 12 percentage points and which were more moderate in France (about 7 percentage points). Long-term interest rates also displayed a declining trend influenced by the monetary policy stance, the ensuing reduction in fiscal deficits and the progressive deceleration of prices, which helped to push nominal interest rates down towards historically low levels. The latter factor was particularly important in Spain where the inflation rate declined from 6% in the early nineties to 2% at the start of Stage Three of EMU. Lastly, the prospects for the creation of a monetary union were a major factor in promoting the convergence process, thus favouring the easing of monetary and financial conditions in both countries.

The easing of financial conditions was also remarkable in the stock market where share prices showed unusual increases in the second half of the nineties (see graph I.11). From 1996 to 1998 prices on the Spanish stock market rose at an average annual rate of 42%, benefiting from the significant reductions in interest rates. Nonetheless the rate was lower in the last two years. In France stock market developments followed a similar pattern although with a different timing. At first the increase in prices was smaller than in Spain, but in the last two years the French index outperformed the Spanish one.

During the nineties the exchange rate, which is also an asset price relevant to any assessment of the monetary and financial conditions of an economy, showed strong fluctuations (see graph I.12 in the statistical annex). These were particularly intense in the period of crisis in the ERM (1992-1993), which very much affected the Spanish peseta and ended up with a widening of fluctuation bands. After that period in which several currencies in the ERM were devalued (the peseta among them), the basket of currencies that were subsequently to participate in Stage Three of EMU appreciated against the dollar. The Spanish peseta and the French franc followed this general pattern. In the three years prior to the start of Monetary Union fluctuations in French and Spanish foreign exchange markets became more moderate as required by the criteria established in the Maastricht Treaty. The nominal effective exchange rate also followed the pattern that has just been described, although with more moderate fluctuations. During the period crisis in the ERM the Spanish effective exchange rate experienced its largest depreciation in the nineties, in contrast to

GRAPH I.11

## INTEREST RATES AND STOCK EXCHANGE INDICES

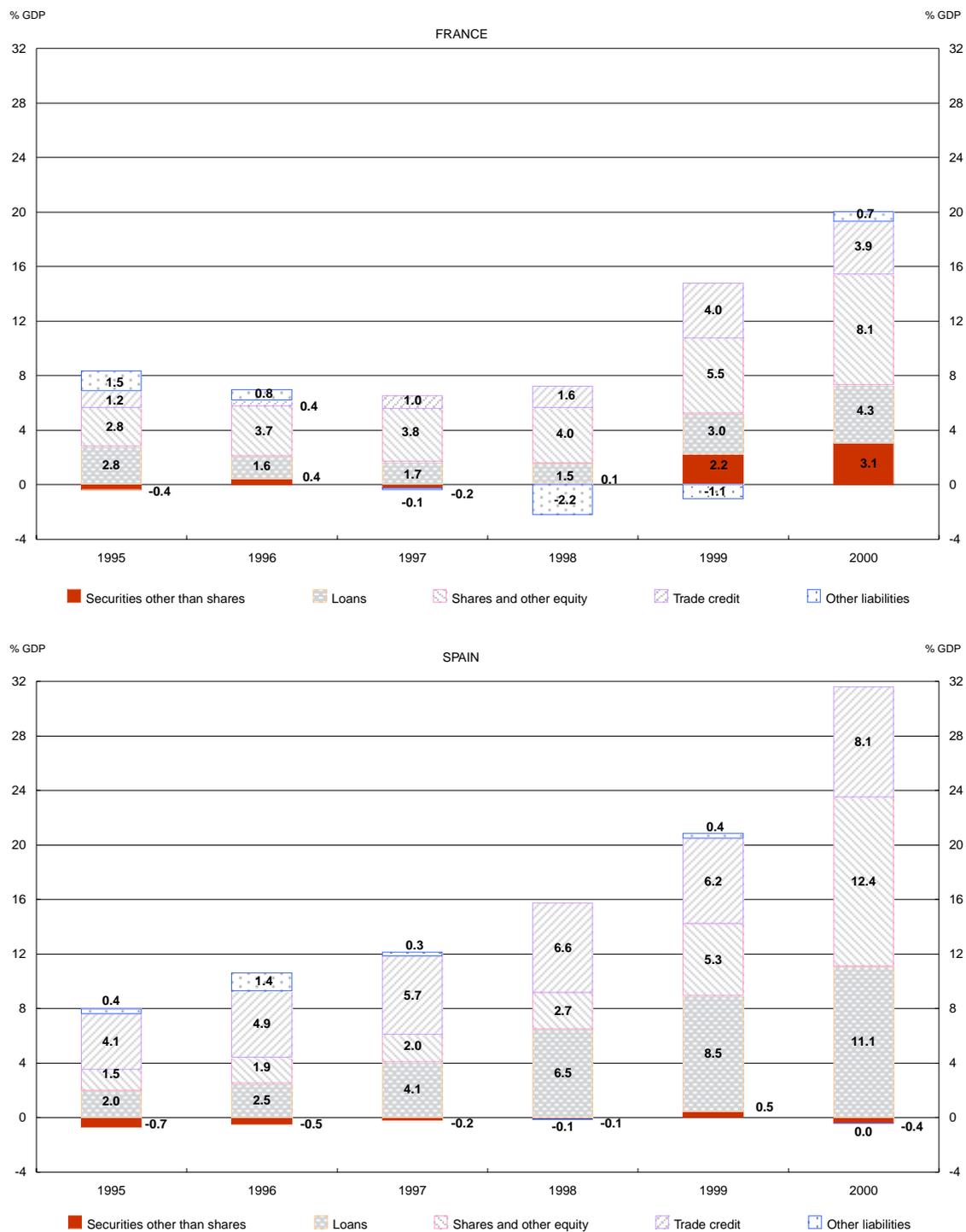


Sources: OECD, Banco de España and Banque de France.

the French index which appreciated even though the exchange rate against the dollar depreciated. The importance of non-dollar transactions with the rest of the world may underlie this development in the case of France. Since 1995, however, there has been virtually no significant difference between the effective exchange rate developments of Spain and France, so that international competitiveness advantages have become determined by production costs rather than exchange rate developments.

The significant reductions in interest rates that took place in Spain and the growth of private expenditure led to an acceleration of domestic credit to the private sector in the second half of the nineties (see graph I.13 in the statistical annex). This followed a period of slow growth against the background of a slowdown in economic activity in the first years of the decade. The fast pace of credit growth in the most recent years was the result of an acceleration in loans to households and in bank lending to non-financial firms. In the case of France, domestic

## NON-FINANCIAL FIRMS' LIABILITIES



Sources: Banco de España and Banque de France.

credit to the private sector followed a rather different path, recording negative rates of growth in several years. Nonetheless, at the end of the decade the rate of growth of credit also increased progressively in France, to reach 10% in 2000. In accordance with the developments in the two countries, the ratio of credit to GDP in Spain, which was below that of France in the

TABLE I.5

## DIRECT &amp; PORTFOLIO INVESTMENT

	1990-1993 Average	1994-1996 Average	1997-2000 Average
<b>SPAIN</b>			
<b>Direct &amp; portfolio investment abroad</b>	1.5	1.2	12.7
Direct investment	0.8	0.8	5.5
Portfolio investment	0.7	0.3	7.2
<b>Inward foreign direct &amp; portfolio investment</b>	8.5	1.4	8.7
Direct investment	2.8	1.4	3.0
Portfolio investment	5.7	0.0	5.7
<b>FRANCE</b>			
<b>Direct &amp; portfolio investment abroad</b>	3.6	3.3	13.4
Direct investment	2.1	1.6	6.3
Portfolio investment	1.4	1.7	7.1
<b>Inward foreign direct &amp; portfolio investment</b>	4.4	0.6	8.6
Direct investment	1.4	1.4	2.4
Portfolio investment	3.1	-0.7	6.2

Sources: IMF and Banco de España

early nineties, rose by 20 percentage points to stand above the French ratio at the end of the decade. In contrast, the ratio declined in France by about 15 percentage points up to 1999, rebounding slightly in 2000.

In most countries bank lending is the main source of financing for households. However, in the case of firms, bank lending is just one of several sources of funds. According to data from the financial accounts of French and Spanish non-financial companies, loans amounted to only 25-35% of their resources, although that proportion declined in France during the period 1995-2000, while in Spain it increased. The remaining sources of funds were market financing (short-term paper, bonds, shares and other equity) and trade credit. However, the importance of these items is different in the two countries and has also evolved in a different way (see graph I.14). In Spain the main sources of funds during the second half of the nineties were loans and trade credit, resources from share issuance acquiring greater significance in 1999 and 2000. Market financing from securities other than shares was virtually irrelevant. However, in France short-term securities and bonds issues were more important, although this cannot be seen in the graph due to the importance of other items, which partially offset the amount of short-term securities and bonds issued. Share issuance has generally been more significant in France than in Spain, although as mentioned above it became increasingly important in Spain during the last two years. Finally, trade credit seems to be a more important source of financing for Spanish companies than for French ones, although, when netting trade credit assets and trade credit liabilities, Spanish firms appear to have been net lenders throughout the period while French firms have been net borrowers most of the time.

The portfolio of financial assets has also experienced significant changes as a result of the notable increase in the acquisition of foreign companies and the proliferation of mergers, acquisitions and cross-shareholdings. In 1995, the acquisition of shares and other equity amounted to only 0.7% of GDP in Spain, and 1.3% of GDP in France. These percentages increased throughout the period to reach 14.2% and 10.4% respectively in 2000. In both coun-

tries a large part of this increase was related to the complete or partial acquisition of foreign companies and cross-border alliances. In the case of Spain, investment in Latin America played a significant role (representing between 50 and 65% of direct investment outflows in 1998 and 1999) although its share decreased in 2000. European Union countries, meanwhile, have accounted for about 30 – 40% of these outflows during the last three years. To give an idea of this process of increasing international expansion of French and Spanish companies, table I.5 presents some figures from the balance of payments.

Although a sectoral breakdown of flows is not available, the figures for direct investment presented in the table are fairly representative of non-financial firms' foreign investment and financing. Portfolio investment has also been included since participation in foreign companies or funds by non-residents investors is sometimes included in this category. Nonetheless, it should be noted that sectors other than non-financial firms – financial institutions and general government – are also relevant in this kind of investment. According to these figures three different periods may be distinguished. In the first one the Spanish economy received funds from the rest of the world representing 8.5% of GDP, in annual average terms, although a good deal of that amount was portfolio investment. Foreign investment in France was also significant during this period, but of lesser importance. In the second period (1994-1996) both countries experienced a slowdown in funds from the rest of the world, mainly related to the weaker economic conditions prevailing in most industrialised countries. The most recent period (1997–2000) was mainly characterised by a large increase in outward direct and portfolio investment both in France and Spain, as a result of the big interest of domestic companies in foreign markets and the surge of cross-border mergers and alliances. At the same time inward foreign investment also rebounded in both countries, reflecting this same process as well as an international reallocation of portfolio investment after the start of Monetary Union.

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## CHAPTER II

# GENERAL CHARACTERISTICS OF THE BANQUE DE FRANCE AND BANCO DE ESPAÑA CENTRAL BALANCE SHEET DATA OFFICES POPULATION AND SAMPLES (\*)

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*All the tables and graphs in this work are part of a statistical annex disseminated separately on the Internet at [www.bde.es](http://www.bde.es). This chapter includes only those that are most relevant, but retains the same numbering as for the statistical annex. That explains any gaps in the numbering used in this chapter.*

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(\*) The authors of this chapter are Ana Esteban (Banco de España) and Annie Sauvé (Banque de France).



## **I. GENERAL CHARACTERISTICS OF THE BANQUE DE FRANCE CENTRAL BALANCE SHEET DATA OFFICE**

The Fiben company database is at the core of the Banque de France's company information system. This is a database of descriptive accounting and financial information on non-financial corporations, updated in real time as and when annual accounts are received.

The database covers an extensive population of natural persons and legal entities. Descriptive and accounting information is gathered, encompassing all items of the balance sheet and profit and loss account, as well as key points from the notes to the accounts.

In 1997, year selected to describe the sample and calculate the coverage rate in comparison with the total population of firms registered at INSEE (France's national statistics office) some 36,000 companies have supplied the Banque de France with additional information. This sub-population is made up of companies that contribute data to the Central Balance Sheet Data Office (CBSDO).

### **1.1. The Fiben database**

Previously, as part of its task of refinancing commercial paper, the Banque de France used to collect information in order to verify the credit quality of the issuers of bills presented to it for discounting. This information was useful to the Bank during the period when discounting was a monetary policy instrument. In 1971, France ceased this type of refinancing, but the central bank continued to gather information on companies. In 1976, the Banque de France set up the Fiben database using this data. Since 1982, all banks have been able to access the base. Economic bodies are also entitled to consult Fiben. Before lending to a company, a commercial bank will check the applicant's solvency in the Fiben base.

#### *1.1.1. Information contained in the Fiben database*

The population of the database includes natural persons and legal entities that have registered offices or are domiciled in metropolitan France, and that belong to one or more of the following categories:

- Companies with a significant economic or financial presence in terms of their turnover (i.e. over EUR 0.75 million), workforce or capital;
- companies with bank loans over a certain threshold, requiring disclosure to the Bank's central credit register;

- businesses giving rise to concerns owing to their financial position, their failure to pay debts on time, or the personal situation of their senior managers;
- companies with economic and financial ties to legal entities or sole traders included in the population of the base;
- *de jure* managers of the above companies.

A broad range of information is gathered, including:

- descriptive details, such as the firm's name, legal status and NAF business code, the address of the registered offices, a list of managers and partners, details of equity ownership, etc.;
- accounting and financial data from the balance sheet and profit and loss account;
- information on bill payment incidents and risks reported by credit institutions in accordance with the regulations of the Banking and Financial Regulations Committee;
- legal information pertaining to judgements handed down by a commercial or a civil court ruling over a commercial case.

The information is gathered from a variety of sources, including journals of legal notices, registrars of commercial courts, France's national statistics office (INSEE) and credit institutions, as well as the companies themselves.

Information is deleted when:

- it becomes obsolete, e.g. a ruling with a specific date (such as insolvency or disqualification from managing a company); details of the judicial liquidation of a sole proprietorship taking place over 10 years ago;
- it is covered by an amnesty law.

These data supply invaluable information for the conduct of monetary policy. The current refinancing process is based on underlying securities that are eligible for money market operations, and, in particular, on commercial paper issued by companies that receive the Banque de France's top rating ("3").

### *1.1.2. The Banque de France rating*

The information gathered on each natural person or legal entity is analysed and then issued as a succinct overall assessment that can be easily interpreted by the different users. The rating represents the central bank's opinion on the short-term viability of a given company. In order to establish this opinion, the Bank relies on its branch network, which supplies it with the necessary information acquired from local sources.

The rating process is in no way automatic. Ratings are reviewed whenever important new information is brought to the attention of the branch managers concerned.

Companies submitting their accounts for consideration are apprised of their rating. Managers and sole traders are informed if their rating reflects a particular concern or an unfavourable assessment.

## THE AIMS OF THE RATING

The rating awarded by the Banque de France is intended to reflect the Bank's assessment at a given time of the situation of an industrial or commercial business at a two-year horizon.

*In terms of refinancing* of the banking system, the rating is used to determine which private bills are eligible for use in the central bank's interventions on the interbank market on behalf of the European System of Central Banks. Only commercial paper representing claims on companies with the best rating ("3") is deemed to be eligible.

*In terms of risk assessment*, the rating acts as an analytical tool used not just internally by the Banque de France, but also by the banking community. In particular, ratings provide an overall view of the creditworthiness of rateable companies.

A company's rating can be used to situate the firm in terms of its turnover, financial health, environment and ability to meet payments.

## COMPANY RATING

The company rating reflects the opinion of the Banque de France on the company's ability to honour its financial commitments at a two-year horizon. Ratings have three components:

- a turnover rating      denoted by a letter between A and H, J, N or X
- a credit rating        denoted by a number: 0, 3, 4, 5 or 6
- a payment rating      denoted by a number: 7, 8 or 9

The rating may be accompanied by additional information pertaining to transparency or indicating that the accounts were filed late or not at all.

## TURNOVER RATING

This part of the rating indicates the level of the company's turnover, as follows:

Rating	Turnover	EUR	FRF
A	More than or equal to	750 million	4.92 billion
B	Between	150 and 750 million	984 million and 4.92 billion
C	Between	75 and 150 million	492 and 984 million
D	Between	30 and 75 million	197 and 492 million
E	Between	15 and 30 million	98.4 and 197 million
F	Between	7.5 and 15 million	49.2 and 98.4 million
G	Between	1.5 and 7.5 million	9.84 and 49.2 million
H	Between	0.75 and 1.5 million	4.92 and 9.84 million
J	Less than	0.75 million	4.92 million
N	Non significant (companies whose turnover is unrepresentative of their business, or companies that do not directly carry out an industrial or commercial activity, notably, holding firms that do not publish consolidated accounts).		
X	Turnover unknown or data too old (relative to a financial year ending more than 21 months previously).		

## CREDIT RATING

The credit rating is mainly based on:

- *an analysis of the company's financial position and profitability*, if the size of the business justifies obtaining accounting information. This analysis takes account of the features inherent to the large sectors of activity, as well as specific characteristics of sectors considered to be atypical.
- *an assessment of management, shareholders, affiliated companies or those with which the company has close financial or commercial ties, the immediate environment of the company (markets, regulation, etc.)*.
- *the existence of payment incidents or legal proceedings*.

The credit rating given to companies belonging to a group takes account of the financial position of the economic group to which they belong.

There are five credit ratings:

- *a credit rating of 0* is given to companies on which the Banque de France has not received any unfavourable information and which economically, are not sufficiently important to warrant the collection of accounting records;
- *a credit rating of 3* is rating of excellence awarded to companies deserving the best Banque de France assessment of their creditworthiness and whose ability to meet their financial commitments is entirely guaranteed.
- *a credit rating of 4* is given to companies that are able to satisfactorily meet their financial commitments, notwithstanding certain factors of fragility or uncertainty. A credit rating of 4 is incompatible with a payment rating of 8 or 9, which signifies a deterioration in the firm's cash position;
- *a credit rating of 5* is given to a company whose ability to meet its financial commitments gives cause for concern;
- *a credit rating of 6* is given to a company whose ability to meet its financial commitments gives serious cause for concern.

## PAYMENT RATING

The payment rating provides information on the company's ability to make timely payments. There are three payment ratings:

- *a payment rating of 7* indicates that in the last six months, payments were made on time or that reported incidents were not serious and do not reflect real cash flow difficulties;
- *a payment rating of 8* indicates that the cash flow difficulties of the company do not appear to cast serious doubts on the firm's creditworthiness;

- a payment rating of 9 applies when reported payment incidents denote serious cash flow difficulties and that the company's solvency is seriously at risk.

#### RATING OF MANAGEMENT AND SOLE PROPRIETORS

In order to make a more comprehensive assessment of a company, it is also useful to take into account information on its managers, as long as this information is publicly available.

For this reason, the Banque de France awards a rating to natural persons exercising a management function or to sole proprietors in their capacity as natural persons. This *Banque de France* rating given to natural persons is expressed by one of the following three-digit codes:

- 000: the information collected by the Banque de France on the manager gives no cause for concern;
  - 040: the information calls for special attention;
  - 050: the information gives cause for concern;
  - 060: the information gives serious cause for concern;
- the 040 rating is given to a manager:
    - who holds office as the legal representative of a company that, regardless of its payment rating, is given a rating of 6 owing to a judicial liquidation order being served in the last five years;
    - or who holds office as the legal representative of at least two companies with a payment rating of 9.
  - the 050 rating is given to a manager:
    - who holds office as the legal representative of two companies that have both been subject to a judicial liquidation order within the last five years, unless these companies are the subject of a judgement binding on them by third-party notice, or the judgement has been extended to also apply to them;
    - or who is ordered by the courts to pay the debts of the legal entity, whatever the amount of the pecuniary liability.
  - the 060 rating is given to a manager:
    - who holds office as the legal representative of at least three companies that have been subject to a compulsory winding-up order or a judicial liquidation order within the last five years, unless these companies are the subject of a judgement binding on them by third-party notice, or the judgement has been extended to also apply to them;
    - or who is personally the subject of a court decision (court-ordered turnaround procedure, judicial liquidation, personal bankruptcy, or a ban on directing, managing, administering or controlling a company).

## 1.2. The Central Balance Sheet Data Office of the Banque de France

### 1.2.1. Description

In 1968, at the request of the France's General Planning Commission (*Commissariat général du plan*), the Banque de France set up a company database intended to provide the national accounts with additional statistics on the size and sector of businesses. The Central Balance Sheet Data Office's (CBSDO) remit was set forth in the agreement between the Banque de France and the national statistics office, INSEE: "On the basis of samples taken from all its member companies, [the Centre] shall process and supply all the information that can possibly be derived from accounting records (balance sheets, profit and loss accounts, notes to the accounts etc.)". The Banque de France provides the monetary authorities and economic decision-makers with valuable information on the economic environment through the analysis of aggregated data on firms. The data derived from company annual accounts constitute the source material for conducting studies at the macroeconomic or microeconomic level and for undertaking sectoral and financial analyses. The Balance Sheet Office database is a collection of data from firms that volunteer to submit their annual accounts.

Industrial, commercial and services companies in the competitive sector are encouraged to participate, irrespective of their size, tax treatment or legal regime. Companies contribute on a voluntary basis.

A debt-burdened or vulnerable financial position is not a barrier to membership.

Without the assent of the company concerned, the Balance Sheet Office will refrain from divulging, in any form, individual information received that is not subject to a legal disclosure requirement. Nor will the Centre publish aggregate data in the form of leaflets of sectoral results if they may reveal the individual position of a participating company.

Every year, in return for its voluntary participation, each company receives an individual report with a detailed financial analysis of its position, which is a valuable tool for decision-makers, as well as a leaflet of aggregate results for its sector. Historical series from 1971 to the present make it possible to study long-term economic cycles. In 1997, some 36,000 firms from the broad Fiben population mentioned earlier have submitted their corporate tax returns as well as an additional information report (a "dossier de collecte") containing more precise details of certain balance sheet items, debt and inter-year flows. An additional sheet may also be submitted on construction, public works, temporary employment and haulage.

The information requested, which is not intended to constitute an exhaustive inventory of the company's accounting data, is needed to:

- check the consistency of the file;
- construct a table of flows;
- examine closely the key aspects of the business or certain particular features, such as leasing transactions and debt.

Like all bodies that use company accounts, the Balance Sheet Office is heavily dependent on the degree of accounting standardisation in force.

Since 1986, the branch of the Banque de France that receives accounting statements from companies has also been responsible for the whole data processing operation. The data are en-

tered and checked by means of an interactive computer program, in collaboration with the company and its accountant, if necessary.

Once the balance sheet has been validated, a Financial Analysis File (FAF) is generated and sent to the company. The lead-time between submission of the balance sheet and sending of the FAF has been cut to one week at the most.

Since individual data are centralised, they have to be grouped according to appropriate criteria. Generally speaking, the key determinant of a company's classification is its core business. Since 1994, the Balance Sheet Office has used INSEE's NAF 1993 classification, which arranges the activities of different companies according to their Principal Activity Code (*Code APE*).

The additional data collected in the database are presented in a very detailed form and are extremely important for financial analysis, especially when making international comparisons.

Regular checks are carried out to ensure that the database is representative. Investigations are conducted to control the quality of the sample and the coverage based on the number of employees. These controls are performed by size and sector. The aim is to reach full coverage for large companies (500 + employees), especially in manufacturing. The coverage rate should reach 50% for medium-sized companies employing 20 to 500 people and 10% for small businesses. If coverage does not reach this threshold, the branches are asked to contact new companies from the sectors or of the sizes that are poorly represented in the database.

Over the last few years, active efforts have been made to increase participation in under-represented sectors. Representativeness is satisfactory in industry (with an overall coverage rate of 60%) and acceptable in construction (34%) as well as in the retail sector (32%). In the services sector, some sub-sectors are well represented and others are currently being canvassed.

The Balance Sheet Office database contains historical series as the Banque de France has been collecting accounting data on the earnings, cash flows and financial structures of industrial companies.

### *1.2.2. Specific data supplied*

The main additional data supplied by companies contributing to the database include:

#### DETAILED INFORMATION ON CAPITAL GOODS ACQUIRED UNDER FINANCIAL LEASE OR FINANCIAL RENTAL AGREEMENTS

While tax returns provide partial information on finance leases (amount of rental payments, lease liabilities), they provide no details on financial rental, which is a widely used technique in the transport sector. Furthermore, the Balance Sheet Office is the only database to identify the amount of lease-financed investment and the value of fixed assets used by the company, regardless of how they are financed. The lease-financed investment is booked as a tangible asset, considered as if it were financed by a bank loan which decreases at the same pace as the estimated depreciation. This information is key to assessing the breakdown between the factors of production and company investment. It also makes international comparisons more meaningful.

## SOURCES OF CREDIT

The data provided by the Central Balance Sheet Data Office (CBSDO) is used to distinguish banking-system financing from funds obtained from the group and partners.

This breakdown is not revealed in the company's tax return. Yet this sort of information is vital at a time when mergers and consolidations are increasing, even among the smallest firms. Furthermore, these breakdowns are essential for the reclassification necessary for international studies, in view of the fact that we do not always use the same accounting methods as our partners.

## INTEREST EXPENSE

The concept of interest expense used by the Balance Sheet Office is much more precise than that used in tax returns, which include not only annual interest expense, but also discounts granted to customers and miscellaneous financial charges. Only the Balance Sheet Office provides a precise picture of the interest expense incurred in a given financial year.

These data can be used to analyse the calculated cost of financial debt, broken down into the different sources of financing (credit institutions, group and partners). Moreover, the question of introducing risk premiums according to company size into the cost of credit was considered as part of a research project on the cost of credit conducted by National Credit and Securities Council (*Conseil national du crédit et du titre* – CNCT).

## FLOW ANALYSIS

Flow analysis mainly concerns the company's investment drive and working capital requirements and how these are financed over the course of the year. Flows are calculated net of contributions linked to restructuring and describe "intrinsic" changes.

The different types of financing are tracked closely over time because the breakdown of new credits and redemptions is listed in detail. This ensures an in-depth analysis of how firms are financed.

In order to consider the situation of the productive base from the standpoint of short-term solvency, it is vital to obtain data on cash receipts and payments, which give an accurate insight into the cash situation at the level of individual firms.

## CONTRIBUTIONS LINKED TO RESTRUCTURING

Data from the Balance Sheet Office are used to assess the scale of restructuring and to perform the restatements needed to include the balance sheet of the affected company in studies.

Using this type of data, it is also possible to conduct more in-depth studies on restructuring – a phenomenon that is affecting an increasing number of companies.

## SPECIFIC ANALYSIS OF CERTAIN SECTORS

Certain additional information reports contain specific data that enable more meaningful analyses of the transport, temporary employment and construction sectors.

### 1.3. Outlook

The detailed approach taken by the Banque de France's Central Balance Sheet Data Office (CBSDO) enables it to respond swiftly and accurately to questions from economic and monetary policymakers.

The representativeness of the CBSDO's data is checked by calculating a coverage rate with respect to Insee's comprehensive database. This guarantees meaningful results and authorises adjustments, if necessary.

Using the Central Balance Sheet Office's data, it is also possible to compare individual company analyses (available in the Financial Analysis File) with the overall or sectoral analyses (performed using statistics). This is a valuable exercise, for two reasons:

- it makes it possible to evaluate each company with respect to its sector of activity;
- it gives economists a critical appreciation of the concepts used in studies, and especially in the construction of scores (which are produced using from statistical studies) and ensure that the right variables are used by making this research more efficient.

## 2. GENERAL CHARACTERISTICS OF THE BANCO DE ESPAÑA CENTRAL BALANCE SHEET DATA OFFICE

The Banco de España created its Central Balance Sheet Data Office (CBBE) in 1983 with the aim of compiling and maintaining economic and financial information on the activity of Spanish non-financial corporations and of enhancing knowledge thereof (1). To comply with this remit, the CBBE is entrusted with gathering annual information on non-financial corporations which co-operate voluntarily by completing an annual questionnaire (CBA). Since 1993, information has been compiled on a quarterly basis (CBQ) on the most significant corporations among those reporting to the CBA. And since 1991, under the agreement entered into with the Spanish Mercantile Registries, information has been processed from the accounts that corporations are obliged to file with the Mercantile Registries. Further, the annual accounts of small and medium-sized corporations suitable for study are incorporated into a specific database (CBB). The results discussed in Chapter 3 of the study are based on the information in the databases CBA and CBB.

### 2.1. Main aims of the Central Balance Sheet Data Office

- To contribute to knowledge of the non-financial corporations sub-sector using two analytical approaches. These are, namely, a business approach, i.e. from the standpoint of the corporation itself and the proprietor, and a general economic analysis approach, which seeks to describe the income generation and distribution and accumulation processes, along with the opening and closing balance sheet positions. This latter ap-

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(1) The Banco de España Law of Autonomy, promulgated in 1994, stipulates the tasks under its remit. These include, among others, the preparation and publication of statistics relating to the functions of the Banco de España, and the promotion of the sound functioning and stability of the financial system. The creation, maintenance and dissemination of the CBBE databases are subordinate to the performance of these tasks.

proach provides information on the financial transactions, assets and liabilities of the non-financial corporations sub-sector (2). The rules applied for their preparation are drawn from National Accounts systems, specifically the 4th Revision of the United Nations System of National Accounts published in 1993 (SNA 93) and its version for the EU, the European System of Regional and National Accounts (ESA 95). These data are necessary for contrast in the preparation by the Statistics and Central Balance Sheet Data Directorate of the *Financial Accounts of the Spanish Economy*. Sectoral data are also being used by the Spanish National Statistics Office (INE) in its Analysis of National Accounts and as a cross-check source in the preparation of its Input-Output Tables.

- To maintain databases with full uniform information on individual corporations, thereby enabling the Research Department to analyse corporate behaviour and the effects of monetary policy measures on corporate financing and results. At the same time, the itemised information available is one of the bases on which the Operations Directorate evaluates and proposes to the ECB the inclusion and maintenance of corporations in the “Tier 2” collateral list (corporations whose liabilities are provided and accepted by the Banco de España as collateral for liquidity injection operations in the financial system).
- To prepare quarterly articles contributing to knowledge of the economic position of non-financial corporations with the shortest time-lag possible. In drafting these articles CBQ data and, once a year, CBA and CBB data are used.
- To provide the reporting corporations with aggregated and homogenous sectoral information as consideration for their co-operation.
- To disseminate aggregated sectoral information for use by other non-Bank analysts: financial institutions, universities, researchers, central government, regional governments and public, national and international agencies.

## 2.2. Central Balance Sheet Data Office annual results (CBA)

Drawing on a directory of about 100,000 corporations (of a total of 700,000 in Spain), the CBA currently maintains a non-statistical sample of around 8,000 mainly medium and large-sized corporations. For the 1983 database, 3,271 corporations co-operated, with coverage – in relation to the gross value added at basic prices of the total for non-financial corporations obtained from National Accounts – of 36.9%; for the 1999 database, information was received from 8,159 corporations with coverage of 32% (for the 2000 database it has been processed 7,240 companies at the date of presentation of this document; the database is still open). The Central Balance Sheet Office does not have a sample of corporations that has been designed through statistical procedures, since co-operation with the database is voluntary. Certain biases are present which should be taken into consideration by analysts of CBA data. Regarding the various economic activities, these are unevenly represented, although the weight of data on manufacturing activity in the database is considerable. In practice, neither agriculture nor services other than transport are sufficiently represented in the CBA. The following key activities are well represented: the production and distribution of electricity, gas and water; the manufacture

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(2) The information is obtained after several steps: a) change to the format of ESA95; b) include some adjustments to the accounting data, i.e. valuation at market prices; c) mix the CBA and CBB databases to create an integrated database (called “CBI”); d) extrapolate to the total population; e) include some final adjustments to the final data, to rank the information provided by other sources.

of transport equipment; transport, storage and communications; the chemical industry; and oil refining and nuclear fuel processing.

The CBA information is of high quality and is highly detailed as it is obtained from a questionnaire completed by the reporting corporations. Once the questionnaire is received, it's checked in a direct contact with the corporation. Since 1992 the CBA has been using two questionnaires – one normal and one abridged – which are sent to the reporting corporations depending on whether their staff numbers 100 or not. The essential difference between both questionnaires lies in the number of data requested in each, as indicated in the following table:

**Information items for each year in the questionnaire**

	Type of questionnaire	
	Normal	Abridged
Accounting information	452	151
Additional information	113	61
<b>Total</b>	<b>565</b>	<b>212</b>

The CBBE questionnaires are revised periodically to incorporate regulatory changes the previous year in the General Chart of Accounts and to include improvements and suggestions received from users. The following table briefly outlines the contents of CBA questionnaires:

**Content of CBA questionnaires**

a) Characterisation data and non-accounting information	b) Accounting information
Registered office	Balance sheets
Activities engaged in	Profit and loss accounts
Location	Proposal for distribution of profits
Human resources employed	Value-added tax
Ownership structure	Information required for calculating a statement of source and application of funds and similar
Restructuring in the past year	Restatement and restructuring of balance sheets, and other information
Information to ascertain whether an individual corporation or group of companies is involved	Data requested of the corporations concerned which are normally obtained through direct contact with them
Other	Breakdown by currency, residence of counterpart agents and inter-company relationship

The CBA obtains information for two years in each data base (to calculate rates of variation for a common sample) and generally classifies corporations according to various criteria (main activity, size, public- or private-sector, regional community where registered office is located), which are the bases for the analyses of the different groupings of corporations:

- As regards productive activity, corporations are classified according to their main activity. The available aggregates of activity have a four-tier structure. The lowest level is that of the groups in the NACE 1993 statistical classification of economic activities in the European Community (four digits), in which the CBA has coded all the corporations available in its databases, whether opened or closed. Allocating a corporation (which may engage in differentiated productive activities) to a single activity code is done by

- the top-down method defined by INE. Subsequently, once each corporation is classified in a NACE group, the CBBE table of activities is used to allocate each corporation to a sector (82 of which have been defined), a major sector (26) and activity group (14) in the annual CBBE publication.
- As regards classification by nature of ownership, the aggregates of public- and private-sector corporations are presented separately. A corporation is considered to be in the public sector in the CBBE databases if: a) the direct plus indirect general government ownership interest exceeds 50%, and b) while not holding a majority interest, effective control of the corporation (or, what amounts to the same, company management decisions) is exerted by general government. Also included as public-sector corporations are those where corporations fitting either of the two foregoing cases exert control or have a majority ownership interest. Classification of corporations into one of these groups takes place each year, according to their position as at 31 December.
  - Turning to classification by size, the explanatory variable here is the average number of employees of each corporation in each of the database years. Also, two secondary parameters are used: the total assets figure and the total figure on the credit side of the profit and loss account, whose value is set as a security threshold that prevents classification errors (to ensure, for instance, that an apparently small company, according to the number of staff, is not classified as such when its balance sheet, expenditure or income are high enough to invalidate the aggregate). In 1996, EC Recommendation 96/280 established the need to apply uniform criteria in defining SMEs (small- and medium-sized enterprises), a definition that should consider, in part, the three above-mentioned criteria. The CBBE has essentially adopted this Recommendation (i.e. small corporations up to 50 employees; medium, from 50 to 249; and large, 250 employees and above).
  - Lastly, the CBBE classifies corporations in the province and regional community where their registered office is located.

The following table summarises the classification criteria:

**Corporation classification criteria used in the CBBE**

Classification by	Criteria used
ACTIVITY	Based on main activity. Activity aggregates available: <ul style="list-style-type: none"> <li>— NACE 93 (four digits). Allocation by top-down method, defined by INE.</li> <li>— CBBE sectors: 82.</li> <li>— CBBE major sectors: 26.</li> <li>— Activity groups in the annual publication: 14.</li> </ul>
SIZE	Mixed allocation criterion based on Recommendation 96/280/EC, but bearing the following parameters in mind: <ul style="list-style-type: none"> <li>— Average number of employees.</li> <li>— Total assets.</li> <li>— Total on credit side of the profit and loss account.</li> </ul> <ol style="list-style-type: none"> <li>1. Average number of employees. Small: up to 50 employees. Medium: from 50 to 249 employees. Large: 250 employees and over.</li> <li>2. Assets and Credit Total assets and the total Credit figure are set as a security threshold so that a small corporation in terms of number of employees, but one which is large in terms of its balance sheet or profit and loss account, is not classified among small corporations and so does not distort the aggregates.</li> </ol>
LOCATION	Regional community in which its registered office is located.

### 2.3. The database of annual accounts filed with the Mercantile Registries (CBBE/RM or CBB)

Since 1991, the CBBE has been using another supplementary CBA database to ascertain the position of and recent developments in non-financial corporations. The CBB is based on a different work methodology that uses the data available in administrative sources. That further enables the various obligations falling on corporations to be exploited for statistical purposes. Since 1990, Spanish corporations have been obliged to file their annual accounts with the Mercantile Registry of the province in which their registered office is located in order to make the accounts public. The CBBE and the Mercantile Registries co-operate in respect of the filing of accounts. The information from the Mercantile Registries provides for cross-checking which, moreover, allows the characteristics of a most extensive sample of non-financial corporations to be known. And on the basis of this, population totals may be deducted and the strata of the non-financial corporations that are worst represented in the CBA database (services and small corporations) may be monitored. The CBBE is obliged not to disclose individual information, whereby it publishes the results of its work only in aggregated (not corporation-by-corporation) form, and this exclusively for economic analysis purposes.

As a result of this co-operation with the Mercantile Registries, the CBBE offers them technical advice and maintains a database with information for the years 1990 to 2000 on a growing number of companies. The Banco de España promoted the promulgation of the Ministry of Justice Order dated 14th January 1994, which made the completion of an official standardised annual accounts format obligatory. This fundamentally changed the project, since thereafter the number of accounts expanded exponentially (420,342 corporations in 1999, compared with 24,479 in 1992). Information is expected to be received from over 450,000 corporations for 2000. There is a field which identifies whether a corporation also co-operates with CBA so that any overlapping may be avoided in the preparation of studies that use both databases. In conformity with the rules of the General Chart of Accounts, there is a normal form and an abridged one.

#### *General characteristics of the database*

- The CBB corporations accounted in 1990 for 0.4% of the total gross value added at basic prices of non-financial corporations compared with 12% in 1998. This sample is not statistical either. In the studies performed using this database medium and large corporations are excluded, although all resident corporations file their accounts with the Registries and, therefore, they are finally also available to the CBBE. The lack of direct contact and of correlative exhaustive editing, on one hand, and the specialisation of the CBA in processing medium and large corporations, on the other, mean that only small corporations received from the Mercantile Registries are used in the CBBE/RM, provided they were not already available to the CBA.
- The number of corporations provided in each base differs greatly. The early years (1990 to 1992) are the least representative owing to the scant number of corporations studied. The number of common corporations, which is low in percentage terms compared with the total available, is on the increase (approximately 87,820 for the latest three bases). Nonetheless, the number of corporations apt for study has stabilised at over 200,000. Consequently, given the amount involved and the uniformity of size, this means that this database, whose latter years are more comparable, is an information source of the first order.

- The corporations incorporated into the databases are classified according to their main activity (NACE 93) and size. With regard to the size of the corporation, the CBBE follows a similar procedure to the CBA, using a triple classification criterion. The main one is the average number of employees during the two years of each base, which is supplemented with certain security criteria, taking as a reference total assets and the total on the credit side of the profit and loss account.
- The activities covered by this database are notably different from those addressed by the CBA database. The share of manufacturing industry in the database total is much less than that observed in the CBA. In parallel, the wholesale and retail trade and other services are notably significant in this base. For 1997, 54.8% of the corporations were engaged in these activities.
- Most are very small corporations, according to the triple criterion applied by the CBBE. As a reference, it may be noted that the small corporations in the CBA databases have, on average, about 20 employees, while in this database corporations with fewer than 50 employees have an average staff of about 7 employees.

#### **2.4. Central Balance Sheet Data Office quarterly results (CBQ)**

This database was created in 1993 to obtain initial information on the basis of a quarterly survey acting as a counterpoint for the studies on the economic situation prepared by the Banco de España Research Department. In October 2001, the draft date for this report, a series of 31 consecutive quarterly observations is available.

As it is a quarterly survey, the information requested is less detailed than in the annual survey. Approximately 900 medium and large corporations co-operate, covering 17% of GDP. The information obtained is presented with a lag of 15 weeks. The classification criteria of size, activity and ownership status are the same as in the CBA.

#### **2.5. Integrated Central Balance Sheet Data Office (CBI)**

Conceptually, a new database was created to provide the source for the extrapolation process to obtain the non-financial corporations sector of the National Accounts, from the addition of the CBA and CBB databases. Obviously, these data are not the official and final information of the NA; it will never be, because the system and process of getting the information (from aggregation and extrapolation of the annual accounts) invalidates the data for this purpose. Although some changes are made to the final results (in order, for example, to value some elements closely to market prices), the NA are obtained in a complete coherent and inter-linked way that the simple extrapolation of annual accounts will never fit.

Anyway, the result of the extrapolation is a complete framework of an incredible value as contrast for the elaboration of the Financial Accounts, that is the responsibility of Banco de España. Moreover, some elements of the Financial Accounts can be obtained only directly from the results of this CBI: shares not quoted, and other equity of the non financial corporations; commercial credit internal to the institutional sector; portfolio of Public Administrations in non financial corporations; and the assets of the non financial balance sheet.

### 3. CHARACTERISTICS OF THE FRENCH AND SPANISH CORPORATION POPULATIONS

The data that have provided knowledge of the corporation populations for Spain and France have been obtained from the National Statistical Offices of both countries, and refer to the corporations existing in each country at 31 December 1997 (3).

Information is available on the number of corporations and the number of employees existing as at that date, and for this analysis the following classification criteria have been used:

- Employment range: from 0 to 49, from 50 to 199, from 200 to 499 and 500 or more employees. Tables II.1.1 (See summary table in the text and rest of the tables in the statistical annex)
- Sector of activity: section of the NACE classification (4). Tables II.1.2 (See summary table in the text and rest of the tables in the statistical annex)
- Legal status: a distinction is drawn between public limited companies, private limited companies and others (co-operatives, general partnerships, limited partnerships and autonomous agencies). Tables II.1.3 (See summary table in the text and rest of the tables in the statistical annex)

Tables II.1.1 provide information on the number of corporations (table II.1.1.1) and the number of employees (table II.1.1.2) in each country by employment range in absolute values and in structural terms. The average number of employees for each of the ranges has also been obtained (table II.1.1.3). On the basis of these, one differentiating characteristic of the two countries can be seen: although the number of corporations in both countries is similar, the number of employees is almost double in France. This means that the average size of French corporations is virtually double that of Spain's. Thus, the total denotes that Spanish corporations have 11 employees on average compared with almost 20 employees in French companies.

If the analysis of the figure is made in terms of corporation size (according to employment range), the structure in terms of the number of corporations can be seen to be very similar for all sizes. In both countries most corporations are concentrated in the 0-49 employees range (97.2% in Spain and 95.3% in France). But if this same figure is analysed on the basis of the number of employees, the differences are most marked in corporations with between 0 and 49 employees and those with 500 or more. In both ranges there are 13 points' difference between the two countries. Hence, 47.6% of Spanish employment is concentrated in small corporations compared with 34.4% in the case of France, while the related figures in corporations with over 500 employees are 23.9% for Spain and 37.4% for France. The other two employment ranges show very similar weights in both countries. These data are confirmed once more in the summary table II.1.1 on analysing the average size of corporations in each employment range. Small Spanish corporations have an average of 5.4 employees compared with 7.1 for French firms, and large Spanish companies employ 1,688.8 workers on average against 2,105.5 for their French counterparts.

(3) Analysing the population of corporations required prior work, performed by the CBBE, on the homogenisation of the different legal forms included in the population (this, among other things, meant taking the decision to include the non-financial corporations in each country with 0 employees). The apparent contradiction whereby there are more non-financial corporations in Spain than in France would then be explained – other than by reason of the different population structure (the high share in Spain of micro-corporations) – by the high growth rate of the population of corporations registered in Spain in the last five years.

(4) In Spain's case there is no information for sections A and B of the NACE.

Tables II.1.2 provide the same information but classified by sector of activity and show that there are no major structural differences in the business activities pursued in both countries. The activity with the largest number of corporations in both countries is section G of the NACE, which essentially encompasses wholesale and retail trade corporations (around 30%). There are two activities in which bigger differences are observed. On one hand, in the Spanish case, construction accounts for 14.8% of total corporations, while in France this figure is 8.9%. And on the other, 17.9% of total firms engage in “real estate and rental activities; business services” in Spain, while this figure is 29.7% in France. These figures highlight the greater weight of the tertiary sector in the French economy, in keeping with the increasingly service-based orientation of more developed economies.

Table II.1.2 also confirms that the distribution of employment by activity in both countries is quite similar. In this case it is manufacturing that absorbs most employment (almost 30.7% in Spain and 33.5% in France). The transport, storage and communications sector shows most differences: while in Spain 7.3% of employment is concentrated in this sector, the related figure is 11.6% in France. Lastly, the analysis of the average number of employees in each sector (summary table II.1.2 and table II.1.2.3 of the statistical annex), shows that the average size of French corporations can be seen to be bigger in virtually all sectors. Most prominent here are the “production and distribution of electricity, gas and water” sector (236.0 employees per French corporation compared with 47.2 for Spain), the “transport and communications” sector (54.2 employees on average in France, 14.7 in Spain) and, lastly, manufacturing (41.8 employees in France against 18.6 in Spain).

Lastly, tables II.1.3 offer information on the corporate make-up of each country in terms of the legal status of corporations. In Spain, the private limited liability company is predominant, owing to the fact that the small corporation is the most used form since the capital stock requirement is much lower (3,000 Euros) as there is for public limited liability companies (PLCs) (60,100 Euros). Thus, 73.5% of the Spanish companies are private liability and 22.0% are PLC. This is also the case in France, although the breakdown is more even: 28.6% for private limited liability companies and 63.6% for PLCs. Regarding employment in both countries, the proportion differs: 55.4% of employees work in PLCs and 36.8% in private limited liability companies in Spain, while the related proportions are more marked in France, at 63.6% and 21.7%, respectively. The other legal corporate forms play a residual role in both countries in terms of both the numbers of corporations and of employees.

## **4. CHARACTERISTICS AND COVERAGE OF THE FRENCH AND SPANISH CENTRAL BALANCE SHEET DATA OFFICE SAMPLES**

### **4.1. French and Spanish Central Balance Sheet Data Office samples**

Tables II.2 provide information on sample coverage in respect of numbers of corporations (tables II.2.1) and numbers of employees (tables II.2.2) both by employment range and by sector of activity for 1997. As discussed in previous points, for this study, the CBBE has used in conjunction information from its two annual databases, CBA and CBB, while its French counterpart has, from its two databases (FIBEN and CB), drawn on the latter's corporations for this study. Nonetheless, tables II give information on both databases. Coverage in terms of the number of corporations in Spain stands at 22.1%. In France the FIBEN database covers 29.1% of total corporations and the CB database, 6.4%. In respect of staff numbers the Spanish sample accounts for 31.6% of total employment and the French sample for 75.9% in the case of the FIBEN and 36.0% in that of the CB (see summary table II.2).

As to the analysis based on employment range, a bias is seen in both countries towards large corporations (over 500 employees). There is coverage in the Spanish case of 53.5% of the number of corporations and 70.2% of the number of employees, and of 85.4% and 88.0%, respectively, in the French FIBEN and of 51.6% in its CB for corporations and employees. Table II.1.1.2 also confirms this

TABLE II.1

## POPULATION: COMPARISON SPAIN-FRANCE. SUMMARY TABLE

## 1. By range of employment

TABLE II.1.1

Range of employment	Number of non financial companies (%)		Number of employees (%)		Company average size (number of employees)	
	Spain	France	Spain	France	Spain	France
0- 49 employees	97.2	95.3	47.6	34.4	5.4	7.1
50-199 employees	2.2	3.7	18.1	17.4	89.1	93.8
200-499 employees	0.4	0.7	10.4	10.8	300.2	302.1
500 and more employees	0.2	0.4	23.9	37.4	1,688.8	2,105.5
<b>TOTAL</b>	100.0	100.0	100.0	100.0	11.1	19.8

## 2. By activity

TABLE II.1.2

Sectors	Number of non financial companies (%)		Employees of non financial companies (%)		Company average size (number of employees)	
	Spain	France	Spain	France	Spain	France
<b>C</b> MINING AND QUARRYING	0.3	0.3	0.7	0.5	25.7	29.3
<b>D</b> MANUFACTURING	18.2	15.9	30.7	33.5	18.6	41.8
<b>E</b> ELECTRICITY, GAS AND WATER SUPPLY	0.2	0.1	1.0	1.8	47.2	236.0
<b>F</b> CONSTRUCTION	14.8	8.9	11.9	8.0	8.9	17.8
<b>G</b> WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES, MOTORCYCLES AND PERSONAL ARTICLES	30.1	30.3	20.5	20.3	7.5	13.3
<b>H</b> HOTELS AND RESTAURANTS	6.0	5.0	5.5	3.4	10.1	13.5
<b>I</b> TRANSPORT, STORAGE AND COMMUNICATIONS	5.5	4.2	7.3	11.6	14.7	54.2
<b>K</b> REAL STATE, RENTING AND BUSINESS ACTIVITIES	17.9	29.7	13.7	16.6	8.5	11.0
<b>M</b> EDUCATION	1.7	0.7	3.1	0.3	19.9	8.6
<b>N</b> HEALTH AND SOCIAL WORK	1.5	1.1	1.9	1.9	14.6	32.8
<b>O</b> OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES ACTIVITIES	3.8	3.8	3.7	2.3	10.5	11.9
<b>TOTAL</b>	100.0	100.0	100.0	100.0	11.1	19.8

## 3. By legal form

TABLE II.1.3

Legal form	Number of non financial companies (%)		Employees of non financial companies (%)		Company average size (number of employees)	
	Spain	France	Spain	France	Spain	France
Public limited companies (PLCs)	22.0	28.6	55.4	63.6	27.8	44.0
Private limited companies	73.5	63.6	36.8	21.7	5.5	6.8
Other companies	4.5	7.8	7.8	14.7	19.3	37.1
<b>TOTAL</b>	100.0	100.0	100.0	100.0	11.1	19.8

Sources: Spanish and French National Statistical Institutes and Central Balance Sheet Offices of Banco de España and Banque de France.

over-representation of large corporations in both samples; while in the population this group accounts for 23.9% of Spanish employment and 37.4% of that in France, in the samples of both countries (CB in the case of France) the figures stands at 53.0% and 53.4%. This bias is also discernible in the analysis of the average size of corporations. In the case of the Spanish sample, average employment per corporation is 15.8 employees (compared with 11.1 employees on average in the population). In France's case, the sample shows average employment of 111.6 employees, substantially higher than the average figure in the population, which stands at 19.8 employees per corporation.

Coverage by sector of activity in Spain shows uneven representation (5). The sectors where the large corporation predominates, such as "production of electricity", "transport, stor-

(5) The biases arising from the difference between the structure of the population and that of the sample could be eliminated, in part, by the re-weighting of the sample information on the basis of the weights the different sub-sectors have in the population. The central balance sheet offices, which have used this approach in other studies with different aims, have opted to work with the data obtained directly from their samples. The direct connection thus obtained between the aggregate data and the individual information of the corporations, which is necessary for the type of study being conducted, advises direct use of the aggregate data.

COVERAGE TABLE: COMPARISON SPAIN-FRANCE. SUMMARY TABLE

	Number of employees	Coverage rate	Number of employees	Coverage rate
SPAIN				
Sample	128,831	22.1%	2,034,723	31.6%
Population	582,936		6,442,364	
FRANCE				
Samples: FIBEN	165,708	29.1%	8,517,082	75.9%
CdB	36,244	6.4%	4,044,900	36.0%
Population	569,512		11,221,880	

Sources: Spanish and French National Statistical Institutes and Central Balance Sheet Offices of Banco de España and Banque de France.

age and communications”, “mining” and, to a lesser extent, “manufacturing”, exhibit coverage in respect of numbers of employees of 100.0%, 66.5%, 45.9% and 34.7%, respectively (see table II.2.2.1 in the statistical annex). By contrast, sectors where the number of small corporations is higher, such as “hotels and restaurants”, “construction” and “real-estate”, are less well represented, with employment coverage of 19.3%, 23.5% and 25.4%, respectively.

In the case of France, the situation differs according to the database analysed. Employment coverage in the FIBEN database rises to figures of 95.7% in “production of electricity”, 89.0% in “transport, storage and communications” and 82.3% in “manufacturing”, while in the CdB database the figures are 9.0%, 29.9% and 55.3%, respectively (see table II.2.2.2 in the statistical annex). As the purpose of this study is the analysis of industrial corporations and since the CdB represents this sector well and is more in keeping with the figures from the Spanish sample, it is this database which has been selected by the Banque de France.

#### 4.2. Criteria in the construction of the sample in this study

The analysis of the financial structure and performance of companies is based on the analysis of the balance sheets and profit and loss accounts of non financial companies available in the databases of each national central bank. In the case of France a number of two-year sliding samples (6) were drawn from the base material, covering the period under review in overlapping sections. Such an approach, which is in fact commonly adopted by the Bank of Spain since the annual accounts of the companies are available two consecutive years in the Spanish database is appropriate to mirror economic evolutions. The same companies are analysed in the years N and N-1; the companies which were declared bankrupt or ceased to exist in year N as well as those which were set up in year N will be set apart from the two year (N-1, N) sliding sample. This way of processing data provides the most valuable and accurate information on the economic evolution by analysing the highest possible number of companies.

In chapter III of this document, the *industrial companies* of the CdB French sample and CBA/CBB Spanish samples have been analysed for the years 1991 to 1999. Thus, studied companies are classified in section D of the NACE- Rev I (CNAE 1993 in Spain and INSEE's NAF 1993 classification in France) excluding “Refined petroleum products and nuclear fuel”. Within the industrial companies, an analysis by size and by sector of activity has been developed in the mentioned chapter.

(6) The figures and ratios of the second year of each sliding sample were used to make the graphs.

- Size: Industrial companies have been analysed considering their size. In this study, the three following sizes have been considered:
  1. Small companies: Between 0 and 49 employees
  2. Medium: Between 50 and 249 employees
  3. Large: From 250 and more employees. Within this size, two more categories have been analysed:
    - From 250 to 499 employees
    - 500 or more employees
- Sector of activity: French and Spanish companies have been divided in three categories attending to the type of product they manufacture, with the aim to know better their behaviour. In this way, we can distinguish:
  1. Industry of consumption goods
  2. Industry of intermediate goods
  3. Industry of capital goods
- Statistical indicators: The two statistical indicators used are, the weighted mean and occasionally the median for some information. The weighted mean can be calculated by dividing the combined numerators by the combined denominators. The median, which once the companies have been ranked in rising order of ratios, separates the population studied into two equal parts. The weighted mean reflects the aggregate position of the industrial sector in each country but this indicator, can be influenced by large firms. The median gives the central value of the distribution and in that case each firm, whatever its size, has the same weight.

A table referred to one specific year of the sample analysed in this study (1997) is presented next. In this table, we can find the number of companies and employees existing in the French and Spanish samples for the industry sector. The table II.3 distinguishes the sizes and the sectors used for this study.

## 5. METHODOLOGICAL ASPECTS IN THIS STUDY

### 5.1. Leasing: Differences in national accounting plans

#### 5.1.1. *Financial Leasing in France*

Owing to the fact that the Fourth EC Directive does not provide any rule for the disclosure of leased assets, the requirements for the disclosure of leasing are not harmonized in the European Union.

In general, it can be stated that under French law, the juridical ownership principle forms the basis of disclosure in individual accounts whereas an economic approach can be adopted in consolidated accounts. French financial statements disclose finance-leased assets within the bal-

## SAMPLE OF THE STUDY. YEAR 1997

	Number of companies		Number of employees	
	Spain	France	Spain	France
Total industry	23,473	14,833	734,818	1,863,130
By range of employment				
0-49 employees	21,904	9,249	217,529	237,106
50-249 employees	1,094	4,278	112,171	465,190
250 and more employees	475	1,306	405,118	1,160,834
250-499	249	714	80,766	248,536
500 and more	226	592	324,352	912,298
By sector				
Consumer goods	10,635	4,843	243,699	544,644
Capital goods	3,957	3,347	218,933	586,877
Intermediate goods	8,881	6,643	272,185	731,609

Sources: Banco de España and Banque de France.

ance sheet of the lessor and not the lessee until a purchase option is exercised. Under these conditions, *the accounting of leasing in individual accounts is not the same in France and in Spain.*

In this study, to comply with the French accounting principles, leased assets are not included in the total balance sheet on the assets side and lease commitments are not included in the balance sheet on the liabilities side. However supplementary information provided by members of the Central Balance Sheet Office makes it possible to evaluate the weight of financial leasing and improve the quality of comparisons made between companies.

Therefore extra information is given:

- On the one hand the weight of leased assets can be appreciated by the ratio “ net leased assets/total balance sheet ”.
- On the other hand the weight of lease commitments has been measured by comparing its amount to the total financial debt.

In the profit and loss account, the annual finance lease charge is split into two parts:

- The first corresponds to an estimate of the depreciation charges that the company would have paid if it had acquired the fixed assets instead of entering into a finance lease agreement;
- The second part corresponds to the interest expense of the imputed loan.

In flows, *productive investment*, has been increased by the amount of the value of the assets appearing in the contract.

*To sum up*, in French accounting there is a dual approach of leasing, the juridical approach is adopted in French individual accounts whereas the economic approach is favoured in consolidated accounts. In this study based on the analysis of individual accounts, the juridical approach is adopted, so, leased assets are not booked on the assets side nor are lease commitments on the liabilities side. However to evaluate the importance of financial leasing in the total assets, the ratio of “leasing over total assets” has been calculated.

### 5.1.2. Financial Leasing in Spain

The Spanish General Accounting Plan, conferred by RD 1643/1990 establishes in its valuation rules a specific reference in relation with leasing accounting.

“When due to the economic conditions of a financial leasing there are no reasonable doubts that the purchase option will be carried out, the tenant should register the operation in the following terms.

The rights derived of financial leasing contracts referred in the above paragraph, should enter in the accounts as intangible assets by its cash price, it has to be registered in the liability side the entire debts, finance lease payments plus purchase option value. The difference between both prices, the financial expenses of the transaction, has to be registered as expenses to be distributed in several years. The rights registered as intangible assets have to be amortised, whenever necessary, attending to the lifetime of the asset. When the asset is purchased, the value of the rights registered and its correlative accumulated amortisation will be cancelled and this amount will be transferred to tangible assets. Expenses to be distributed in several years should be attributed to results according to a financial criterion.

In case of lease back, when the economic conditions of a sale, related to the financial leasing of sole assets, show out that this is a way of financing, the tenant has to register the transaction in the following way. He has to cancel the asset with its net value and has to recognise the intangible asset with the same value. He also has to register in the liabilities the financial lease payments plus purchase option value; the difference between the debt and the received finance should be registered as expenditures to be distributed in several years”.

To sum up, the Spanish General Accounting Plan, establishes that the financial leasing has to be registered as intangible assets if the asset is going to be bought through the purchase option. On the contrary, the French General Accounting Plan does not contemplate the activation of the leased asset. *To guarantee the comparison of the data in this study, Banco de España has removed the leasing from the assets of the balance sheet and the debt generated by these assets has been estimated and removed from the liabilities.*

### 5.2. Way of registering discounted bills

The Spanish General Accounting Plan establishes that companies that decide to discount a commercial bill in a bank, have to register the operation in the asset of the balance sheet through the account “Clients, trade bills” when accepting the bills. In relation to the financing obtained through the discount of this bill, in the liabilities we should register a debt with the financial institutions. The French General Accounting Plan does not include this information in the balance sheet but this type of information is available in one of the annexes. In order to being able to compare the balance sheets of industrial companies in both countries, the Banque de France has included the information of discounted bills under customers in assets and under short term debts with banks in the liabilities.

### 5.3. Way of registering terms according to expiry date

The criteria of the Spanish General Accounting Plan (according to international rules) in relation to the classification between short and long term is the one that attends to the maturity date of assets/liabilities. This means that a financial investment, a right or a obligation of pay-

ment that expires in term higher than one year, will be classified in the long term when it is originated, but it will be reclassified as short term the year before it is going to expire. In the case of France, the analysis of bank debt according to its maturity is based on the nature of the term either long or short when it is originated. Under these conditions borrowing with a term of less than one year is included in medium and long –term debt in France even the year before it is going to expire if at the origin this loan was extended for more than a year whereas it is included in short-term debt in Spain.

This different way to register between the two countries is not able to correct in this document, what must be known by the reader.

## **5.4. Transition tables**

### *5.4.1. Balance Sheet*

The following table presents the variables of the Balance Sheet used in this study and the codes of the French tax form and the Spanish questionnaires which allow calculating them. French tax form is presented next to the table with the description of the codes. In the case of Spanish questionnaires, they can be consulted in the web page of the Banco de España ([www.bde.es](http://www.bde.es)).

### *5.4.2. Profit and Loss Account*

Next table presents the variables of the Profit and Loss account used in this study and the codes of the French tax form and the Spanish questionnaires which allow calculating them.

## TRANSITION TABLE OF THE BALANCE SHEET ITEMS

BALANCE SHEET FORMAT FOR THIS STUDY	FRANCE (1)	SPAIN (2)		
	Codes of French tax form	CBA database		CBB database
		Codes of Normal questionnaire	Codes of Abridged questionnaire	Codes of CBB questionnaire
<b>ASSETS ITEMS</b>	<b>I+II</b>	<b>I+II</b>	<b>I+II</b>	<b>I+II</b>
<b>I. Fixed assets</b>	<b>I.1 to I.3</b>	<b>I.1 to I.3</b>	<b>I.1 to I.3</b>	<b>I.1 to I.3</b>
1. Intangible fixed assets	AB-AC+AD-AE+AF-AG +AH-AI+AJ-AK+AL-AM	103+146+104-106+387	103+146+104-190	121000+130000+ 122000
2. Tangible fixed assets	AN-AO+AP-AQ+AR-AS +AT-AU+AV-AW+AX- AY	111+112-121-122+113 -123-130+114+115+116 +117+118+1307-124- 125-126-127-128+1306	110	123000
3. Financial fixed assets	CS-CT+CU-CV+BB-BC +BD-BE+BF-BG+BH-BI	131+141-187	131+141	124000+125000
<b>II. Current assets</b>	<b>II.1 to II.4</b>	<b>II.1 to II.4</b>	<b>II.1 to II.4</b>	<b>II.1 to II.4</b>
1. Stocks	BL-BM+BN-BO+BP- BQ+BR-BS+BT-BU BV-BW+BX-BY	153	153	142000
2. Trade debtors		142+158-162	142+983+129+ (158-983-129)*k637	143000+147000 +217000
3. Other debtors	BZ-CA	310+171+172+173 +362+363-365-176 +198+162+187+182	310+(166*k97)+(158 -983-129)*k363+182	
4. Liquidities	CD-CE+CF-CG	177+311+168+169 +170+174-175+360 -199+361-364+178	177+311+178 +(166*k903)	144000+145000+ 218000+146000
<b>LIABILITIES ITEMS</b>	<b>III + IV +V</b>	<b>III + IV +V</b>	<b>III + IV +V</b>	<b>III + IV +VI</b>
<b>III. Own Funds</b>	<b>DL</b>	302-101-152+303 +304+305+312-314 -797+306-307+308 +309-106+387+ ((106*149)/ (((387*913)/516)+149))	302-101-152+ 303 +304+305+312+191 +309-190+(-146+ ((146*190)/104))	211000-110000 -141000+ 212000 +213000+214000 +215000+216000 +220000
<b>IV. Provisions for risks and charges</b>	<b>DR</b>	779+874+875+876 +1321+1328	317+332	230000+260000
<b>V. External sources of funds</b>	<b>V.1 to V.3</b>	<b>V.1 to V.3</b>	<b>V.1 to V.3</b>	<b>V.1 to V.3</b>
1. Financial debt	DS+DT+DU+DV+DO	324+985+325+986- ((106*149)/ (((387*913)/516)+149))+ 329+988+326+327 +330+366+328+331 +987-1027 +335+352+989+996	322+998+900-(-146 +((146*190)/104))	240000+250000
2. Trade creditors	DW+DX	338+337+339+346 +991+992+993	(600*k323)+999	
3. Other creditors	DY+DZ+EAI	342+351+995+340+341 +343+347+314+797	(600*k677)	
<b>PRO-MEMO: Loans from group and associated companies</b>	6324.4 + 6118 + 6312.4 + VI	985+986+988+989 +349+350+996	323	n.a.
<b>Loans to group and associated companies (on assets side)</b>	6219.4+6117+VC			

(1): See French tax form next to this table

(2): See Spanish questionnaires in the web page of Banco de España ([www.bde.es](http://www.bde.es))

## FRENCH TAX FORM

<b>Assets</b>	<b>N°</b>	<b>Liabilities</b>	<b>N°</b>
Uncalled capital	AA	Subscribed capital	DA
Formation expenses	AB-AC	Share premium account	DB
Research and development cost	AD-AE	Revaluation reserve	DC
Patents and licences	AF-AG	Legal reserves	DD
Goodwill	AH-AI	Statutory or contractual reserves	DE
Other intangible fixed assets	AJ-AK	Special tax-based reserves	DF
Advance payments relating to intangibles	AL-AM	Other reserves	DG
Land	AN-AO	Profit or loss brought forward	DH
Buildings	AP-AQ	Profit or loss of the financial year)	DI
Industrial fixtures and equipment	AR-AS	Grants and subsidies	DJ
Other tangible fixed assets	AT-AU	Special tax-based provisions	DK
Tangible fixed assets in progress	AV-AW	<b>Total (I)</b>	DL
Advance payments on fixed assets	AX-AY	Profits from the issuance of subordinated equity	DM
Participations	CS+CU-CT-CV	Conditional advances	DN
Loans to groups and associated companies	BB-BC	<b>Total (II)</b>	DO
Other holdings	BD-BE	Provisions for risks	DP
Loans	BF-BG	Provisions for charges	DQ
Other financial fixed assets	BH-BI	<b>Total (III)</b>	DR
<b>Total (I)</b>	BJ-BK	Convertible debenture loans	DS
Raw material and supplies	BL-BM	Other debenture loans	DT
Goods in progress	BN-BO	Borrowings from credit institutions	DU
Services in progress	BP-BQ	Other borrowings and loans	DV
By-products and finished goods	BR-BS	Advances and deposits received on orders	DW
Merchandise	BT-BU	Trade creditors and related liabilities	DX
Advances to suppliers	BV-BW	Fiscal and social security charges	DY
Trade debtors	BX-BY	Fixed assets creditors	DZ
Other debtors	BZ-CA	Other liabilities	EA
Subscribed capital called but unpaid	CB-CC	Accruals and deferred income	EB
Current investment	CD-CE	<b>Total (IV)</b>	EC
Cash in hand, at banks	CF-CG	Exchange rate differences (liabilities) (V)	ED
Prepayments and accrued income	CH-CI	<b>General Total (I to V)</b>	EE
<b>Total (II)</b>	CJ-CK		
Deferred charges (III)	CL		
Premiums on redemption (IV)	CM		
Exchange rate differences ( assets ) (V)	CN		
<b>Total (I to V)</b>	CO		

Loans and advances granted to groups and VC associated companies

Loans to group and related entities (62194<sup>1</sup>+6117<sup>1</sup>+VC)  
<sup>1</sup>The item 6219.4 is an extract from the items BB, BF and BH of the balance sheet  
 The item 6117 is an extract from the items BX the balance sheet VC is an extract from BZ  
 Leasing: items of additional information forms in the French Central Balance Sheet Data Office Base  
 Leasing

Loans raised from groups and associated VI companies

Loans raised from groups and associated companies (F.: 6324.4 + 6118 + 6312.4 + VI)  
 VI is an extract from EA  
 The item 6324.4 is an extract of the item DN of the balance sheet  
 The item 6118 is an extract of the item DX of the balance sheet  
 The item 6312.4 is an extract of the item DV of the balance sheet

$$6605.1+6605.2 - \left[ \frac{6608.2 \times (6605.2 - 6606.2)}{6607.2} \right] - \left[ \frac{6608.2 \times (6605.2 - 6606.2)}{6607.2} \right]$$

## TRANSITION TABLE OF THE PROFIT AND LOSS ACCOUNT ITEMS

PROFIT AND LOSS ACCOUNT FORMAT FOR THIS STUDY	FRANCE	SPAIN		
	Codes of French tax form	CBA database		CBB database
		Codes of Normal questionnaire	Codes of Abridged questionnaire	Codes of CBB questionnaire
1. Output, of which:	FC+FF+FI+FM +FN+FO+FQ	701+708+711-1309 +1450+704-501+705 +706+763+764+792 -1292+709	701+1305+1303+705	401009
- Net turnover	FL	701	701	401000
2. Input	FS+FU+FT+FV+FW-HP -HQ+FX	503-1375-1450-1309 +1375+504+529+763- 535	582-1375-1450-1309 +1375+1301+504+529	301009+306000
<b>S.1. Gross Added Value</b>	<b>1-2</b>	<b>1-2</b>	<b>1-2</b>	<b>1-2</b>
3. Personnel expenses	FY+FZ+HJ	505-511	505	303000
<b>S.2. Gross Operating Profit</b>	<b>S.1-3</b>	<b>S.1-3</b>	<b>S.1-3</b>	<b>S.1-3</b>
4. Net Financial Income	4.1-4.2	4.1-4.2	4.1-4.2	4.1-4.2
1. Financial Income	GJ+GK+GL	712+728-717-787-560	712	402009-402040
2. Financial Expenses	GR+66.11.1+66.11.2- [66.11.1*(66.03.1- 66.06.1-66.09.1) /(66.07.1+66.10.1)]- [66.11.2+(66.03.2- 66.06.2-66.09.2) /(66.07.2+66.10.2)]	536+764-586-599-542- 543-579-581	536	307000-307040
<b>S.3. Ordinary Cash Flow</b>	<b>S.2+4</b>	<b>S.2+4</b>	<b>S.2+4</b>	<b>S.2+4</b>
5. Net Extraordinary Income	HA-HE	725-557+511-1097	725-557	412000-314000
6. Corporate income tax	HK	563	563	315000+316000
<b>S.4. Cash Flow</b>	<b>S.3-5-6</b>	<b>S.3-5-6</b>	<b>S.3-5-6</b>	<b>S.3-5-6</b>
7. Operating depreciation and provision	GA + GB + GC +GD- 64.19 - UF + [66.11.1 x (66.03.1- 66.06.1- 66.09.1)] / (66.07.1 + 66.10.1) + [66.11.2 x (66.03.2 - 66.06.2 - 66.09.2)] / (66.07.2 + 66.10.2)	513+535-873+525	513+535-873+525	304000+305000
<b>S.5. Net Ordinary Result</b>	<b>S.3-7</b>	<b>S.3-7</b>	<b>S.3-7</b>	<b>S.3-7</b>

## FRENCH PROFIT AND LOSS ACCOUNT (LIST FORMAT)

<b><u>OPERATING INCOME</u></b>		
Sales of bought-in goods*		FC
Sales of own goods		FF
Services		FI
Net sales		FL
Change in inventories of own production of goods and services*		FM
Own production of goods and services capitalized*		FN
Operating subsidies		FO
Write-back of depreciation, amortization and provisions, expense reclassifications*		FP
Other operating income		FQ
<b>Total operating income</b>		FR
<b><u>OPERATING EXPENSES</u></b>		
Purchases of bought-in goods (including customs duties)*		FS
Change in inventories of bought-in goods		FT
Purchases of raw materials and other supplies (including customs duties)*		FU
Change in inventories of raw materials and supplies*		FV
Other purchases and external charges (3)*		FW
Duties and taxes other than income tax		FX
Wages and salaries*		FY
Employee welfare contributions and similar charges		FZ
<b>DEPRECIATION, AMORTISATION AND CHARGES TO PROVISIONS (OPERATING)</b>		
On non-current assets	Depreciation and amortisation*	GA
	Charges to provisions	GB
On current assets: charges to provisions		GC
For contingencies and losses: charges to provisions		GD
Other charges		GE
<b>Total operating expenses</b>		GF
1 -NET INCOME (Loss) from operations (I-II)		GG
Joint venture operations		
Profits transferred in or losses transferred out*	(III)	GH
Profits transferred out or losses transferred in*	(IV)	GI
<b>FINANCIAL INCOME</b>		
Financial income from participating interests		GJ
Income from other transferable securities and long-term loans		GK
Other interest and similar income		GL
Write-back of provisions and expense reclassifications		GM
Positive foreign exchange differences		GN
Net proceeds from sale of short-term investments		GO
<b>Total financial income (V)</b>		GP
<b>FINANCIAL EXPENSES</b>		
Amortization and charges to provisions for financial items*		GQ
Interest and similar charges		GR
Negative foreign exchange differences		GS
Net charges on sales of short-term investments		GT
<b>Total financial expenses (VI)</b>		GU
2 – NET INCOME/(LOSS) FROM FINANCIAL ITEMS (V – VI)		GV
3 – NET INCOME BEFORE EXCEPTIONAL ITEMS/INCOME TAX (I – II + III – IV + V – VI)		GW

SCHEME II.4

**FRENCH PROFIT AND LOSS ACCOUNT (LIST FORMAT) (continuación)**

EXCEPTIONAL INCOME			
Exceptional income from non-capital transactions			HA
Exceptional income from capital transactions*			HB
Write-back of provisions and expense reclassifications			HC
<b>Total exceptional income (VII)</b>			HD
EXCEPTIONAL CHARGES			
Exceptional charges on non-capital transactions			HE
Exceptional charges on capital transactions*			HF
Exceptional depreciation, amortisation and charges to provisions			HG
<b>Total exceptional charges (VIII)</b>			HH
4 - NET EXCEPTIONAL ITEMS (VII – VIII)			HI
Statutory employee profit-sharing scheme	(IX)		HJ
Corporate income taxes*	(X)		HK
TOTAL EXPENSES (II + IV + VI + VIII + IX + X)			HM
5 – NET INCOME/(LOSS) FOR THE PERIOD (total income less total expenses)			HN

## Notes

(3)	Of which	Capital leases on equipment	HP
		Capital leases on real estate	HQ

All the items with a number codification are supplementary information supplied by the Central balance sheet office. All the items in 66 concern the restatement of leasing.

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## CHAPTER III

# FRENCH AND SPANISH INDUSTRIAL CORPORATIONS: A COMPARATIVE STUDY USING ACCOUNTING DATA (\*)

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*All the tables and graphs in this work are part of a statistical annex disseminated separately on the Internet at [www.bde.es](http://www.bde.es). This chapter includes only those that are most relevant, but retains the same numbering as for the statistical annex. That explains any gaps in the numbering used in this chapter.*

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(\*) The authors of this chapter are Ana Esteban (Banco de España) and Alain Tournier (Banque de France).



## **I. FRENCH AND SPANISH INDUSTRIAL CORPORATIONS: ANALYSIS OF THE BALANCE SHEET STRUCTURES 1991-1999**

This chapter examines the way in which French and Spanish companies' balance sheets are structured and how this structure changed during the nineties. Our analysis concerned industry (including agri-food) and used samples that were held constant over two consecutive years (1). We broke down the findings by size and sector in order to refine our comments on the aggregate population.

### **I.1. Assets**

Companies' behaviour in terms of financing is heavily influenced by the borrowing requirements arising from their portfolio of assets.

If we classify assets according to their maturity, we see that corporate behaviour patterns change according to company size in both countries. Whereas the *weighted mean* shows that the breakdown between fixed assets and current assets in the aggregate population is 40/60 in France and 45/55 in Spain, the *median* gives a breakdown of 20/80 in France and 30/70 in Spain. (See graph III.1.1.1 for weighted mean)

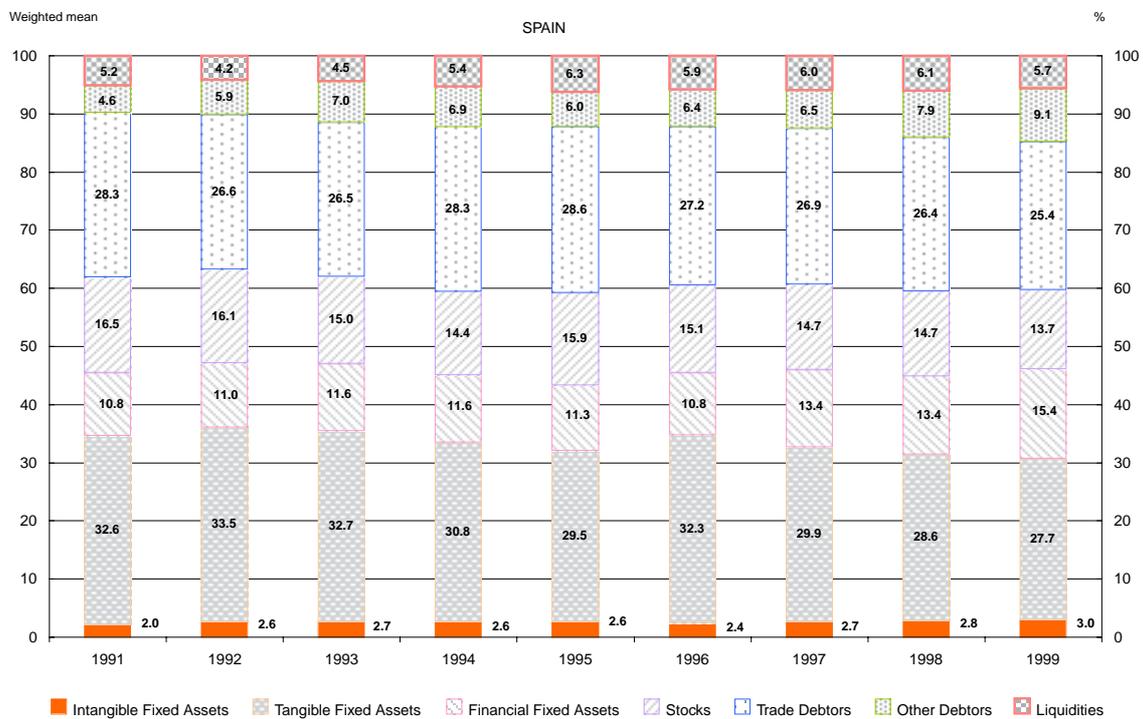
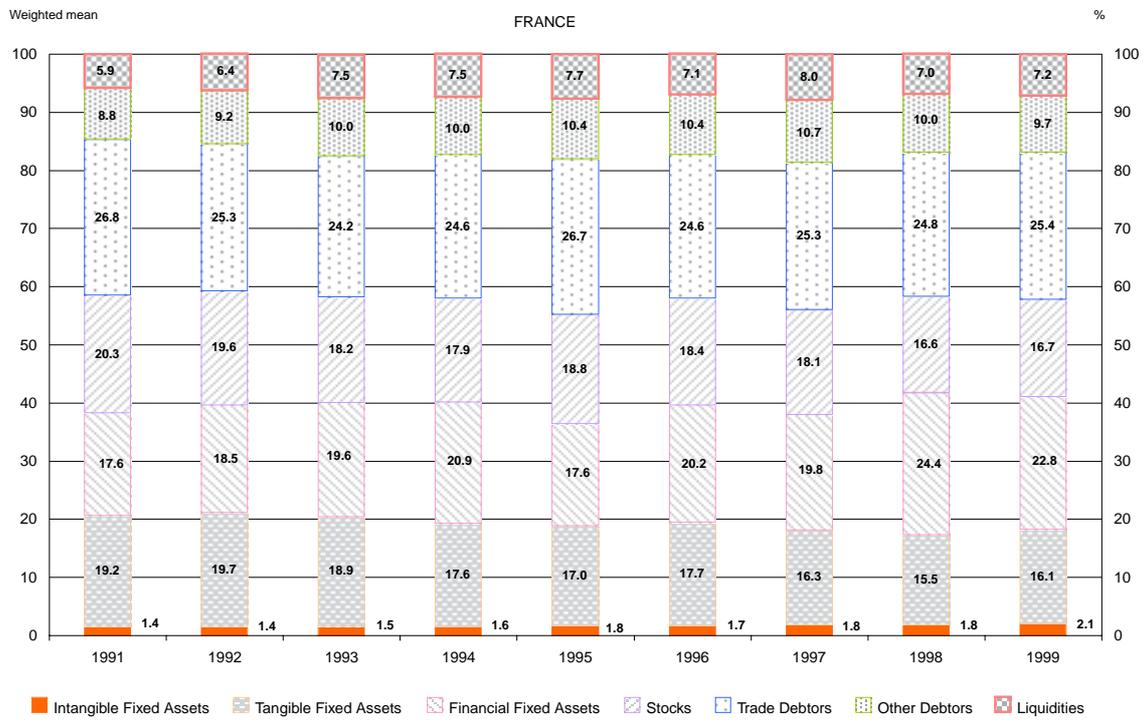
This difference arises because unlike the weighted mean, the median shows the central distribution value. Each firm has the same weighting and as a result, the median reflects the influence of the largest group in the business community, namely the smallest companies. Meanwhile, large companies have a major impact on the weighted mean in both countries: consequently, the aggregate figures mainly reflect their behaviour.

Bearing these points in mind, an examination of the weighted means of the different assets making up fixed assets reveals the following:

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(1) By holding samples constant over two years, it is obtained far more data than if we had used a sample that was held constant over nine years, i.e. between 1991 and 1999. This allowed us to improve the coverage rate and gain a better insight into company behaviour. That said, comparisons between years are made trickier because differences may appear in the values of certain ratios as samples change with the inclusion or exclusion of companies. Accordingly, for a given year, each ratio has two values, which may be different because of changes to the samples. However, for simplicity's sake, the charts appearing in this paper show only one of these values. We made sure that this simplification did not alter our observations regarding the level of, and changes in, the various ratios analysed.

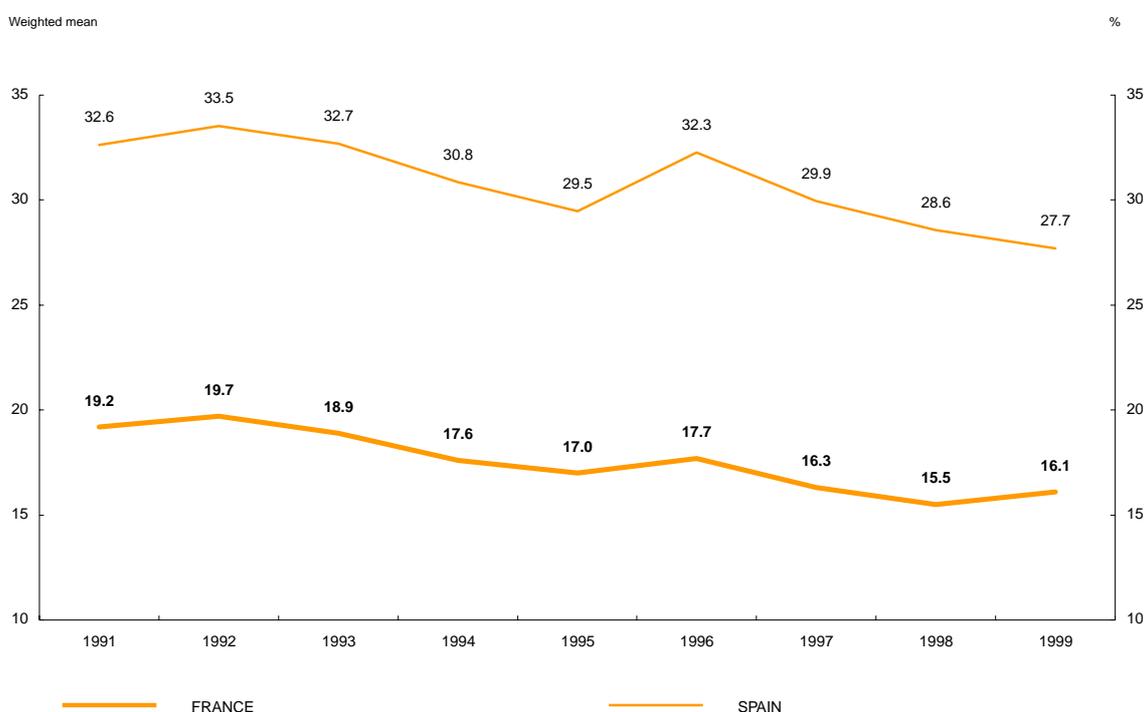
**STRUCTURE OF ASSETS  
TOTAL INDUSTRY (SAMPLE)**



Sources: Banco de España and Banque de France.

GRAPH III.1.1.8

### TANGIBLE FIXED ASSETS TOTAL ASSETS



Sources: Banco de España and Banque de France.

- The structure of assets changed between 1991 and 1999. Notably, *financial fixed assets* gained in importance as a result of the increasing dematerialisation of investments, the accelerated pace of globalisation and the greater use of external growth strategies by industrial firms.
- In parallel, the weight of *tangible fixed assets* declined gradually, while that of *intangibles* increased. This reflected businesses' increased focus on innovation and strategic organisation in response to market competition.

Our analysis of current assets in France and Spain found the following:

- On aggregate, current assets remained stable over the study period. The weighted mean for the population as a whole came to around 55% of total assets in Spain and about 60% in France.
- The structure of current assets (*stocks and trade debtors*) (2) was fairly heavily dependent on the size of the company and its sector of activity. Some French and Spanish industrial firms used current assets as a means of adjusting their working capital requirements, especially in response to changes in the business cycle.
- *Cash* management was closely linked to the financial strategies adopted by companies to preserve their financial autonomy. Again, size appeared to be a determining factor, with large companies enjoying greater flexibility in their cash management than smaller outfits.

(2) It should be noted that creditors relate to the liabilities side (payables) while debtors to the assets side (receivables) of the balance sheet.

### 1.1.1. Fixed assets

Throughout the nineties, French and Spanish industrial firms maintained a stable proportion of fixed assets, which can be divided into tangible, intangible and financial fixed assets. The weighted mean for the aggregate population was around 45% of total assets in Spain and about 40% in France. Large industrial firms exerted a strong influence in this regard. Fixed assets accounted for 45% of the total assets of large industrial firms in France and 48% in Spain. By contrast, the proportion was much lower in the case of small companies employing less than 50 people, at around 25% in France and 33% in Spain (see graphs III.1.1.2 to III.1.1.4 in the statistical annex). A sectoral analysis reveals that between 1991 and 1999, the proportion of fixed assets was higher in the intermediate goods sector than in other sectors, at over 50% in Spain and around 41% in France, compared with around 39% in France and 42% in Spain in the consumer goods sector, and 35% in France and 40% in Spain in the capital goods sector (graphs III.1.1.5 to III.1.1.7 of the statistical annex)

However, this overall stability in the fixed assets of French and Spanish industrial companies masked contrasting trends in the underlying components. In fact, between 1991 and 1999, there was a gradual reduction in the proportion of tangible fixed assets, coupled with an increase in financial fixed assets and intangible fixed assets.

A large difference was observed in the ratio of *tangible fixed assets* to total assets between the two countries, even though the gap tended to narrow towards the end of the period, reducing to 11.6 percentage points in 1999 from 13.4 percentage points in 1991 (see graph III.1.1.8). In the following box, several factors may explain why Spanish companies have a higher proportion of tangible fixed assets.

An analysis by size (see graph III.1.9 in the statistical annex) reveals that large companies (employing more than 250 people) in France and Spain *scaled back the proportion of tangible fixed assets* in their total assets more than smaller companies. Over the 1990s, large firms concentrated on acquiring financial assets, focussing especially on equity interests between 1995 and 1999. This illustrates the way in which inter-company relations intensified, notably through the creation of corporate groups. The weighted mean of tangible fixed assets to total assets among large industrial firms came to 15.6% in 1999 in France compared with 19.4% in 1991, i.e. a fall of 3.8 points. In Spain, the ratio fell by 4.3 points from 33.5% in 1991 to 29.2% in 1999. Smaller businesses less concerned by external growth stuck closer to the business cycle as they adjusted plant and equipment to meet demand. In France, the ratio of tangible fixed assets to total assets in this category was 17.9% in 1999 compared with 16.4% in 1991, i.e. a gain of 1.5 points. In Spain, the ratio for small companies fell mainly between 1991-1994. By 1999, it was practically back to its 1991 level (26.7% in 1999 compared with 26.9% in 1991).

On a sectoral level (see graph III.1.10 in the statistical annex), the intermediate goods sector consistently reported the highest proportion of tangible fixed assets in both France and Spain, despite the downtrend seen over the period. This was due to the nature of the goods produced in this area: the intermediate sector processes raw materials and so is active at an early stage in the manufacturing process. In 1999, tangible fixed assets accounted for 31.8% of total assets in the Spanish intermediate goods sector, compared with 20.6% in France.

*Related to the assets acquired under finance leasing, this technique enables companies to avoid having to purchase plant and equipment, instead allowing them to access the equipment they need in return for rental payments. Companies in France made greater use of this type of financing than those in Spain, offering one explanation why the proportion of tangible fixed assets (which does not*

count assets acquired under finance leases) in total assets is lower in France. Annex 3 “Financial leasing in France and Spain” offers more information about this issue.

As the information on finance leasing is available in Banco de España database and thanks to complementary information of the central balance sheet of Banque de France, the weight of finance leasing can be measured using the “net fixed assets acquired under finance leases / total assets” ratio. On aggregate (see graph III.1.1.11), *fixed assets acquired under finance leases* accounted for around 2% (3) of total assets in France in the 1990s. However, there were contrasting trends within this aggregate. While one-quarter of industrial firms made no use of finance leases over the period, another quarter acquired fixed assets under finance leases amounting more than 5% of total assets between 1991 and 1999. Spanish companies resorted to this practice less than French ones: fixed assets acquired under finance leases accounted for under 1% of their total assets throughout the period. While this statement holds true for the overall population, the actual situation varied according to company size (see graph III.1.1.12 in the statistical annex). In both France and Spain, small companies employing fewer than 50 people and medium-sized companies made more use than larger companies of finance leases to finance their operating investment. In 1999, fixed assets acquired under finance leases accounted for 4.8% of the total assets of small companies in France compared with 1.2% in Spain. For medium-sized firms, the ratio was 3.4% in France and 1.5% in Spain, while in the case of large companies, the ratio stood at 1.2% in France and 0.5% in Spain.

If we analyse these figures by economic segment (see graph III.1.1.13 in the statistical annex), we find that the situation is broadly similar in the consumer and intermediate goods sectors in both countries, with fixed assets acquired under finance leases accounting for around 2% of total assets over the study period in France and around 1% in Spain. In the capital goods sector, fixed assets acquired under finance leases accounted for a slightly smaller proportion of total assets: 1.8% in France and 0.4% in Spain in 1999.

Analysing *intangible fixed assets* (4) is still awkward insofar as their definition is unclear. The OECD gives the following definition for intangible investment (source: *Petites Affiches – 16 July 2001 – No. 140*: “The term ‘Intangible fixed assets’ covers all long-term outlays by firms aimed at increasing future performance other than by the purchase of fixed assets. As well as technology investment (R&D), it also encompasses investment in training, labour relations, management structures, the organisation of production, the development of commercial and technological ties with other firms, suppliers and consumers, the exploration of markets and the acquisition and operation of software” (original quote in French). Over the 1990s, intangible fixed assets came to form one of the lynchpins of corporate competitiveness and the outlays that they necessitated were seen as strategic investments for the company’s future development. This trend has become more deep-rooted in France and Spain, where investments are becoming increasingly dematerialised.

Bearing this in mind, our analysis of balance sheet structures in France and Spain shows an increase in the average “*Intangible fixed assets / total assets*” ratio (see graph III.1.1.14), even though intangible fixed assets still account for only a small fraction of the balance sheets of the companies in these two countries. Companies may either book formation and share issuance expenses on their balance sheet and amortise them over a maximum of five years, or book them immediately on the profit and loss account. The fourth EU Directive states that R&D expenses in respect of a specific project that can be clearly identified and that has a serious

(3) Fixed assets acquired under finance leases accounted for 10.5% of total fixed assets in France and 2.5% in Spain in 1999.

(4) Definitions for the items comprising the intangible fixed assets analysed in this paper are given in chapter II.

## EXPLANATORY FACTORS OF THE DIFFERENT WEIGHT IN TANGIBLE ASSETS

It appears that the share of net tangible fixed assets (gross amount minus total amortisation/depreciation) in the balance sheet structure is greater in Spain than in France. There are several possible explanations for this difference:

1. *The most important factor is the weight of financial assets recorded in the balance sheet of French companies.*

French firms hold more financial fixed assets than Spanish companies, partly due to the faster pace of globalisation and the organisation in corporate grouping in France. This could be a symptom of higher maturity of French companies which are gradually followed by Spanish ones. This may also be due to the method used for booking equity holdings. Both, in France and Spain, the “equity holdings” item, which is included in financial fixed assets, combines the concepts of “subsidiaries”, whose definitions are similar in France and in Spain, that is to say holdings exceeding 50% of the capital in another company (-legal definition -in France), or whose management is appointed by the parent company (Spain), and “participating interests” (holdings between 10% and 50% in France, and with a “significant influence in the management” in Spain). If these equity holdings are below 10%, they are booked as a portfolio investment in France. In the case of direct investment in foreign companies, these financial fixed assets recorded in the balance sheet of French companies swell the fixed assets booked in the balance sheet of foreign companies. As the internationalisation process is more developed in France, this movement from tangible assets to financial assets is more explicit in this country; the catching up process followed by Spain, also is taken part in this domain: from 1998 Spanish corporations privatised has pursued the same pattern than the French ones.

2. *Moreover, due to the economic catch-up process under way in Spain mentioned, resulting in a substantial increase in investment, the fixed assets recorded on the assets side of the balance sheet in Spain may be more recent than those in France. It means that the fixed assets booked in French companies balance sheets are older; since they are booked at their historical costs, their value is lower than at current prices. The phenomenon can also be due to different expansion of production capacity in the two countries. As an illustration in the study between 1985 and 1990, Spanish firms stepped up their investment in order to boost production capacity and meet growing demand. In France, the investment drive between 1980-1990 was smaller insofar as significant production capacity was already in place. The economy slowed in the early 1990s and went into recession in 1993, which hit profits hard. This had a negative impact on the investment decisions of business managers in France and Spain, leading to a fall in gross fixed capital formation (GFCF) in French and Spanish industrial firms. The decline in GFCF showed up in the accounts, reflecting the uncertainty that overshadowed investors’ expectations until the mid-1990s. Thus, the weighted mean of tangible fixed assets to total assets fell from 32.6% in 1991 to 29.5% in 1995 in Spain, and from 19.2% in 1991 to 17% in 1995 in France. Subsequently, the accelerated pace of external growth operations by industrial firms put a damper on the acquisition of new tangible fixed assets through to the end of the period under review. In France however, the brighter economic picture in 1999 gave renewed impetus to investment, causing the proportion of tangible fixed assets in total assets to rise. Overall, in both countries, the share of net tangible fixed assets in total assets trended downwards in industry throughout the 1990s. In France in particular, among half of all industrial firms, the ratio of tangible fixed assets accounted for less than 16.5% of total assets in 1991, less than 15.1% in 1995 and less than 14.6% in 1999.*

3. *The depreciation method used for calculation expenses (i.e. Straight-line depreciation or declining balance depreciation) may affect the calculation of net fixed assets*

In fact the declining balance depreciation method (1) was more favourable in France than in Spain at the end of the period for goods to be depreciated over a period of seven years, thus being the average period of depreciation of industrial investments

- (1) The use of four possible amortisation methods is accepted in Spain:
- a) Sixth fiscal index accepted by Treasury Ministry
  - b) Constant percentage method, or straight line rate (may not be used in Building, furniture and others); this is the one referred in this box
  - c) Addition in digit numbers
  - d) Amortisation plans presented to the Treasury administration and duly accepted.

## EXPLANATORY FACTORS OF THE DIFFERENT WEIGHT IN TANGIBLE ASSETS

## Declining balance depreciation regime

	Scope	Rate
France (current)	Industrial moveable capital goods, industrial buildings whose UL (*) < 15 years and investments in new hotel prop- erty	UL 3-4 yrs: 1.5 × straight-line rate UL 5-6 yrs: 2 × straight-line rate UL > 6 yrs: 2.5 × straight-line rate
Spain	Tangible assets	UL < 5 yrs: 1.5 × straight-line rate UL 5-8 yrs: 2 × straight-line rate UL > 8 yrs: 2.5 × straight-line rate

(\*) Useful life = depreciation period

4. *Equipment operating time (operational capital) has increased over the past few years to contend with the growth of activity.*

According to a Banque de France survey, equipment operating time stood 53.2 hours in 1999. Such a level had not been seen since 1963 (52.9 hours), the figure having reached a low value in 1981 and around 48 hours in 1993 to increase then till the end of the period. The sharp rise in equipment operating time testifies both to manufacturers' efforts to use fixed capital as efficiently as possible, as well as to their attempts to adjust, in the short term, their factors of production to pressures on supply. This historically high level is likely to be the consequence of the steady increase in equipment operating time since the mid-1990s, following the sharp fall during the business cycle trough of 1993. In the long run, this substantial rise may indicate that equipment operating time will return to levels close to those observed before the first oil price shock. From the end of the 1980s, an increase was seen in equipment operating time in all economic sectors and in all company size brackets. This was due to the increased recourse to shift work, and, in particular, continuous work. Since the end of the nineties, this increase has been attributable to the fact that previously unused equipment was brought into service to meet the rise in demand. The data available for Spain (use of installed capacity, accordingly to Ministry of Science and Technology Survey), reflects a huge increase from 1993 to the end of the decade, showing the same behaviour in Spanish corporations related to the French previous mentioned. It is difficult to know to what extent the differences that could exist between two countries in this indicator would affect the level of tangible fixed assets found.

5. *Different levels of leasing between the two countries*

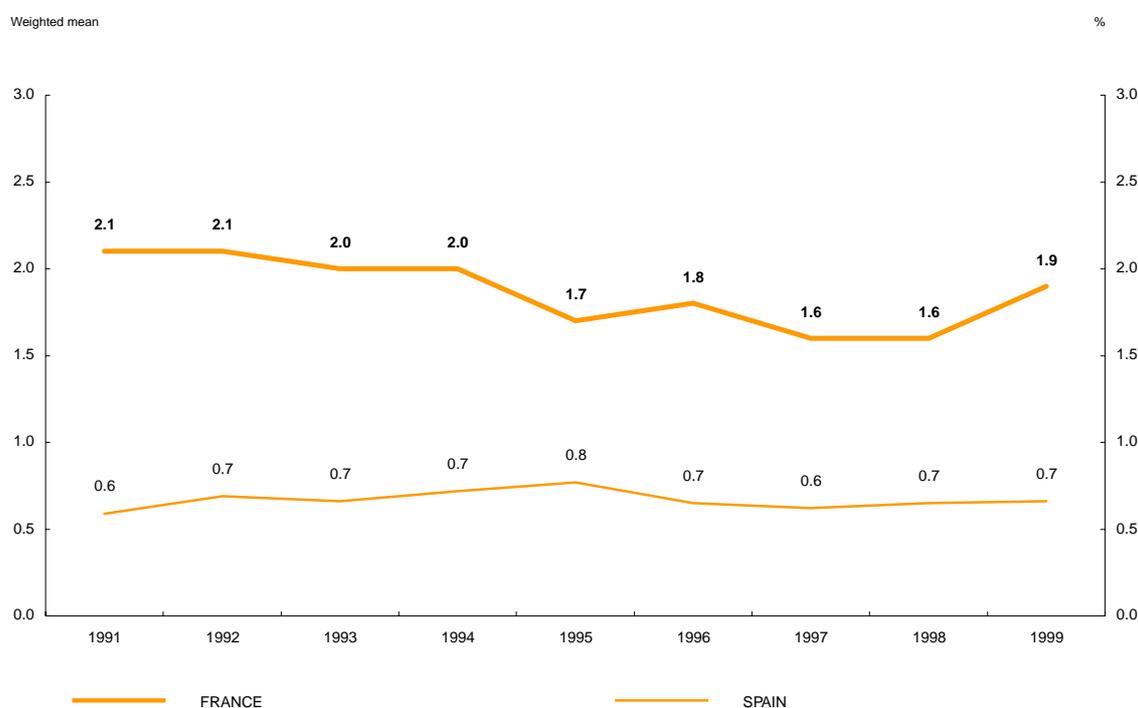
Some plant and equipment is not purchased by companies but simply leased, and therefore is not recorded as fixed assets on the assets side of the balance sheet in France. However, thanks to the information available in the balance sheet in Spain, and through the French Centrale de Bilans questionnaire) it was possible to calculate the amount of leased assets compared with total assets in this study, and give an idea of the importance of this phenomenon in each country. As it can be found in the main text, the use of this financing system is more extensive in France, where the tangible assets acquired with leasing contracts represent in average over the decade, 1 p.p. more than in Spain, in relation to the total assets. Likewise, most business premises are leased rather than purchased outright. Leasing offers companies greater flexibility, especially for recently established firms. Indeed, finance leasing enables the lessee to purchase the property outright, and offers the possibility of sub-letting, during the lease period, the good he has ordered. Listed companies prefer to lease as they receive low returns on real estate investment. In order to remove real estate from their core business, major companies entrust property management to real estate companies. Real estate companies are set up with little capital and borrow the amounts necessary to purchase premises. They then let these premises to companies

6. *Finally, another cause for the different level founded in tangible fixed assets to total assets, arise from the year in which the restatements laws in both countries were approved (1983 and 1996 in Spain; 1978 in France). These restatements laws enable the corporations to level their balance sheets, eliminating, at least partially, the impact of the inflation rates in the balances (because of the historical cost principles of valuation). Any-way, this has a limited impact on the comparison between both countries.*

## BIBLIOGRAPHY

- Sylvain Arnaud: "Equipment operating time : main results 1989-2000", *Bulletin of the Banque de France*, No. 94, October 2001 (English study scheduled for Digest March 2002).  
Vergeau et Chabanas N, 1997 " Le nombre de groupe d'entreprises a explosé en 15 ans", *INSEE Première* n° 553, novembre

### LEASING TOTAL ASSETS



Sources: Banco de España and Banque de France.

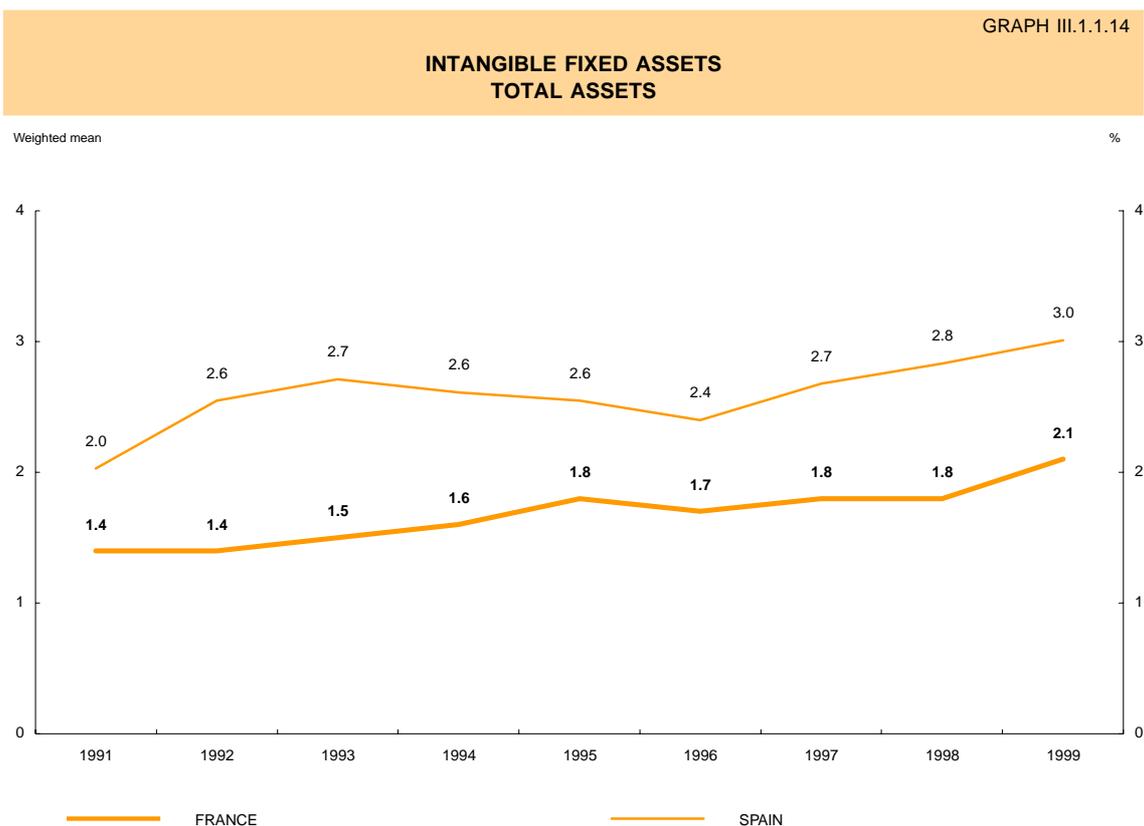
chance of yielding commercial profit, may be capitalised and written off over a maximum of five years. Therefore, the real level of investment cannot be totally shown in the balances. Anyway, between 1991 and 1999, the aggregate ratio of intangibles to total assets went from 1.4% to 2.1% in France and from 2% to 3% in Spain.

In France, this uptrend concerned companies of all sizes (see graph III.1.1.15 in the statistical annex). Moreover, the scale of the increase was identical across the board. This is because the French accounting code gives broad latitude in terms of recognising intangible fixed assets, thereby allowing smaller companies to book the same proportion of intangibles as larger outfits. In Spain, the ratio of intangibles to total assets appeared to rise more sharply among smaller companies (from 1.7% in 1991 to 4.6% in 1999) than among larger firms (2.1% in 1991, 2.9% in 1999).

On a sectoral level (see graph III.1.1.16 in the statistical annex), in France, the average “*Intangible fixed assets / total assets*” ratio was higher in the consumer goods sector than in the capital goods and intermediate goods sectors. The importance of research and development cost, patents and licences and increased biotech spending were two of the main reasons for this. In 1999, intangible fixed assets amounted to 3.4% of total assets in the consumer goods sector, compared with just 1.8% in intermediate goods and 1.2% in capital goods. In Spain, the proportion of intangible fixed assets in total assets was the same as in France in the consumer goods sector. By contrast, in capital goods, the level was higher in Spain throughout the period.

Responding to the development of capital markets in the nineties, French and Spanish companies used more of their cash to purchase financial assets instead of investing in new tangible fixed assets, especially French firms, as it can be checked next, in subchapter III.2. This trend be-

GRAPH III.1.1.14

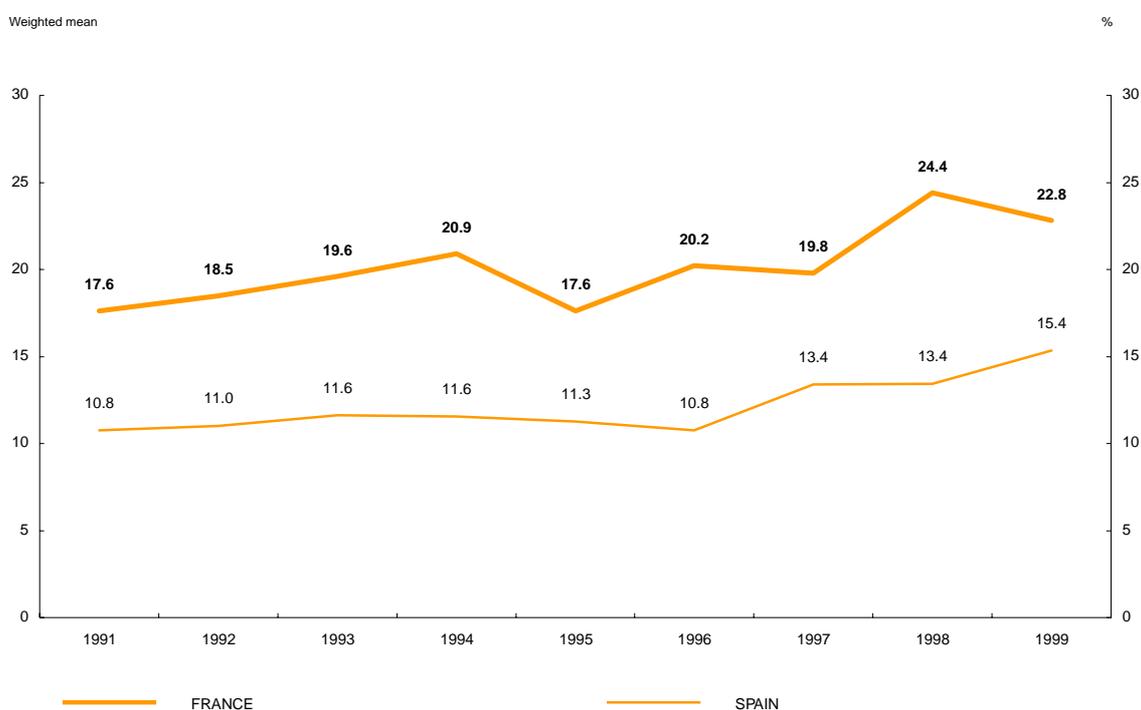


Sources: Banco de España and Banque de France.

came particularly evident from 1996 onwards. This strategy partly explains the symmetrical trends in the weight of tangible fixed assets and financial fixed assets in the total assets of French and Spanish industrial firms. The increase in the proportion of financial assets was greater in France than in Spain over the period under review, probably as a consequence of the different stage in globalisation of both countries (Spain follows the pattern of France, with a gap of several years). Between 1991 and 1999, the average “*financial fixed assets / total assets*” ratio rose from 17.6% to 22.8% (see graph III.1.1.17), reflecting the quickening pace of globalisation and the growing role of outsourcing. In Spain, the ratio went from 10.8% in 1991 to 15.4% in 1999.

However, large companies employing a workforce of over 250, which enjoy easier access to the capital markets, made the biggest contribution to this trend (see graph III.1.1.18 in the statistical annex). The strong rise in the value of shares and equity interests pushed the “*financial fixed assets / total assets*” ratio up almost 8 points in France to 28.2% in 1999. In Spain, the ratio put on almost 5 points, climbing to 16.9% in 1999. If we look at the *share of financial fixed assets* in total assets in different company categories in France, we see how the uptrend in financial assets was concentrated in large companies: the median of the ratio varied in France and Spain between 2.5% and 3% between 1991 and 1999 (between 3% and 5.5% for companies employing more than 500 people), whereas it never exceeded 1% in small and medium-sized businesses over the same period. Companies employing 50 to 250 employees in both countries saw this ratio increase, albeit to a lesser degree (2.2 p.p. in France, 2.6 p.p. in Spain), with financial fixed assets still accounting for a fairly small share of total assets at the end of the period (7.9% in France and 7.2% in Spain). Small-sized businesses made little attempt to acquire this type of asset: financial fixed assets accounted for 6.3% of their total assets in 1991 and 5.1% in 1999 in France, compared with 2.6% in 1991 and 3.4% in 1999 in Spain.

**FINANCIAL FIXED ASSETS  
TOTAL ASSETS**



Sources: Banco de España and Banque de France.

From a sectoral perspective (see graph III.1.1.19 in the statistical annex), while the up-trend was prevalent in all areas of activity and in both countries, the scale of the increase differed across sectors. Thus, in France, the *proportion of financial fixed assets* in total assets increased sharply in the capital goods sector, partly due to the fact that companies seemed to take advantage of growth opportunities. Another reason was the faster pace of globalisation in order to build up their holdings of financial assets. Note that between 1995 and 1997, however, the proportion of financial fixed assets contracted sharply, as and at the same time an increase of the share of trade debtors was observed. This resulted in an erratic pattern for the study period as a whole. In Spain, the biggest increase was seen in the intermediate goods sector, mainly towards the end of the period.

### 1.1.2. Current assets (5)

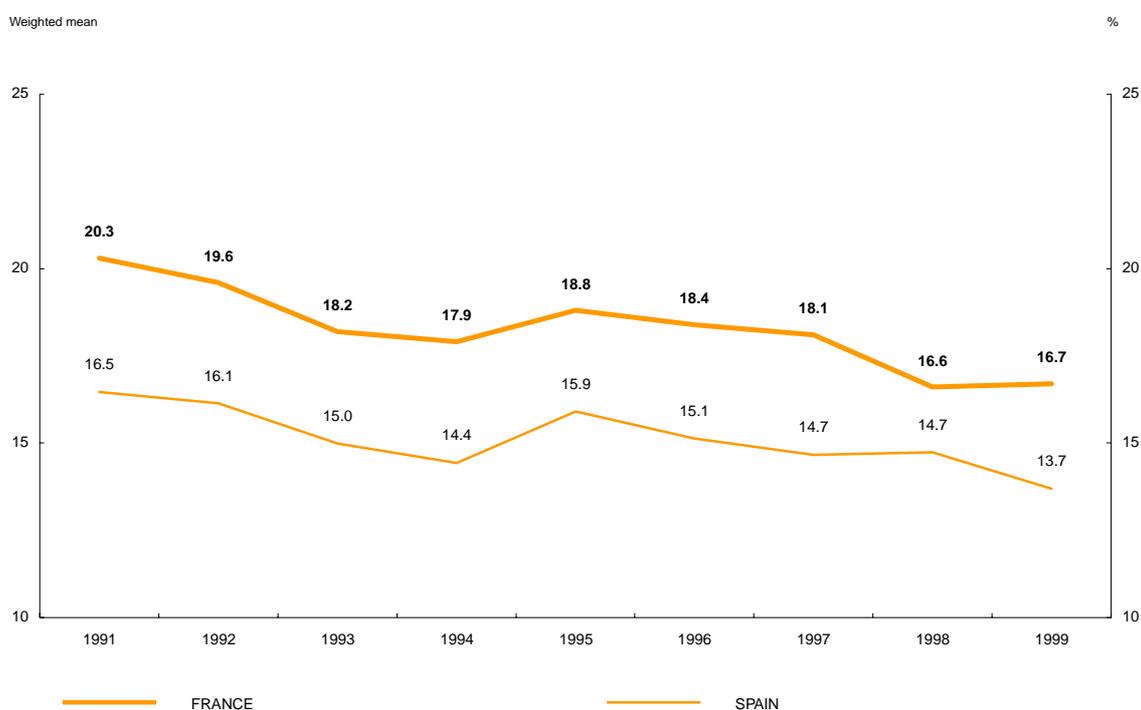
Our analysis of current assets in France and Spain shows that they remained stable overall during the period under review and that their structure was fairly heavily conditioned by company size and sector. Furthermore, the financial strategies adopted by companies are shown to have a marked impact on businesses' cash management, with large companies enjoying greater flexibility in this area than smaller ones.

Analysing stocks, the 1990s saw companies in both countries implement rationalisation measures and restructure their production processes, for example by introducing just-in-time

(5) Currents assets regroup stocks, trade debtors and liquidities.

GRAPH III.1.1.22

### STOCKS TOTAL ASSETS



Sources: Banco de España and Banque de France.

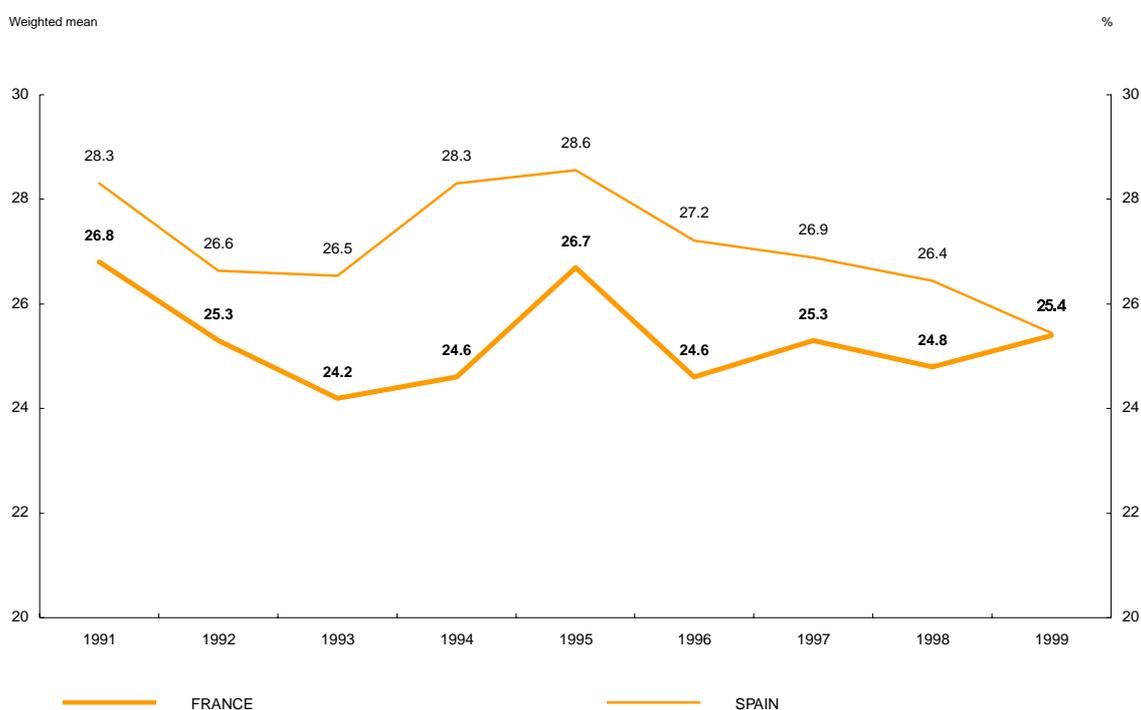
management techniques. As a result, stocks are used by companies as a mean of responding to cyclical developments. For example, during the economic slowdown and recession that took place in France and Spain between 1991 and 1993, the proportion of inventories in total assets went down in both countries, across all company sizes and sectors.

Furthermore, industrial firms are prevented by capacity constraints from building up their inventories during periods of strong growth. From 1991 in France, the downturn in production, falling industrial producer prices, and the ongoing shift to “zero stock” policies prompted companies to scale back their inventories in order to clean up their balance sheets and alleviate financial constraints. In Spain, the need for improved inventory management in a context of heightened competition led to better control in this area. In this respect, for Spanish businesses, the nineties represented a period of consolidation in their integration into the free market process. In both countries, there was a temporary phase of stock building in the middle of the period, at a time when inventory levels were deemed too low and demand expectations were becoming clearer.

Overall (see graph III.1.1.22), the *average proportion of stocks* in total assets fell from 20.3% in 1991 to 16.7% in 1999 in France and from 16.5% to 13.7% in Spain over the same period.

An analysis by size reveals that the ratio of stocks to total assets fell markedly among large companies, especially in France (see graph III.1.1.23 in the statistical annex). In both countries, the largest businesses slashed their inventories of goods, to the detriment of their main suppliers. In addition, French and Spanish companies with a dominant market position successfully shifted all or part of their inventory management costs onto their customers and/or suppliers.

### TRADE DEBTORS TOTAL ASSETS



Sources: Banco de España and Banque de France.

In all, the share of stocks in the total assets of small companies shrank by 2.5 percentage points in France and 2 percentage points in Spain, to 23.1% and 18.9% respectively in 1999. For large companies, the ratio fell by 4.6 p.p. in France and 3.4 p.p. in Spain, to 14.6% and 12.4% respectively in 1999. The results for medium-sized companies were between these two extremes.

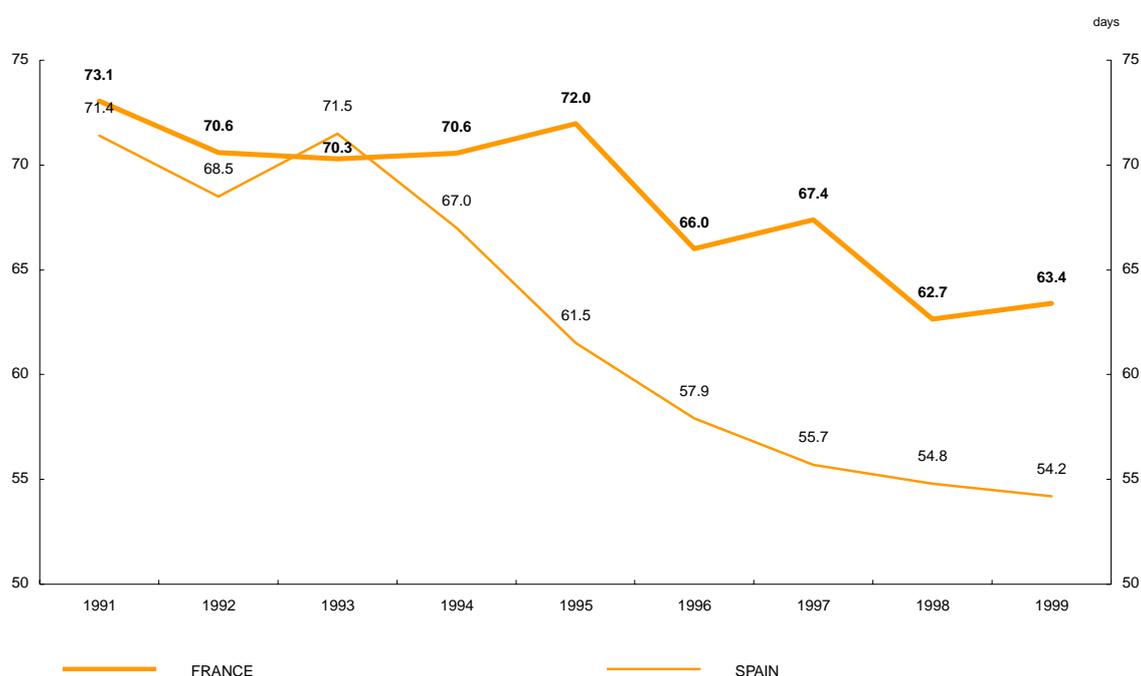
A sectoral analysis reveals that in both countries, the proportion of inventories in total assets was lower in the intermediate goods sector than in other sectors (see graph III.1.1.24 in the statistical annex). In France, the capital-intensive capital goods sector reported higher stocks than the other two segments until 1997, although the gap narrowed towards the end of the period. In Spain, inventory levels were higher in the consumer goods sector than in the other sectors throughout the period under review.

Trade debtors comprise the other main component of current assets. As in the case of stocks, the share of *trade debtors* (including advances paid on contracts but excluding loans to group companies and related entities) in total assets declined in both countries over the 1991-1999 period. The weighted mean for the aggregate population fell by 1.4 percentage points in France to 25.4% in 1999 (see graph III.1.1.25). Unlike in the case of stocks, however, the share of trade debtors in the total assets of Spanish companies, while also on a downtrend, remained above the proportion seen among French companies throughout the period, except towards the end, when the ratios converged at 25.4%.

Here again, the ratio of trade debtors to total assets was conditioned by the size of the firm in question enjoyed a dominant market position (see graph III.1.1.26 in the statistical annex): the ratio fell more sharply for large firms (down 2 p.p. in France and 3.7 p.p. in Spain)

GRAPH III.1.1.28

## AVERAGE TRADE DEBTORS COLLECTION PERIOD



Sources: Banco de España and Banque de France.

than for companies employing fewer than 50 people (the ratio was down 0.2 of a point in France and 2.6 points in Spain). Moreover, in both countries, the ratio of *trade debtors to total assets* was much higher in small and medium-sized companies than in large companies. It therefore appears that small companies were more often forced to sell on credit, rather than demand that their customers pay cash. This finding is backed up by indicators of average trade debtor collection period (see graph III.1.1.28), which were far higher for small Spanish companies (82.5 days in 1999) than large firms (47.9 days in 1999). In France, average payment period of trade debtors in 1999 were 77 days for small companies and around 59 days for large industrial firms. Small Spanish firms are worst placed than French ones in relation to this indicator, while large Spanish companies are better placed than their French counterparts (graph III.1.1.29).

A sectoral analysis reveals that from 1994 onwards, French consumer goods companies were more successful in managing trade debtors than companies in the capital goods and intermediate goods sectors. This was made possible, *inter alia*, by the nature of activities undertaken in this sector. In Spain, the lowest trade debtors were to be found in the intermediate goods sector (see graph III.1.1.27 in the statistical annex).

The approach to *cash management* taken by companies is closely linked to the financial strategy that they adopt. Thus, a company may use its liquidities as a means to react swiftly to unforeseen events in the course of the business cycle, and thereby preserve its financial autonomy. On aggregate, the liquidity ratio (securities and cash) increased slightly more in France than in Spain. On average (see graph III.1.1.30), liquidities accounted for 7.2% of total assets in 1999 compared with 5.9% at the beginning of the period in France, and 5.7% in 1999 compared with 5.2% at the beginning of the period in Spain.

## LOANS TO GROUP AND RELATED ENTITIES

These loans include long term and short term financing. In France, the cross-shareholdings and growing concentration seen in the industrial sector led to an increase in the proportion of loans to group companies and related entities in total assets. This ratio increased from 10.6% at the beginning of the period to 13% in 1999, peaking at 14.7% in 1998. In Spain, this ratio is only available for large companies, and they also increased more than 6 points the weight of loans to group and related companies over total assets between 1991 (2.4%) and 1999 (9.0%).

Large industrial firms, whose lending to subsidiaries was particularly robust were mainly concerned by this trend: in 1999, the proportion of loans to group companies and related entities came to 14.9% of total assets in this size category, compared with 11.9% in 1991. In the case of smaller firms, the ratio was lower than half the level observed for large companies, and stood at 5.8% in 1999 (4.5% in 1991). This type of financial strategy therefore appears to be closely linked to company size (see graph III.1.1.21 in the statistical annex).

On a sectoral level, in France, the proportion of loans to group companies and related entities in total assets remained fairly similar in the consumer and intermediate goods sectors, at 12.4% and 11.6% respectively in 1999 after 10.3% in 1991. Companies in the capital goods sector, however, in particular the major automotive groups, stepped up their lending to subsidiaries.

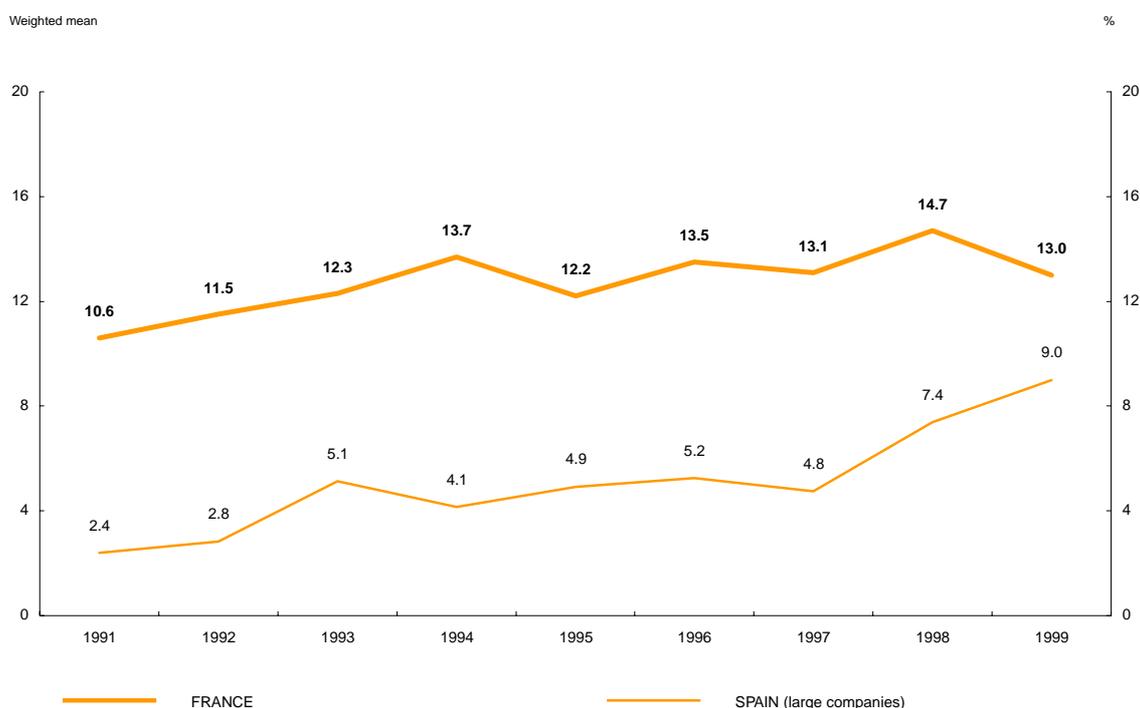
In terms of size, small companies in France and Spain had higher levels of cash than large firms in the 1990s (see graph III.1.1.31 in the statistical annex). This reflected the fact that they did not have access to permanent credit and so were obliged to keep a relatively large stock of cash to maintain the necessary financial flexibility. Smaller companies are forced to adopt this type of strategy because they find it hard to obtain liquidity from banks. At the end of the period, *liquidities* accounted for 11.7% of the total assets of small industrial firms in France and 12.1% in Spain, compared with 6.3% of the total assets of large French companies and 4.2% of large Spanish companies.

A sectoral analysis shows that *cash* accounted for relatively similar proportions of the total assets of French and Spanish companies in the consumer goods and capital goods sectors. Cash levels were far lower in the intermediate goods sector throughout the period, probably because financial pressures and cyclical constraints were less intense (see graph III.1.1.32 in the statistical annex).

To sum up, our analysis of the balance sheet structures of French and Spanish industrial firms shows that their assets were relatively similarly structured in terms of maturity and that the components of current assets developed along comparable lines. That said, tangible fixed assets accounted for fairly different shares of total assets in the two countries. This would appear to be linked in part to the different approaches to organisation taken by corporate groups in France and Spain. In this respect, we observed that asset structures were closely linked to *company size* and *business area (the sector factor)*. Larger firms have more room for manoeuvre than smaller companies in the management of their financial assets (they enjoy broader access to capital markets that avoid to maintain a high level of cash), in terms of external growth (they are able to outsource part of their activity to subsidiaries) and in cash management (they benefit from more flexible banking conditions). The sector factor is more noticeable in inventory management and in the use that companies make of tangible fixed assets.

GRAPH III.1.1.20

### LOANS TO GROUP AND ASSOCIATED COMPANIES TOTAL ASSETS



Sources: Banco de España and Banque de France.

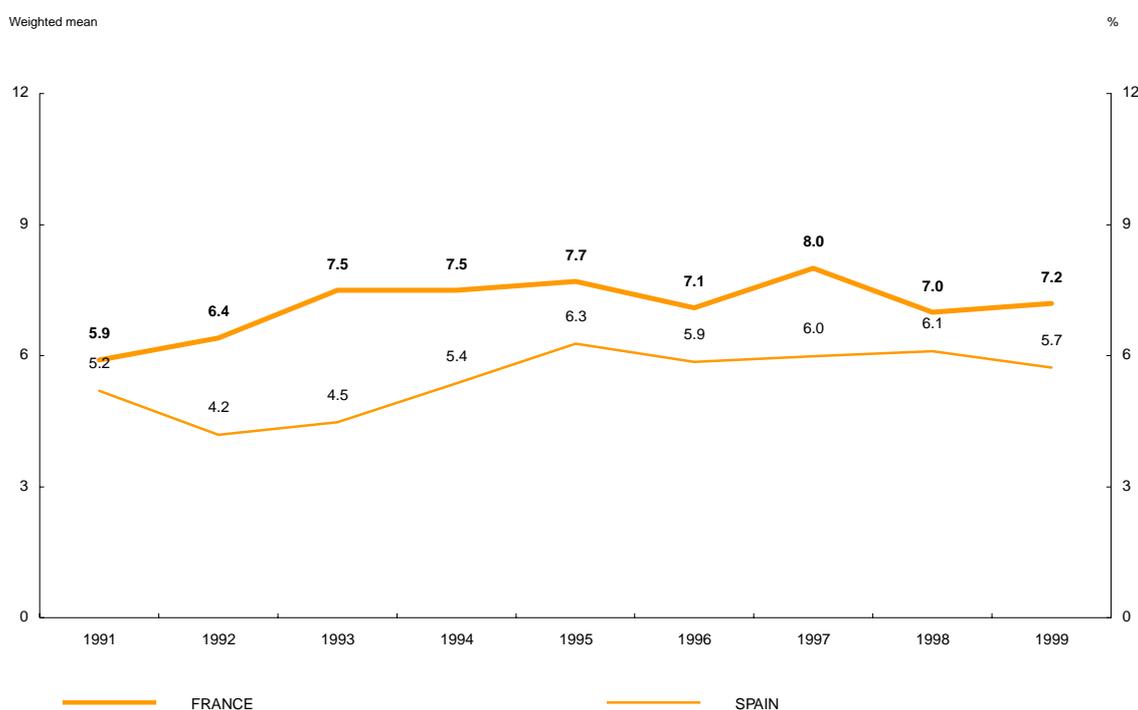
## 1.2. Liabilities

The sources of funds of French and Spanish industrial firms can be divided into own funds, financial debt, trade creditors, other creditors and provisions for risks and charges (see graphs III.1.2.1 to III.1.2.7 in the statistical annex).

By analysing the weighted means of these different components, we find the following basic trends:

- French businesses greatly improved their financial structures during the 1990s, especially between 1991 and 1994, by increasing the level of their *own funds*. In parallel, the share of financial debt in French companies' total liabilities decreased in similar proportions between 1991 and 1999. The behaviour of Spanish firms in terms of own funds was closely linked to the economic cycle although this behaviour was only followed by large corporations. Small firms kept a trend totally different to the total population and to the French small firms; thus defining a special pattern for Spain. Accordingly, there was a significant decline in the proportion of own funds during the 1991-1993 recession, followed by an uptrend from 1994 onwards, leading to a peak in 1999.
- *The weight of financial debt* was reduced in the two countries in the same proportion as the increase observed in the level of own funds. The structure of financial debt shows in France and Spain a fall of the proportion of bank debt between 1991 and 1998 whatever the size and the sector and a larger proportion of financing through loans from group companies and related entities.

### LIQUIDITY TOTAL ASSETS



Sources: Banco de España and Banque de France.

- *The proportion of provisions for risks and charges* shows that French and Spanish companies made marginal use of this source of funds throughout the period, compared with own funds and loans. In the case of French companies, one reason for this is that extremely precise tax and accounting rules specify how much companies have to set aside as provisions. This leaves firms with little discretionary power in terms of provisioning. In Spain, the shift towards outsourcing pension provisions was partly responsible for the decline in the ratio.
- *An analysis by size* reveals a number of differences between France and Spain. These are mainly due to the different practices in the two countries in terms of recourse to external financing.
- *At a sectoral level*, in both countries, the intermediate goods and consumer goods sectors appear to adopt fairly similar approaches in terms of own funds, provisioning and debt, while the capital goods sector stands out as being somewhat different.

The following analysis seeks to identify the shares of different sources of funds in the total liabilities of French and Spanish companies and to reveal how these shares changed over the 1991-1999 period.

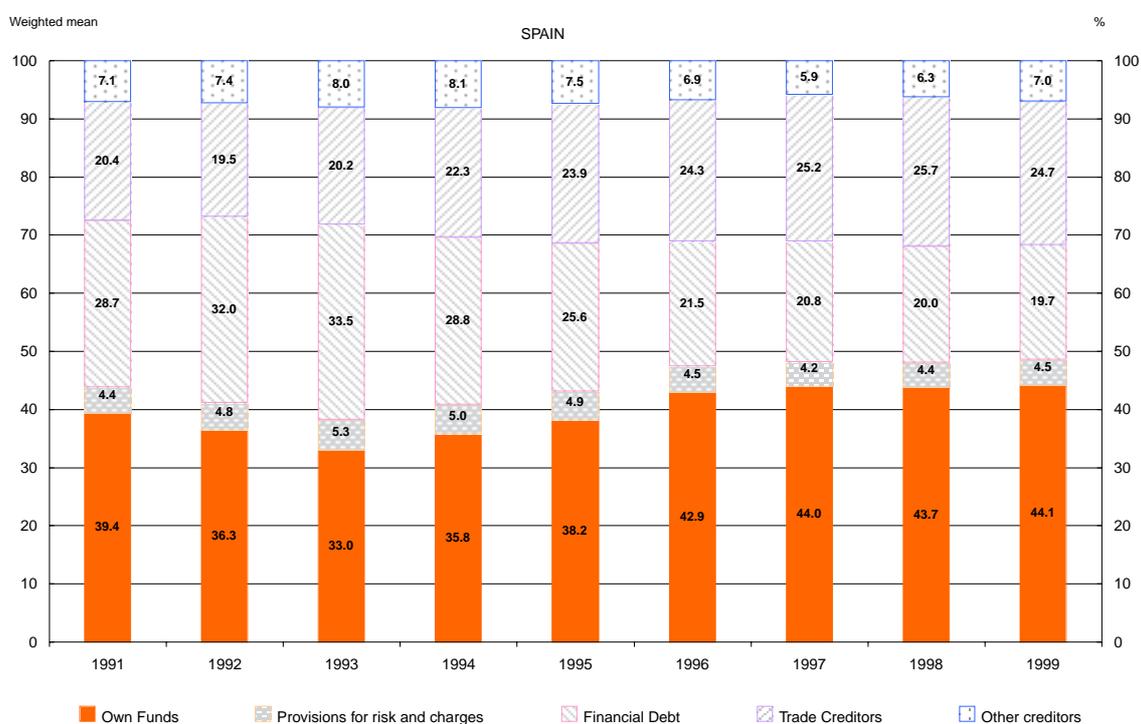
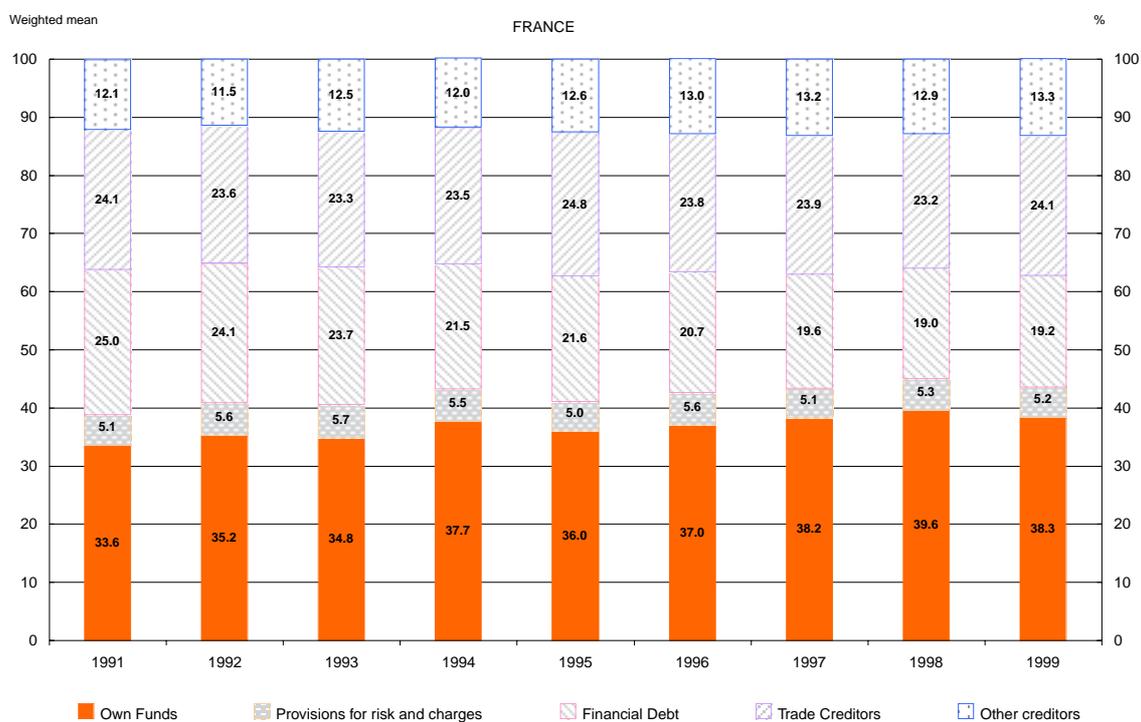
#### 1.2.1. Own funds

*Own funds* (6) are a key source of funds for industrial firms in France and Spain. The weighted mean of the ratio of own funds to total liabilities (see graph III.1.2.8) rose sharply over the study

(6) Own funds main items: equity capital + reserves + profit or loss of the financial year + grants and subsidies. See for precise definition for the two countries chapter II "transition table of the balance sheet items and French tax form".

GRAPH III.1.2.1

### STRUCTURE OF LIABILITIES TOTAL INDUSTRY (SAMPLE)



Sources: Banco de España and Banque de France.

period in France, increasing from 33.6% in 1991 to 38.3% in 1999. At the same time the median of this ratio amounted from 29.1% in 1991 to 34.1% in 1999, confirming the upward trend. In Spain, changes in the proportion of own funds in total liabilities were closely linked to the domestic business cycle, with the ratio fluctuating between 33% in 1993 and 44% in 1999. Between 1991 and 1994, there was a marked fall in the ratio because of an accumulation of negative earnings by Spanish firms: this was reflected in the individual components of own funds. The “other reserves” item recorded large-scale losses during the recession years and its share of total liabilities hit a low of 12.9% in 1993 (as compared with 28.5% in 1999). From 1994 onwards, the ratio of own funds to total liabilities began trending upwards again until it peaked in 1999.

In France, the overall increase in own funds can be traced back to two factors:

- The build-up of reserves by companies. Their twofold aim in doing this was to achieve the strategic objective of improving their financial structures (essentially in the second half of the decade) and to take advantage of tax incentives for retained earnings. This measure, which lasted until 1993, offered lower rates for retained earnings than distributed earnings. In 1999, on average, reserves accounted for around 30% of the own funds of companies and 11.2% of the total liabilities of industrial firms;
- The increase in *equity capital* throughout the 1990s in step with the growth of capital markets (see annex IV on French and Spanish Financial Systems). By 1999, *equity capital* accounted for an average of 12.2% of the total liabilities of companies, compared with 9.3% in 1991, and almost one-third of their own funds.

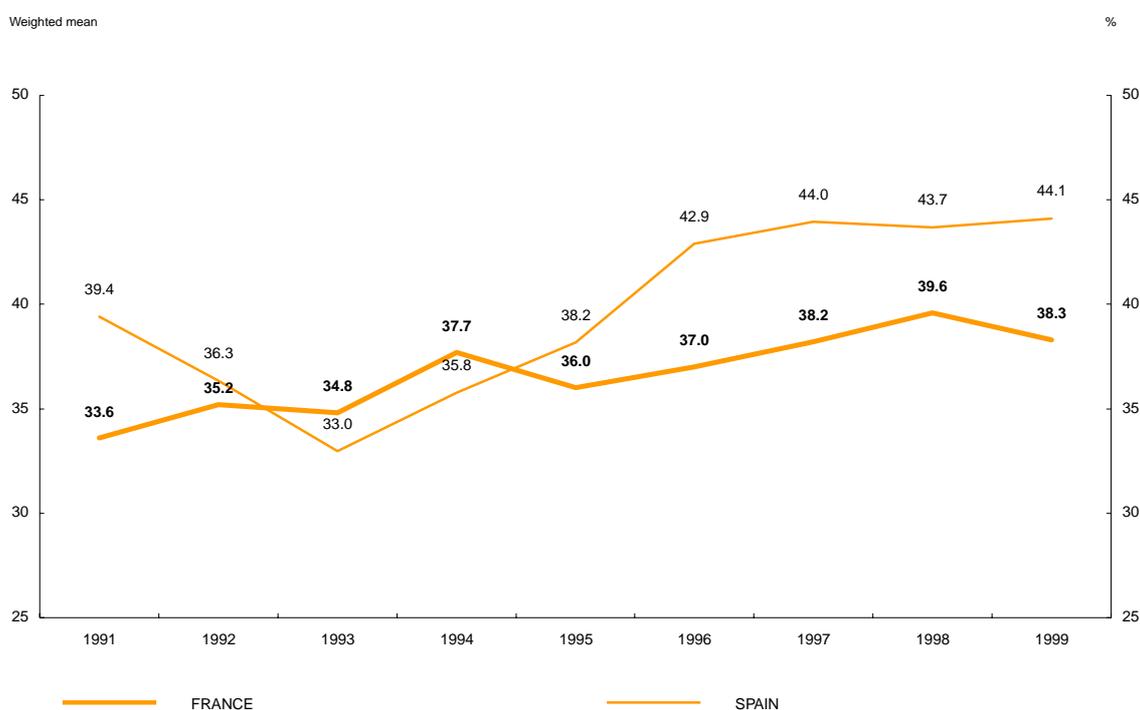
In Spain, the increase in own funds in the last six years of our study can be ascribed to the increase in reserves, which resulted mainly from the build-up of retained earnings. The proportion of reserves in total liabilities soared from 13% in 1993 to 31% in 1999. Over the same period, the ratio of equity capital to total liabilities declined by around 6 p.p.

An examination of the “own funds / total liabilities” ratio reveals that in France own funds increased in all size categories, regardless of the statistical indicator used (weighted mean or median). If we consider the median, we see that the proportion of own funds in total liabilities increased with the number of employees over the 1991-1999 period. However, the gap separating small companies employing fewer than 50 people and very large firms with over 500 employees narrowed considerably from the mid-1990s, from 6.2 p.p. in 1991 to 1.5 p.p. in 1999. Thus, a marked trend towards uniform levels of own funds has emerged, reflecting the fact that all French industrial firms are adopting the same approach, irrespective of their size. In 1999, the weighted mean of own funds to total liabilities came to 38.3% in small companies, 37.6% in medium-sized businesses and 38.4% in large companies (see graph III.1.2.9 in the statistical annex).

In Spain, behaviour patterns changed more significantly according to company size. In the second half of the decade, the ratio of own funds to total liabilities was lower in smaller firms than among the aggregate population. In addition, the ratio for small companies was relatively unaffected by the business cycle: in the case of companies employing fewer than 50 people, it reached a low of 34.9% in 1995, before registering a small 3 p.p. increase by the end of the period. Similarly, the ratio for medium-sized companies was not correlated with cyclical fluctuations. However, it was considerably higher than the ratio for small companies. It bottomed out at 42.5% in 1994, but was up four points on this by the end of the period. By contrast, in the case of large companies, the ratio of own funds to total liabilities was strongly influenced by the business cycle and it was in this category that the largest fluctuations were seen, with the ratio going from 32.8% in 1993 to 44.7% in 1999. This trend was more preva-

GRAPH III.1.2.8

**OWN FUNDS  
TOTAL LIABILITIES**



Sources: Banco de España and Banque de France.

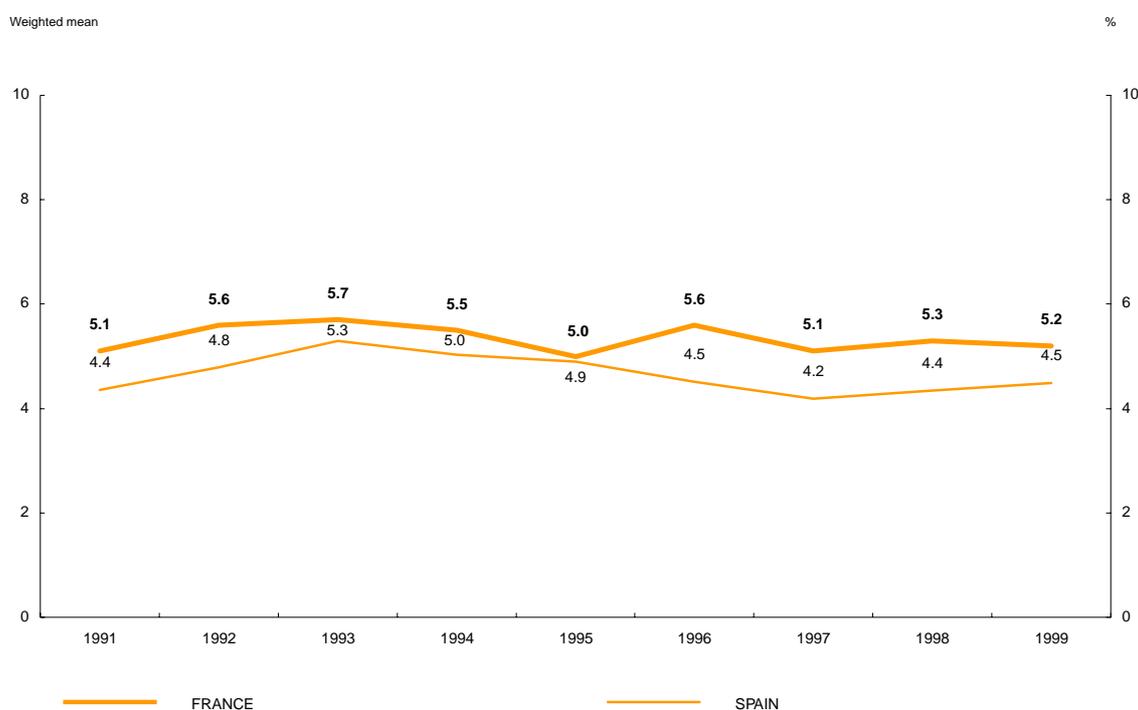
lent among large companies employing more than 500 people (see graph III.1.2.9 in the statistical annex).

An analysis by sector of activity (see graph III.1.2.10 in the statistical annex) shows that in France, own funds stood at fairly similar levels in the intermediate and consumer goods sectors between 1991 and 1999, while levels were far lower in the capital goods sector throughout the period under review. This gap was due to two factors: first, the greater emphasis placed on equity capital in the intermediate goods sector, which would seem to indicate that companies in this segment had greater access to the capital markets; second, the higher level of reserves in the intermediate and consumer goods sectors compared with the capital goods sector. Overall, at the end of the period under review, the ratio of own funds to total liabilities averaged out at 44% in the intermediate goods sector; 40.8% in the consumer goods sector, and 29.6% in the capital goods sector. In Spain, the ratio was stable and highest in the consumer goods sector. This contrasted with the other two sectors, which recorded large increases: in intermediate goods, the ratio climbed from 33% in 1993 to 49% in 1999, while it rose from 22% in 1993 to 35% in 1999 in the capital goods sector.

### 1.2.2. Provisions for risks and charges

Both the weighted mean (see graph III.1.2.11) and the median of the ratio of provisions to total liabilities show that *provisions for risks and charges* play a minor role as a source of financing for French and Spanish businesses. In France, this notably reflects the fact that strict accounting rules are in place for valuing provisions. Since pension provisions are not tax-deductible, complementary pension schemes run by employers remain marginal. Indirect mecha-

**PROVISIONS FOR RISK AND CHARGES  
TOTAL LIABILITIES**



Sources: Banco de España and Banque de France.

nisms, such as pension funds managed by an entity outside the company, are most common. French businesses prefer employee profit-sharing plans as a way of providing an incentive to enhance performances.

In Spain, too, this source of funds has limited importance: provisions for risks and charges varied between 4% and 5% of total liabilities over the period under review. One of the main reasons for this low level was that pension provisions declined as a result of the requirement for companies to outsource this type of commitment. This process began in 1995 and will be completed in 2002 (see annex VI on the legal treatment of pension funds in Spain).

An analysis by size shows that provisions for risks and charges account for a small share of the total liabilities of small companies in both countries: in France, half of all small companies (employing 0 to 49 people) do not set aside provisions for risks and charges, and the weighted mean stood at 1.8% in 1999. In Spain, the weighted mean of the ratio is around 0.4%, owing to the very small pension provisions set aside by small Spanish firms, first because they do not tend to set up such schemes for their employees, and second because it is now mandatory for them to outsource the management of such funds. In addition, in both countries, the proportion of provisions for risks and charges increased in line with the number of employees: in 1999, the weighted mean ratio came to 6.5% of total liabilities among very large French companies employing more than 500 people, 6.1% for large French firms employing a staff of over 250, and 5.8% for large Spanish companies (see graph III.1.2.12 in the statistical annex).

In both countries, the level of provisions was much higher in the capital goods sector than in the other two sectors (see graph III.1.2.13 in the statistical annex). This was particularly noticeable in France.

### 1.2.3. Financial debt (7)

Since practices for booking bank financing according to maturity differ in France and Spain (8), it was decided that for the purposes of comparison, it would be best to analyse sources of funds according to their nature.

#### 1.2.3.1. EVOLUTION OF FINANCIAL DEBT BETWEEN 1991 AND 1999

An examination of the debt structure of French industrial firms reveals that the *proportion of financial debt* declined markedly between 1991 and 1999, irrespective of the statistical indicator used (i.e. weighted mean or median). Moreover, until 1998, cyclical fluctuations (economic slowdown between 1990 and 1992, recession from 1992 to 1993, then growth from the mid-1990s onwards) had little impact on this proportion. Thus, between 1991 and 1998 (see graph III.1.2.14), industrial firms reduced the share of financial debt in their total liabilities by 6 p.p. on a weighted mean (5.3 p.p. according to the median).

Notably, this took place via a process of disintermediation, illustrated by an ongoing reduction in the share of bank debt in total liabilities from 12.1% in 1991 to 7.6% in 1998 on a weighted mean. Disintermediation also took place in Spain as of 1992. The impact was greater than in France: the “bank debt to total liabilities” ratio tumbled by 11 points, from 21.2% in 1992 to 10.2% in 1998 (see graph III.1.2.17). In parallel with the movement of disintermediation experienced by corporations the reasons for the similar approach taken by Spanish and French banks to business lending can also be attributed to domestic bankruptcy laws, which share common features (see annex V on bankruptcy law in France and Spain). These laws caused credit institutions to adopt a relatively cautious tack during this period, contrasting with the seemingly less wary attitude of banks in other European countries, such as Germany. This difference can be explained largely by the creditor-friendly provisions contained in German bankruptcy law. German banks are well-protected against loan losses caused by bankruptcy. Also, a credit guarantee system in place. This explains why German firms’ debt levels remained relatively constant over the study period (9).

Since 1998, however, there has been a shift back towards banking intermediation in French companies. In particular, this resulted in an increase in the proportion of bank debt in total liabilities at the end of the period analysed. Between 1998 and 1999, in fact, the ratio rose from 7.6% to 8.6% on a weighted mean, after remaining stable between 1997 and 1998. This shift also appeared to take place in Spain, albeit on a smaller scale, with the ratio rising from 10.2% in 1998 to 10.7% in 1999.

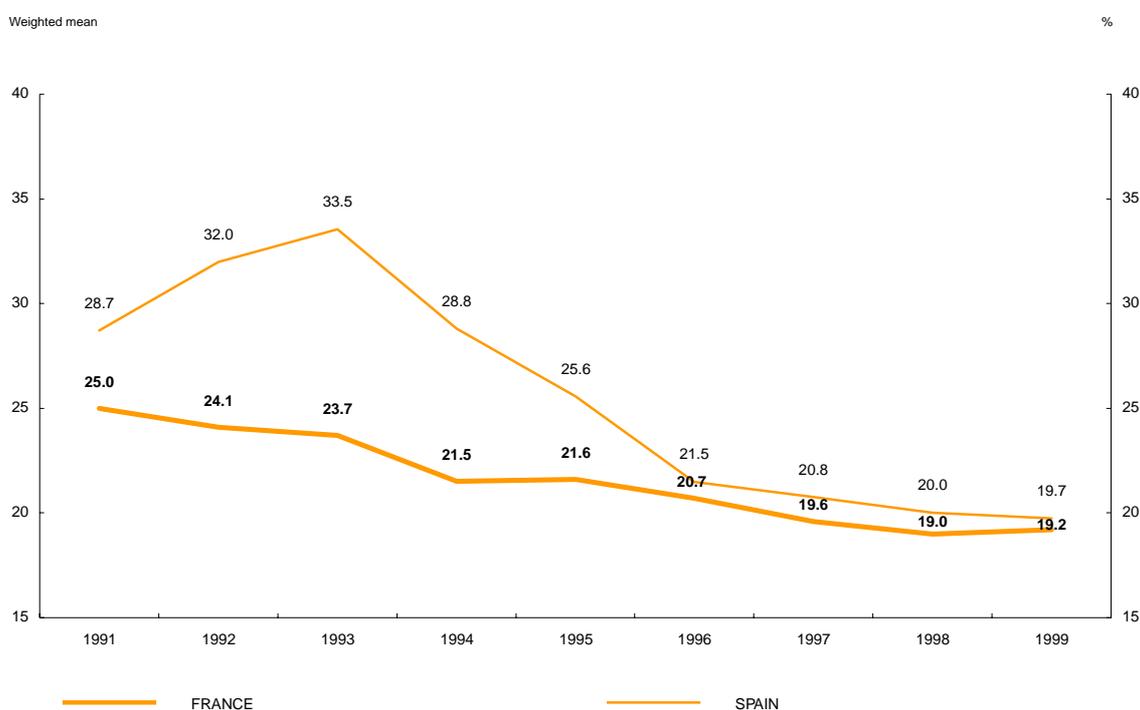
*In terms of size*, French companies, whatever their size, take a more uniform approach to debt than Spanish ones. In France, this approach reflects the greater financial autonomy of large French industrial firms compared to smaller French companies. In Spain, the relative share of financial debt on the balance sheets of small companies remained high and stable (29.6% in 1992 and 1999), meanwhile in large companies the weight reduced significantly passing from 33% in 1992 to 18.2% in 1999. (See graph III.1.2.15 in the statistical annex)

(7) Financial debt = long term bank borrowing + short term bank borrowing + securities other than shares + loans from group and associated companies + other financial debts.

(8) The French Balance Sheet Data Office books debts according to their original maturity. In Spain, in accordance with the Fourth European Directive, debts are booked according to their residual maturity.

(9) See Study on “Corporate finance in Germany and France” (September 1999)

### FINANCIAL DEBT TOTAL LIABILITIES



Sources: Banco de España and Banque de France.

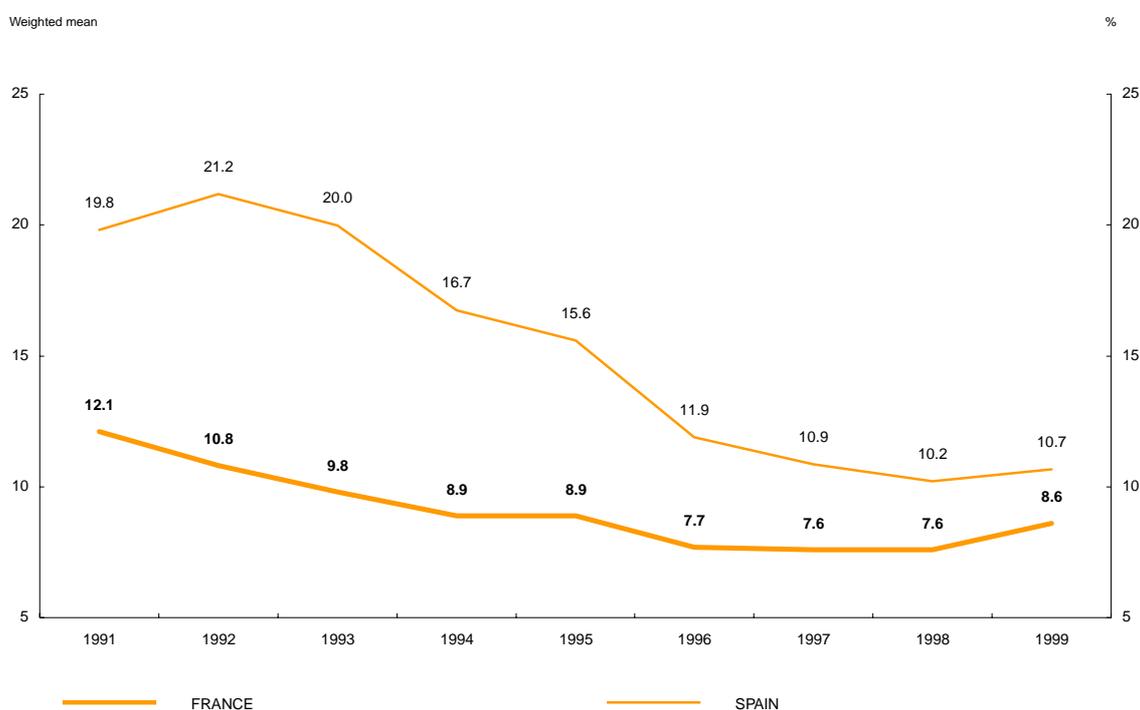
An examination of the sources of financing used reveals:

- There was a large difference between small and large companies in France in terms of the *share of bank loans* in total liabilities, even though this gap tended to narrow towards the end of the period: the weighted mean went from 17.7% in 1991 to 12.2% in 1999 for small companies (0-49 employees), while it fell from 9.8% to 6.7% for companies with over 500 employees over the same period; in other words, the gap narrowed from almost 8 points at the beginning of the period to 5.5 points in 1999. The gap separating small companies (0-49 employees) and companies with a staff of over 250 went from 7.3 points in 1991 to 5 points in 1999. In Spain, the share of bank loans in total liabilities increased from 19.9% in 1991 to 24.6% in 1999 in small companies and fell from 19.2% in 1991 to 9.6% in 1999 among larger companies, indicating that size had great effect on behaviour. (See graphs III.1.2.18 in the statistical annex).
- A bigger substitution effect was seen in the sources of funds of large French companies, which have less difficulty in tapping the financial markets for funds. *Bonds and participating interests* accounted for around 2% of total liabilities among large companies, compared with virtually nil in smaller businesses. The substitution effect was negligible in Spain. Irrespective of their size, Spanish companies made little use of this source of funds during the period under review.

*In the analysis by sector*, the share of financial debt in the total liabilities of French and Spanish companies declined over the 1991-1999 period across all sectors (see graph III.1.2.16 in the statistical annex). The downtrend was similar in the consumer goods sectors of both countries. In the other two sectors, it was more marked in Spain than in France. In fact an up-

GRAPH III.1.2.17

### BANK LOANS TOTAL LIABILITIES



Sources: Banco de España and Banque de France.

ward trend was observed in Spain during the recession period (1992-1993) followed by a significant fall. Furthermore, at the end of the period, the ratio of financial debt to total liabilities remained perceptibly lower in the capital goods sector than in the other two sectors. It came to 15.8% in 1999 in Spain and 16.5% in France, following a steeper fall in Spain (10.3 p.p.) than in France (3.5 p.p.) over the period. In France, this situation can be explained by the fact that this sector makes less use of bank debt and is more oriented towards loans from group companies and related entities (see the analysis of debt structures).

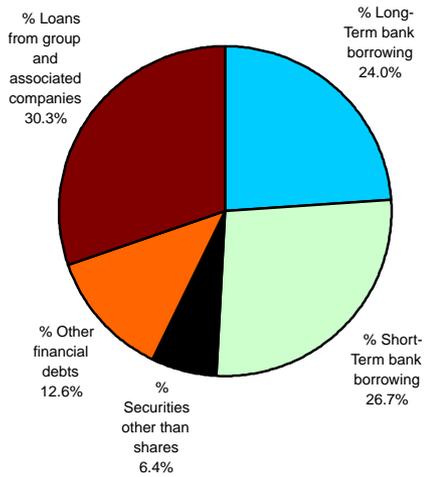
#### 1.2.3.2. STRUCTURE OF FINANCIAL DEBT

The analysis of the external sources of funds (see next graph III.1.3.1) used in France and Spain reveals the following key trends:

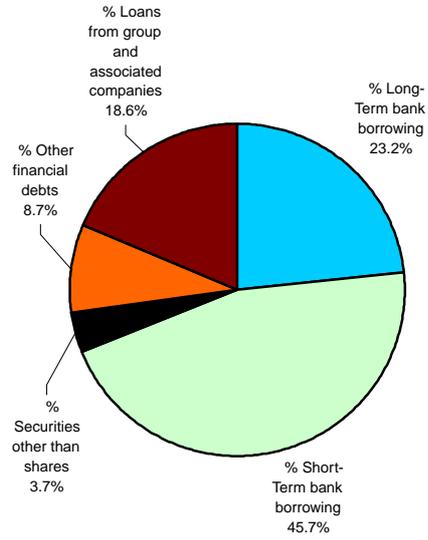
- Loans from group companies and related entities comprised a large proportion of the external funds used by French and Spanish companies. In 1999, their share came to 40.0% in France, up 9.7 p.p. on 1991 and roughly equal to that of bank debt. Companies raised more financial resources by directly tapping national and international money and capital markets. In Spain, the proportion of intragroup financing in financial debt increased from 18.6% in 1991 to 30.2% in 1999. In particular, this enabled Spanish companies to cut back on short-term financing from credit institutions.
- Bank debt became increasingly oriented towards long-term loans, whose share in financial debt came to 23.2% in 1999 in France after 24.0% en 1991. The share of short-term debt shrank from 26.7% in 1991 to 21.3% in 1999, i.e. a sharp fall of

**FINANCIAL DEBT  
TOTAL INDUSTRY (SAMPLE)**

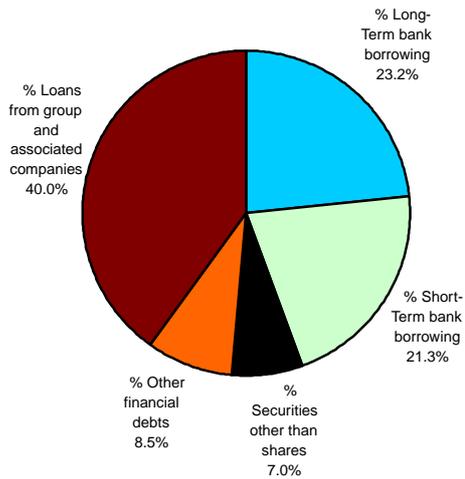
**FRANCE  
( 1991)**



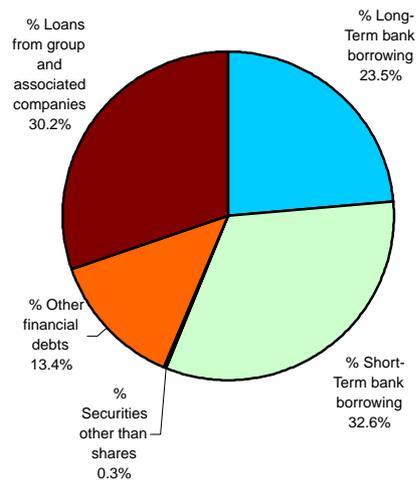
**SPAIN  
( 1991)**



**FRANCE  
( 1999)**



**SPAIN  
(1999)**



Sources: Banco de España and Banque de France.

5.4 p.p. This was due to two factors: first, the determination of companies to reduce their vulnerability as they built up their financial autonomy; second, greater selectivity in credit allocation, which affected short-term lending in the 1990s. Indeed, it seems that the relatively high rates applied to short-term loans at the end of 1992 and in early 1993 in response to the recession and bleak economic outlook prompted firms to adopt bank debt structures geared more towards long-term loans. The overall share of bank debt in financial debt, taking all maturities into consideration, declined regularly until 1996, when it reached 39.1%, compared with 50.7% in 1991. It then began to rise from 1997, climbing to 44.5% in 1999, as firms took on more debt in a bid to keep in step with the renewed growth of the economy. The same situation was seen in Spain: the proportion of bank debt in financial debt fell from 68.9% in 1991 to 56.1% in 1999. The proportion of short-term loans in financial debt fell by 13 p.p. between the beginning and end of the period. However, the widespread practice among Spanish companies, especially smaller ones, of discounting bills of exchange, is one of the reasons for the high level of short-term loans compared to the level observed in France. Under this technique, the monies paid by the bank in return for the sale of claims by the company are booked under loans falling due in under one year. This practice is particularly prevalent among smaller companies because of the long payment times they have to contend with. The proportion of long-term bank debt was stable at around 23% throughout the period under review. In this regard, the role played by the Spanish savings banks, which granted 40% of all loans from credit institutions should be noted (see annex IV entitled “French and Spanish Financial Systems”)

- The weight of other components of financial debt is less significant and their shares did not change much between 1991 and 1999.

*Analysis by size:* debt structures varied with company size. However, the differences were more pronounced in France than in Spain (see graph III.1.3.2 in the statistical annex).

*Short-term bank loans* represented the main source of external funds for medium-sized French companies employing between 50 and 250 people. They accounted for 34.9% of external funds for companies of this size in 1999, compared with 31.4% for small businesses with fewer than 50 employees and 16.4% for large companies. Conversely, in Spain, since 1995, small businesses have made more use of short-term loans than medium-sized ones. In 1999, short-term loans accounted for 51.1% of the financial debt of small companies with a workforce of under 50, compared with 48.9% for firms employing between 50 and 250 people, and 27.3% for large companies.

Furthermore, we found that in France the *ratio of long-term bank loans* to total financial debt was inversely proportional to company size. In small companies employing fewer than 50 people, this ratio stood at 31.4% in 1999, whereas among larger companies with a staff of over 250, it came to 20.8%. Corporate groups set up specialised structures to handle relations with banks and investors, which cut the transactions costs involved in obtaining external funds. In addition, large groups have market clout that enables them to secure more favourable financing conditions from the banks. The lower costs of intragroup financing compared with external funds may go some way to explaining why companies make little use of bank loans when financing their subsidiaries.

The same is true in Spain. Long-term bank loans accounted for 31.5% of the financial debt of small companies in 1999, compared with 24% for medium-sized companies and 22.8% for large companies.

### GROUP FINANCING: AN INCREASING SHARE IN THE TOTAL LIABILITIES

In all industrialised countries there has been an acceleration in the processes of corporate consolidation and corporate group creation. The fact that a company belongs to a group influences the level of financing of its activity and the structure of this financing. It may also be a factor in the reducing of asymmetric information between companies and lenders.

Groups can centralise their cash management in specialised structures in order to optimise the management of their loans and investments. The cash function is in charge of centralising liquidity flows from subsidiaries, bilateral or multilateral netting of reciprocal credit and debit positions in an international group, allocating flows between companies in the group through current account advances or intra-group lending and borrowing, and making decisions concerning group borrowing and investment on the markets. This management method is based on internal financing of subsidiaries showing a deficit using cash from subsidiaries registering a surplus. The lending company invoices at a normal rate, i.e. close to the money market rate.

As internal cash surpluses are used to cover the requirements of subsidiaries showing deficits, the overall debt level is lower than that which would have been recorded if the loss-making companies had taken out individual loans. Moreover, centralising the cash-flow management of the different entities in the group enables the central cash management function to negotiate the overall bank conditions, which reduces the transaction costs involved in obtaining external funds.

Funds borrowed from companies within the same group must be considered as one of the sources of financing for business, especially in France, where the size effect looks to be fairly pronounced. And indeed, while large French and Spanish industrial firms considerably reduced their proportion of bank debt over the period under review, they replaced it to a large extent with intragroup financing, even though, for the aggregate French population, the ratio of intragroup financing to total liabilities (see graph III.1.2.20) increased only slightly, from 11.7% in 1991 to 12.1% in 1999. In Spain, the proportion increased by much more, rising from 10.8% in 1991 to 13.3% in 1999. From 1994, the evolutions are similar in both countries but the financial part of debts with group and associated companies is higher in France (around 9% of total balance sheet) than in Spain (around 7% of total balance sheet).

In the sectors under review, the ratio did not change much in France, except in the capital goods sector, where the proportion of loans from group companies and related entities increased by 2.1 p.p. between 1991 and 1999. Overall, in all sectors, the ratio varied between 10% and 14% between 1991 and 1999. In Spain, the ratio increased in all the sectors over the 1991-1999 period. (See graph III.1.2.22 in the statistical annex)

#### BIBLIOGRAPHY

- Desbrières P. et Poincelot E. (1999), "Gestion de trésorerie", *Éditions Management Société*  
 Kremp E. et Sevestre P. (06/2000), "L'appartenance à un groupe facilite le financement des entreprises", *Économie et statistiques* n° 336  
 Richard J., Becom Simons et associés, Secafi Alpha et associés (02/2000), "Analyse financière et gestion des groupes", *Économica*

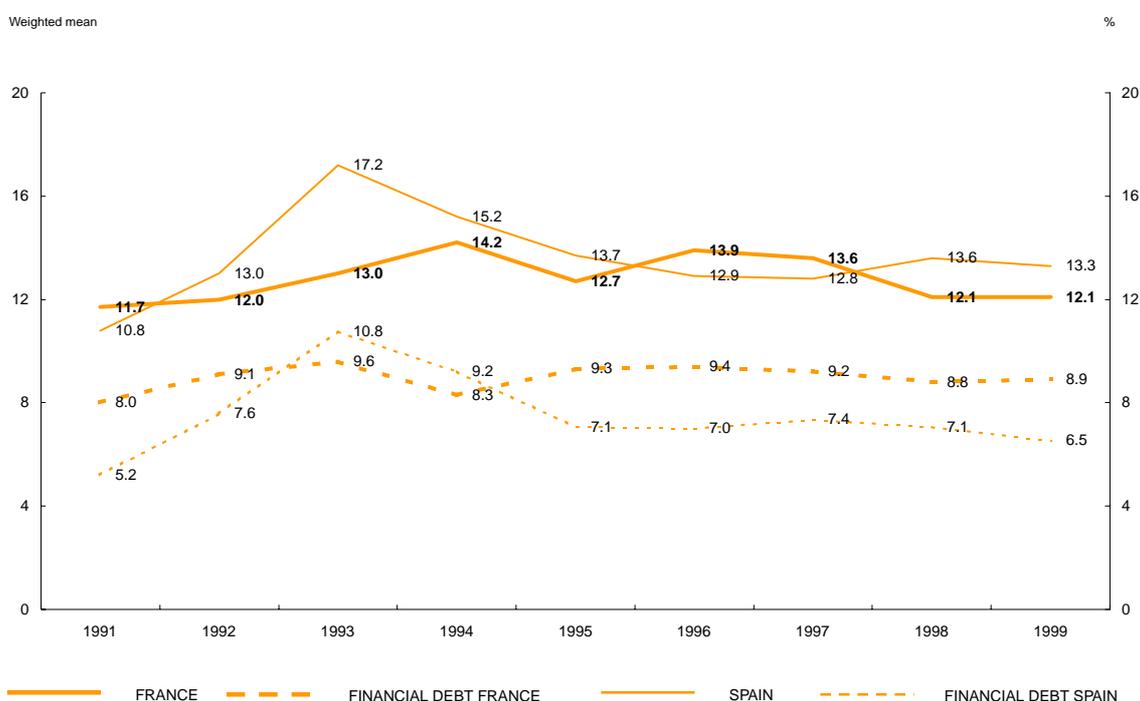
*Loans from group companies and related entities* are widely used by large French companies, most of which belong to a group. This type of financing accounted for 44.3% of the financial debt of large French companies in 1999 and 35.9% of the debt of large Spanish companies. For medium-sized firms, the ratio was 27.5% in France (17.1% in 1991) and 15.3% in Spain in 1999. By contrast, while intragroup financing accounted for 31.4% of the debt of small French companies (21.5% in 1991), it represented less than 1% of that of small Spanish companies.

Large French firms also made more use of bond financing than smaller companies because they enjoy easier access to the capital markets and also because issuance costs are too high for small businesses. Spanish firms, irrespective of size, made virtually no use of bond financing.

*An examination by sector* reveals differences in debt structures in France and Spain (see graph III.1.3.3 in the statistical annex).

GRAPH III.1.2.20

**TOTAL AND FINANCIAL DEBTS WITH GROUP AND ASSOCIATED COMPANIES  
TOTAL LIABILITIES**



Sources: Banco de España and Banque de France.

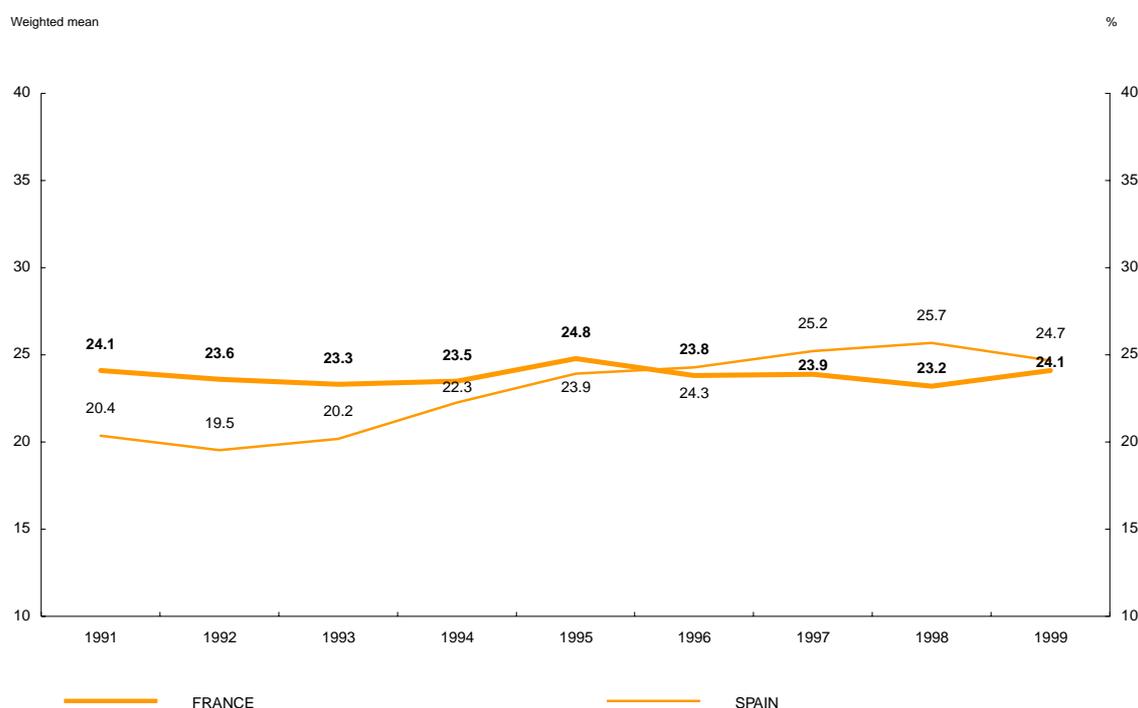
The *capital goods* sector stands out from the other two because of the predominance of *loans from group companies and related entities*, which accounted for 47.9% of the financial debt of companies in the sector in France and 40.3% in Spain in 1999. In addition, French companies in this sector made considerable use of *bond financing* (15.4% in 1999). This source of funds is especially widely used in the automotive sector. Accordingly, bank debt (long-term + short-term loans) accounted for just 29.6% of total financial debt in this sector in France in 1999, compared with 35.0% in Spain.

The *consumer and intermediate goods* sectors have comparable debt structures in France: intragroup financing predominates, followed by long-term and then short-term bank loans, although the breakdown varies slightly between the sectors. The proportion of negotiable debt securities was relatively high in the consumer goods sector, at 2.3% in 1999, mainly because the large firms in this sector were major issuers of commercial paper. In Spain, the debt structure of these two sectors make more use of short-term bank loans, which accounted for 41.4% of financial debt in the consumer goods sector in 1999 and 33.5% in the intermediate goods sector. Also, loans from group companies and related entities accounted for a high proportion of financial debt in the consumer goods sector (32.8% in 1999), while long-term bank loans made up a relatively large share of financial debt in the intermediate goods sector (32.1% in 1999).

It would also appear that large French companies made less use of finance leases. In 1999, finance leases accounted for 5.5% of the financial debt (10) of large industrials, compared with 7.3% for medium-sized companies and 16.2% in the smallest businesses. Small businesses face the biggest constraints in terms of financing their fixed assets, hence their greater use of finance leasing.

(10) The total amount "financial debt + finance leases".

### TRADE CREDITORS TOTAL LIABILITIES



Sources: Banco de España and Banque de France.

Another way of evaluating the importance of “group financing” is to analyse its weight in the total balance sheet.

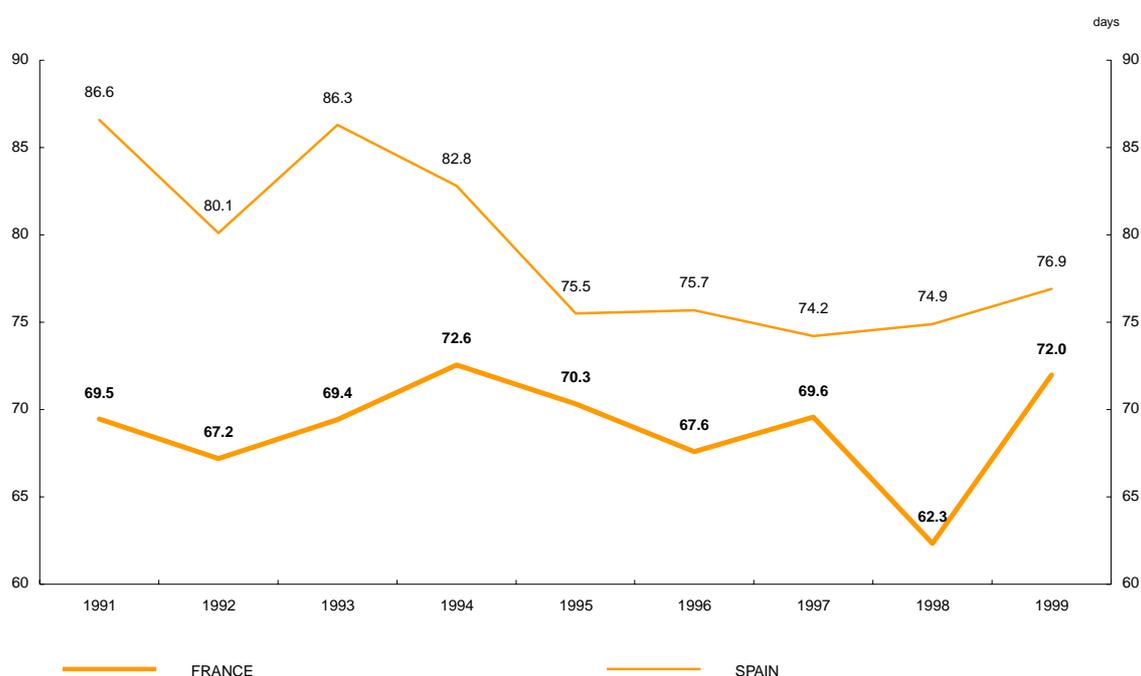
#### 1.2.4. Trade creditors

*Trade creditors* constitute another important source of funds for French and Spanish companies. Indeed, if we analyse the weighted mean, we see that trade creditors were a key source of short-term financing for industrial firms of both countries. The proportion of trade creditors to total liabilities in French companies exceeded 24% in 1999 (see graph III.1.2.23), i.e. three times greater than the share of bank debt (8.6% in 1999), even though the weighted mean points to a long-term trend towards reducing slightly creditors. The difference between the two ratios “trade creditors/total liabilities” and “bank debt/total liabilities” was particularly marked between 1991 and 1993, doubtless in response to the economic slowdown and recession that took place during that period. During such periods in the business cycle, businesses are pressured by their suppliers to cut payment times, while at the same time they are trying to obtain quicker payment of debts owing to them. In 1993, France introduced a policy aimed at reducing trade creditors. This policy was kept in place until the end of the period, even though the upturns in activity in 1994-1995 and in 1999 twice interrupted the long-term trend described above.

Thus, in 1999, average payment period of trade creditors were equal to 72 sales days in France. Spanish companies also made considerable use of this type of financing, whose share in total liabilities fluctuated between 20% and 25% throughout the period. An analysis of the average payment period of trade creditors confirms this: they were equivalent to 77 sales days in 1999 (see graph III.1.2.26), i.e. higher than in France, although the gap between the two countries narrowed considerably between the beginning and end of the period.

GRAPH III.1.2.26

## AVERAGE TRADE CREDITORS PAYMENT PERIOD



Sources: Banco de España and Banque de France.

An examination by size reveals that the proportion of trade creditors in total liabilities was higher among small companies (0-49 employees) than among larger firms. In France, the average ratio of trade creditors to total liabilities was 23.4% for large firms in 1999 compared with 26.6% for small ones. In Spain, the ratio was 24.7% for small firms, compared with 24.4% for large companies. But in the rest of the years, the difference between these two populations is greater in Spain than in France. (See graph III.1.2.24 in the statistical annex)

It emerges that in Spain, small companies are overall lenders of intercompany credit, with average payment period of trade debtors equal to around 82 days in 1999 compared with 78 days for creditors. Large Spanish firms, on the other hand, are heavy borrowers of intercompany credit, with trade debtors standing at around 48 days in 1999, compared with 76 days for trade creditors. In France, large companies are also borrowers of intercompany credit, with trade creditors reaching around 71 days in 1999 compared with 59 days for debtors, while small companies are lenders, with trade creditors coming out at around 74 days in 1999 compared with 77 days for debtors. (Graph III.1.2.27 of the statistical annex)

Use of trade credit seems to be more frequent in the capital goods sector, and especially in the automotive sector, compared with the consumer and intermediate goods sectors. This is true in both countries and throughout the period (see graph III.1.2.25 in the statistical annex).

### 1.2.5. Tax liabilities and other debt

The share of tax liabilities and other debt in total liabilities did not vary much in either country during the period under review. This component thus had little impact on the debt structures of French and Spanish firms.

In France, the average ratio came to around 12%. In the annual accounts, this item comprises miscellaneous taxes, participating interests, payments and other deductions to be paid by the company as well as monies due to various welfare organisations. Since 1996, the share of tax liabilities and other debt in total liabilities has increased slightly, mainly as a result of measures such as the 2 p.p. increase in the standard VAT rate and the introduction of a special levy of 10%, later increased to 15%, added to the amount of corporate income tax (see annex VIII about the different taxes which burden Spanish and French corporations). In Spain, the weighted mean fluctuated at around 7% during the period under review.

## 2. FRENCH AND SPANISH INDUSTRIAL CORPORATIONS: ANALYSIS OF THE RESULTS 1991-1999

*NOTE: The rates of change of sales, Gross Value Added (GVA) and Gross Operating Profit (GOP) of the industry as a whole to be analysed in this chapter have been adjusted for inflation, i.e. they are rates of constant prices enabling direct comparison between the two countries. However, it has been possible to ascertain that the general conclusions would not change if the rates had not been inflation-adjusted. The other rates (including the first three rates by size and sector) have not been adjusted. Readers should bear this in mind in interpreting the data.*

### 2.1. Introduction

The main objective of this chapter is to analyse and compare the behaviour of French and Spanish industrial corporations from 1991 to 1999 in respect of activity, employment and personnel costs, results, margins and rates of return, and finally investment. The analysis is to be performed for total industrial corporations from both countries, and also inside the total, by size (small, medium and large corporations) and sub-sector (consumer goods, intermediate goods and capital goods).

The information available confirms the connection between the production activity of French and Spanish industrial corporations and the economic cycle of each country, as can be seen analysing the rates of change of sales and GVA at factor cost. However, the Spanish economy and the production activity of its industrial corporations have generally shown more volatile data than the French economy and corporations, in that in Spain, during years of crisis, slumps have been deeper, but, on the other hand, during years of prosperity, growth has been stronger. The convergence process for the Spanish economy and corporations has thus not been even, because catching-up occurs only in bullish periods. In the analysis by size, in the French data it is possible to perceive a connection between corporate activity and economic growth, but the effect is appreciably lower in smaller corporations. On the other hand, in Spain the changes in the cycle can be seen to affect large corporations especially and, specifically, corporations with more than 500 employees. Across the sectors in both countries, a significant cyclical connection can be observed in the capital goods industry and, to a lesser extent, in the intermediate goods industry. The corporations operating in the consumer goods industry behave in a much more stable manner not connected to the cycle.

In relation to employment, French and Spanish corporations have developed in step with activity, but at a different level of intensity. During the recession years (1992 to 1994), there were net falls in employment in both countries, but somewhat more strongly so in Spain. Since 1995, periods of modest growth have combined with some years of moderate falls in France. But from 1995 in Spain, Spanish corporations embarked on a period of net job creation, initially with very mild growth, and subsequently with greater intensity. The explanation for this differing behaviour between France and Spain is that in Spain the initial situation was particularly bad, with an unemployment rate of 24%. For this reason the Spanish authorities decided to pursue special policies for the stimulation of employment and the adaptation of the job market, and from 1997 to 2000, 500,000 net jobs were created. By size, France and Spain coincided in that it was large corporations that had to make more employment adjustments in the years prior to economic recovery; that said, small corporations absorbed part of the employment that the larger ones destroyed. By sector, the intermediate goods industry destroyed most employment during the recession years, while employment in the consumer goods industry remained moderately stable. In France, the phenomenon involving the creation of groups of corporations has been important for employment developments.

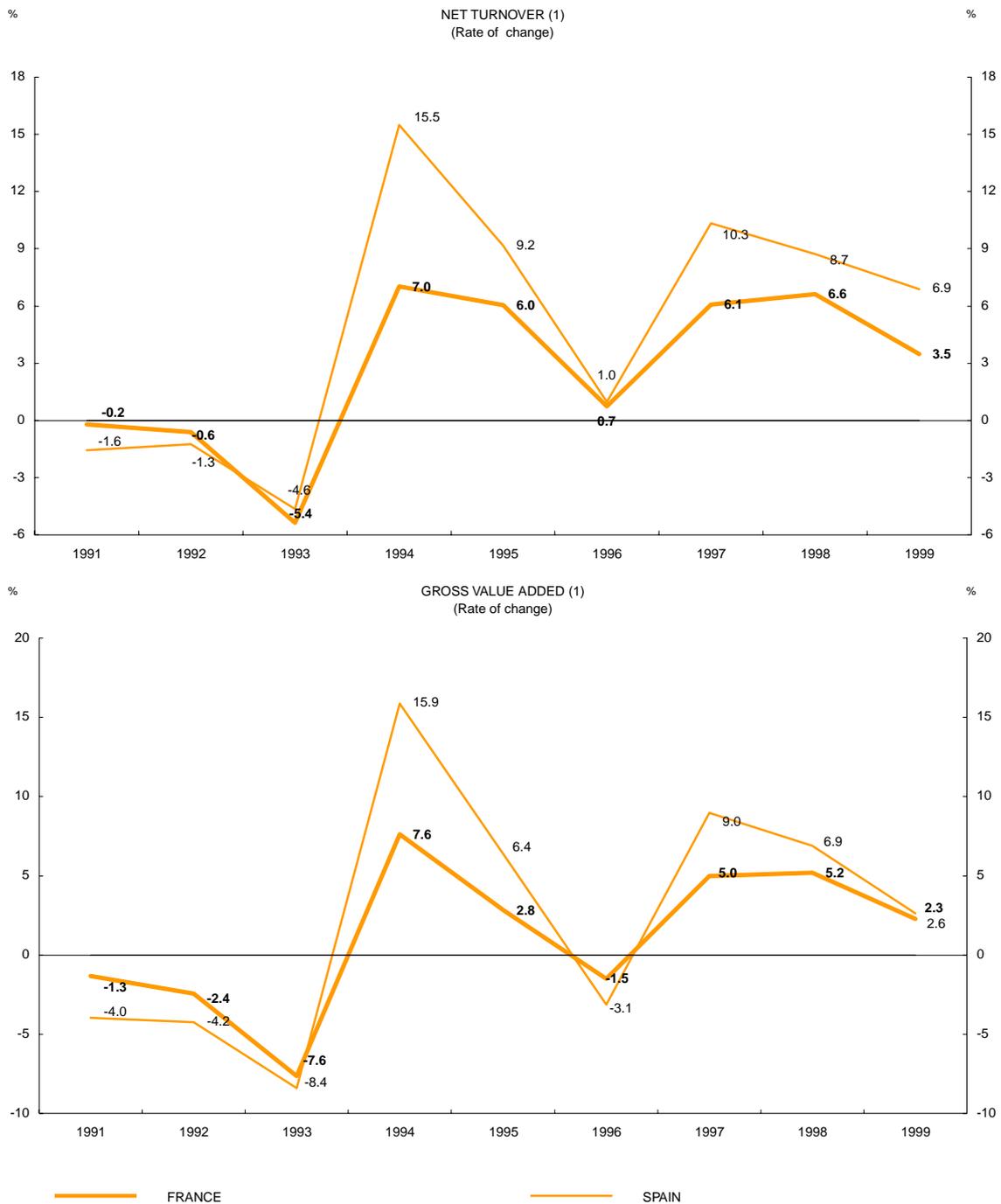
The fall in interest rates has meant that corporations in both countries have reduced the influence of financial expenses in their income statements, which has been conducive to an improvement in funds generated. This positive effect of lower financial costs has been reflected in the rates of return on equity of both countries. While French corporations have been stable (except in 1993) and have posted high levels of rates of return on assets in the whole historical series analysed, Spanish corporations have shown two clearly differentiated periods: the first, running to 1993, with very low rates of return; and the second as from 1994, at the same time as the fall in interest rates and the pick-up in activity, with much more similar rates of return on assets to French corporations. By size, small French and medium Spanish corporations have had the best rate of return data in the sequence analysed. By sector, the consumer goods industry of both countries has been most stable and had the highest rates of return.

Finally, the evolution of investment showed different behaviours in the two countries. The level of investment in tangible assets of Spanish companies was much more intense than the French one in growth phases. This difference of behaviour between French and Spanish firms was particularly noticeable over the period 1998-1999 in terms of financial investment when French companies preferred to invest on the financial markets by acquiring shares of other companies.

## 2.2. Activity

The rate of change of GVA at factor cost is the best economic concept for ascertaining corporations' activity. Graph III.2.1 shows that in the whole group of French and Spanish industrial corporations, there has been a substantial connection over the past ten years between their activity and the cycle of their respective economies. Chapter I described the cycle followed by the French and Spanish economies and, as can be seen, there is a coincidence between these cycles and the course of activity of French and Spanish industrial corporations, respectively. Another coincidence between the behaviour of the economies and industry is that, as discussed in chapter I, the Spanish economic recession (1992-1993) was deeper than that in France, while Spanish periods of prosperity have also been more intense and it is in these periods that the Spanish economy has seen the catching-up process in train. In French and Spanish industrial corporations the behaviour has been the same. During the recession years in both countries (1991, 1992 and, especially, 1993) industrial corporations registered negative rates of change for both sales and gross value added. There was a recovery during 1994 and 1995, at the

**TOTAL INDUSTRY (SAMPLE)**



Sources: Banco de España and Banque de France.  
(1) Rate of change deflated by industry GDP deflator

same time as the expansionary phase and as the improvement in the international context. However, as was the case in the economy as a whole, the pick-up manifested itself to differing degrees of intensity in the two countries: while in France the real growth of industrial corporations' sales and GVA in 1994 was 7% and 7.6%, respectively, in Spain the related two values were 15.5% and 15.9%. In 1996, coinciding with a turning point in Spanish and French GDP growth and a cooling of world trade, the industrial corporations in both countries reduced their activity again. But as from 1997 they resumed positive rates, albeit on a gradually slowing path. The slowdown observed from 1997 to 1999 must be matched in both countries with the sales slowdown, with growth dipping in France from 6.1% to 3.5%, and in Spain from 10.3% to 6.9%, and specifically with the negative trend of exports. French corporations in particular felt the impact of the crisis in the emerging countries, because the industrial sectors were those most exposed to foreign markets and, at the same time, those most affected by declining external demand. That said, it was these same corporations which most benefited from periods in which external activity was expanding.

The graphs in the statistical annex (III.2.2.a) for France, and (III.2.2.b) for Spain show information by corporation size. In France a connection can be seen between evolution of GVA of the companies and economic cycle, irrespective of the size of the company. On the other hand, in Spain the changes in cycle affect especially large corporations, and specifically corporations with more than 500 employees, although SME also had some influence, showing their worst data in 1992 and 1993. The slowdown in the last three years analysed (1997, 1998 and 1999) hardly affected SME, and was stronger in large corporations, especially in Spain, where the growth rate of GVA fell by 10 percentage points from 1997 to 1999, and stood this last year at -0.1%. In SME, meantime, the data have been stable, with the nominal growth rate of GVA close to 9% throughout the period. In France, large corporations posted nominal growth of GVA of 2.6% in 1999, compared with 5.8% in 1997, while SME were more stable over these three years, with modest reduction of less than 2 percentage points. This phenomenon could be explained by the different sectoral composition of each size aggregate, but is due mainly to the fact that corporations with less export activity are involved, whereby sales were not affected by the adverse course of foreign activity.

Graphs III.2.3 in the statistical annex shows information by sector of activity. In France the consumer goods industry has been less affected than the capital and intermediate goods industries by the unfavourable effects of the phases of slowing activity, mainly because of the food and agricultural industries, which are structurally able to support the external influence. On the other hand, the intermediate and capital goods industries seem to perform better during periods of prosperity, thanks to the strong growth of industrial demand. In Spain it is also possible to observe a significant cyclical connection, depending on the sector of activity. This connection is especially intense in the capital goods industry, and modestly so in the intermediate goods industry. In both industries, fluctuations are very marked. Similarly to than French companies, Spanish corporations that make consumer goods are much more stable, but it is also possible to discern the connection with the economic cycle.

Tables III.2.1 shows the number of corporations distributed according to the rate of change of GVA, irrespective of their size and their weight in relation to the whole. These distributions are influenced by the different structures of the sample in France and in Spain (see chapter II). This has to be born in mind when observing these data. So it is more relevant to analyse the evolution rather than the level. In both countries 1993 was the only year of the series in which the number of corporations with negative rates exceeded corporations with positive rates. In France, corporations with more than 500 employees and the intermediate and capital goods industries were the most affected by the 1993 recession; in these three aggregates and during that year, more than 60% of the corporations presented negatives rates of

TABLE III.2.1

**DISTRIBUTION OF TOTAL INDUSTRY CORPORATIONS ACCORDING TO RATE  
OF CHANGE OF GVA AT FACTOR COST**

<b>France</b>	<b>Table III.2.1.a</b>									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	
20% or higher	14.8	13.4	10.6	17.2	18.4	13.3	16.1	17.6	16.0	
From 0 to 20%	42.2	38.7	31.7	40.7	42.0	37.6	42.9	45.2	42.1	
From -20 to 0%	33.4	36.1	42.5	33.0	31.7	38.6	33.4	30.3	33.6	
-20% or less	9.6	11.8	15.2	9.1	7.9	10.5	7.6	6.9	8.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

<b>Spain</b>	<b>Table III.2.1.b</b>									
	1991	1992	1993	1994	1995	1996	1997	1998	1999	
20% or higher	27.3	23.0	20.9	34.9	34.7	31.4	33.7	34.5	30.3	
From 0 to 20%	38.9	36.4	27.7	31.2	32.0	31.7	34.7	35.2	36.1	
From -20 to 0%	22.3	28.6	29.7	21.9	21.2	23.1	20.6	19.9	23.7	
-20% or less	11.5	12.0	21.6	12.0	12.0	13.8	11.0	10.4	10.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Sources: Banque de France / Banco de España

change of GVA. In Spain, since that point, more than 60% of corporations have always had positive rates, and in this group, more than 30% have grown with intensity (with increases in GVA of more than 20%). Since 1993, the proportion of companies with positive rates of change of GVA has been increasing in line in both countries. At the end of the period under review, this percentage was similar or even slightly higher than in 1991. Capital goods corporations and very large corporations were the most affected in 1993 by the crisis, so that 58% of the corporations of both Spanish aggregates had negative rates in the concept under analysis.

### 2.3. Employment and personnel costs

*Employment* in both countries has developed in step with activity, as can be seen in graph III.2.4. Until 1994 there had been net falls in employment in France and Spain. 1993 was the worst year, with rates of -5.1% and -6.8%, respectively. Since 1995, both countries have moved on slightly different courses. French corporations have alternated periods of light growth (1995, 1997, 1998 and 1999) with a moderate fall (in the year 1996). As from 1995, Spanish corporations embarked on a period of net employment creation, initially with very mild growth, but later with greater intensity, posting the highest growth of the series in 1998 (3.4%).

Tables III.2.2 provides for an analysis that distinguishes between corporations creating employment and those shedding jobs. In both countries it was the case that until the years in which the employment adjustment was harshest, the proportion of corporations maintaining or creating employment exceeded corporations destroying jobs (with the exception of 1993 in France). Since 1995 in France, corporations creating employment have clearly exceeded corporations destroying employment, with a high in 1998 of 66.8%. In Spain these data are even higher because, as discussed in chapter I, the initial situation was very poor in respect of the unemployment rate in Spain in 1994, after the recession, of about 24%. That is why the Spanish authorities decided to initiate special plans to promote employment and open up the job market (see annex II for the labour measures adopted to promote employment), creating on average

500,000 jobs in net terms each year from 1997 to 2000. Spanish industrial corporations reached a high in 1998 with 79.6% of the corporations creating employment.

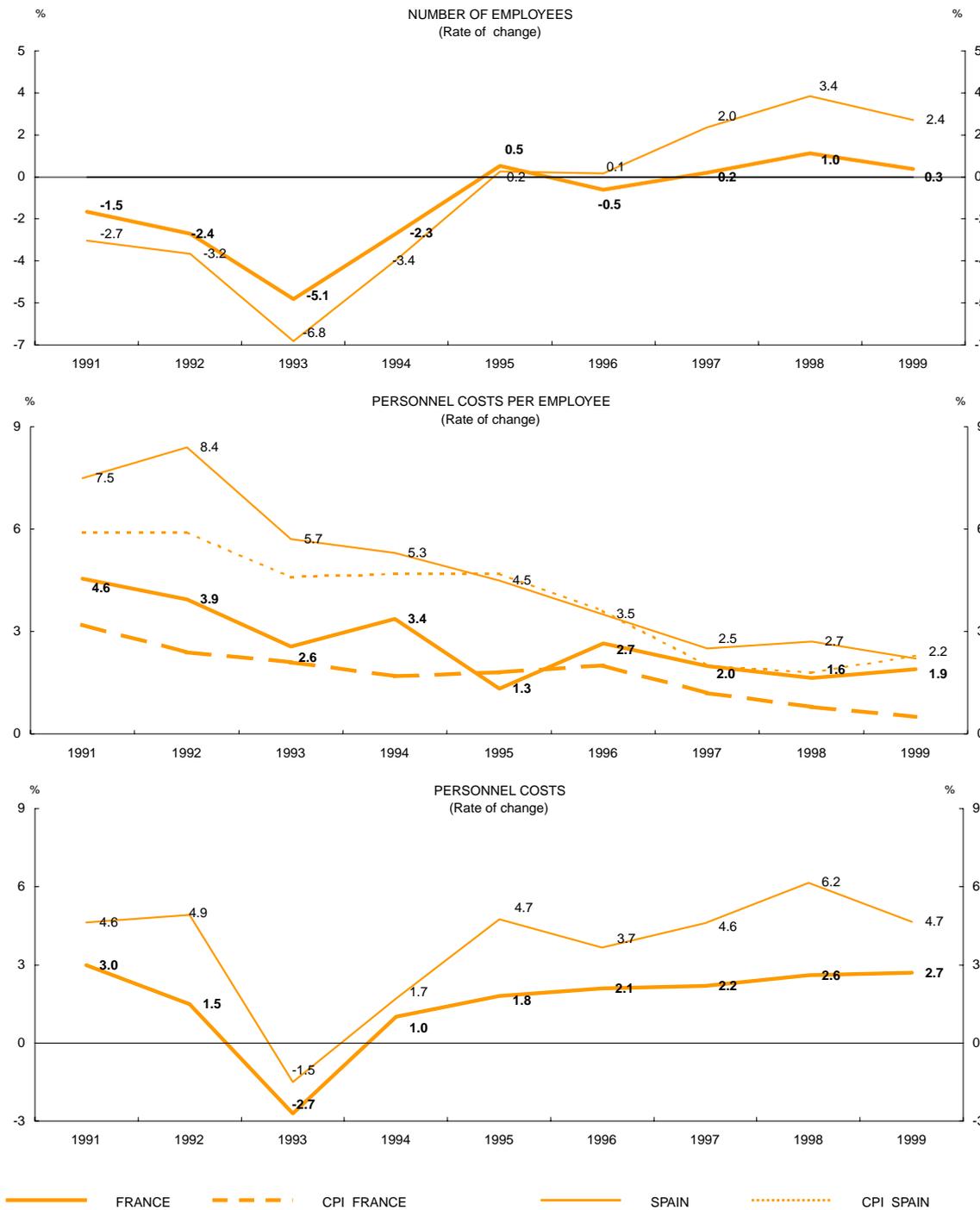
By size, graphs III.2.5 of the statistical annex show that, as is the case with activity, in Spain it was large corporations which had to make most staff adjustments in the years prior to the recovery, with falls close to 8% in 1993. This was compared with SME, in which falls were softer at between 3% and 4%. In France, medium-sized corporations made the most forceful personnel adjustments in 1993, with a fall of -7.5%. Notwithstanding, since 1995 French SME have shown net employment creation, but with very moderate rates which have in no year exceeded 2%. In Spain, just as SME have served to sustain employment during recession periods, during years of plenty these corporations have been the principal source of net employment creation, with rates reaching 6% in some cases, compared with 1% at large corporations.

In the tables III.2.3 to III.2.5 of the statistical annex, it can be appreciated clearly how French and Spanish large corporations adopted a policy of personnel adjustments in 1993, when 70% and 82%, respectively, destroyed jobs, and close to 74% and 90% in corporations with more than 500 employees. Conversely, small corporations creating employment have always exceeded in number those corporations destroying jobs; in France this was the case as from 1995, with figures close to 70%, and in Spain from 1996 to 1998, when nearly 80% of corporations created net employment. As has been explained and can be observed in the tables, during periods of crisis small corporations act as a "buffer", absorbing part of the employment that the larger corporations destroy. In addition to this, downsizing and the incorporation of advanced techniques for production management and stock organisation lead to a reduction in the size of some large industries, through the outsourcing of a portion of their secondary activities to small-size corporations. In France the way a company is organised (independent corporations, that belong to a group or a net of corporations) has a direct influence on employment.

By sector, as can be seen in the statistical annex (graphs III.2.6), during the years in which there was a reduction in employment, it coincides in both countries that the capital and intermediate goods industries were the sectors that destroyed most employment, in line with the poorer performance of productive activity. In Spain, while it was when the recovery began that the most favourable employment creation rates were seen, in France rates remained marginally positive, and in 1999 intermediate goods corporations showed a minor fall in employment of about -0.4%. Employment in the consumer goods industry has held relatively stable. In Spain the capital goods industry presented worse results than the other industries in 1993 and 1994, but it has posted positive data in the last five years. This recent positive trend in employment has been supported by the recent growth of output and also by the modernisation of and added flexibility given to the Spanish labour market. Annex II also offers information about the key features of the labour markets in France and Spain and the regulatory changes in recent years affecting employment.

As can be seen in graph III.2.4, the rate of change of *personnel costs per employee* in nominal terms in French industrial corporations outgrew the Consumer Price Index (CPI) throughout the whole period except in 1995. This latter year and 1998 were the two years that showed the most restrained wage growth, while they were also the years with the largest employment growth. This explains the lower wage growth because, generally, the compensation of new employees is lower. The course of average compensation has contributed to the achievement of France's intended aim relating to the competitive disinflation policy, which has entailed wage moderation combined with relatively sustained increases in productivity in industry. In Spain, average compensation in nominal terms outgrew the CPI by about 1.6 p.p., 2.5 p.p. and 1.1 p.p., in 1991, 1992 and 1993, respectively. Thereafter, a downward trend initiated, with compensation growing at below inflation in some of the years (1995, 1996 and 1999). This differenti-

**TOTAL INDUSTRY (SAMPLE)**



Sources: Banco de España and Banque de France.

TABLE III.2.2

**TOTAL INDUSTRY. WORKERS AND PERSONNEL COSTS PER WORKER RELATIVE TO INFLATION  
PERCENTAGE OF CORPORATIONS IN SPECIFIC SITUATIONS**

<b>France</b>		<b>Table III.2.2.a</b>								
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	
<b>Average number of employees</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Falling	42.1	47.8	50.5	40.9	32.3	37.3	35.3	33.2	35.1	
Constant or rising	57.9	54.2	49.5	59.1	67.7	62.7	64.7	66.8	64.9	
<b>Average compensation (relative to inflation)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Lower growth	45.2	47.6	58.6	46.9	39.2	47.9	43.2	34.1	38.0	
Higher or same growth	54.8	52.4	41.4	53.1	60.8	52.1	56.8	65.9	62.0	

<b>Spain</b>		<b>Table III.2.2.b</b>								
	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	
<b>Average number of employees</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Falling	42.6	44.8	46.9	33.9	25.5	22.7	21.2	20.4	23.1	
Constant or rising	57.4	55.2	53.1	66.1	74.5	77.3	78.8	79.6	76.9	
<b>Average compensation (relative to inflation)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	
Lower growth	37.8	37.2	49.5	52.9	49.0	50.7	46.7	44.5	48.7	
Higher or same growth	62.2	62.8	50.5	47.1	51.0	49.3	53.3	55.5	51.3	

Sources: Banque de France / Banco de España

ation between the two periods is closely matched by the trend of employment: the economic crisis and the above-inflation increase in average compensation in 1992 and 1993 were absorbed by corporations in terms of employment, through severe staff cuts. From 1995, wage containment and the increase in productive activity allowed for a recovery in gross operating profit, as will be analysed, and for the onset of the process of investment and employment creation; additionally the economic recovery entailed the incorporation of new employment (paying lower wages), providing for the continuation of wage containment. Annex VII "Contribution to social security by French and Spanish companies" offer institutional information about one of the components of personnel costs paid by the companies.

Table III.2.2 gives information about the proportion of corporations in which average personnel costs grew above or below inflation. Considering the evolution during the whole period, it can be seen that in France, 1998 and 1999 were the years in which most corporations (66% and 62%) increased their average compensation at an above-inflation rate, this coinciding with the fact that the inflation rate was at its most moderate in these years (0.8% and 0.5%, respectively). In Spain, this occurred in 1991 and 1992, when wages outgrew inflation in nearly 63% of corporations. From that point a new period ensued in which a percentage close to 50% was maintained for both groups of Spanish corporations, because of the more recent performance of small corporations.

By size (graphs III.2.5 of the statistical annex), all the French corporations displayed increases in their average compensation similar to 1991 and 1992, at nearly 4%, irrespective of their size. But since 1993, SME have behaved in a more stable manner compared with large corporations. In Spain, large corporations and SME exhibited very high rates of change in average

compensation in 1991 and 1992, especially in the latter year, in which close to double-figures were recorded. As from 1993, it was small-sized corporations which strongly reduced the rise in salaries and wages per employee. In medium and large corporations, the numbers that increased wages above inflation was always higher than those that did not. In the case of large corporations, this proportion was 70/30 in 1997 (see tables III.2.3 to III.2.5 of the statistical annex).

By sector, (graphs III.2.6 of the statistical annex), the consumer goods and intermediate goods industries in France showed a very similar and moderate trend in terms of the change in average compensation of their employees, but in all the years analysed, this outgrew the CPI. The capital goods industry exhibited erratic ups and downs, moving the rate of change of personnel costs per employee from 4.8% to -5.9% in 1994 and 1999, respectively. In Spain the initial position of the consumer goods industry was one of increases in average compensation higher than in other industries. But as from 1994, containment took hold and held them stable, with more moderate growth than the intermediate and capital goods industries.

As a consequence of the course of employment and average compensation, *personnel costs* for industry as a whole in France showed two different phases. The first ran from 1991 to 1993, with a -2.7% decline in personnel costs in 1993, explained by the destruction of employment in that year. Thereafter, a restrained rise began, reaching high of 2.7% in 1999. From 1994 to 1999, it was average compensation that was most reflected in this increase. Analysing the weight of personnel costs relative to total net turnover (graph III.2.13), substantial stability is observed in the series from 1991 to 1997, with figures close to 19%. But in the last two years personnel costs have accounted for nearly two points less relative to total sales, contributing to a bigger business margin. In Spain, the rate of change in personnel costs has been more erratic, with a low of -1.5% in 1993, similar to France. This figure must be connected with the destruction of employment. From that moment on, personnel costs posted positive rates, with a high of 6.2% in 1998. But in this second period, contrary to France, the trend was more associated with employment creation, because average remuneration behaved more moderately. As regards the weight of personnel costs relative to net turnover, Spanish corporations have seen a move from 20.8% in the initial years of the series to 13.9% in 1999.

## 2.4. Results, margins and rates of return

The graphic representation of the rate of change of GOP in France and Spain (graph III.2.7) reveals a more erratic evolution of this parameter at the beginning of the period in Spain than in France with a fall of 21.8% and 18.2% in 1993 respectively and an increase in 1994 of 72.0% in Spain and 21.3% in France. From 1996, there has been a similar pattern of this parameter in the two countries. As a consequence of the trend in activity and personnel costs, the GOP of the corporations of both countries was small and decreased regularly in 1991, 1992 and 1993. From 1994 to 1998, rates remained positive (with the exception of 1996); in 1999, the GOP moved onto a stagnating trend, strongly so in Spain

Financial costs in both countries posted positive growth rates during the early years of the study, but since 1993 in France and 1994 in Spain, and as a consequence of the fall in interest rates (graph I.11 of chapter I) and Spanish convergence with the other European countries, negative rates of change have arisen. Probably, this is one of the effects of convergence with Europe and the creation of a single market, which has meant bigger profits for non-financial corporations not only in terms of nominal stability but also in the reduction of costs. The reduction in financial costs can also be appreciated in their less relative significance in the profit and loss account in terms of structure (see graph III.2.13); in Spanish industrial corporations,

compared with 4.6% for the financial costs/sales proportion in 1993, the same structure was 1.0% in 1999. In French industrial corporations, the related proportion in terms of the profit and loss account has also been reduced, dipping from 2.5% in 1993 to 0.9% in 1999. The detected reduction in financial costs contributed to the strong increase in funds generated (graph III.2.7) by Spanish industrial corporations, as can be seen in the fact that rates of change were positive as from 1994 (with the exception of 1996). Nevertheless, in 1999 signs of backtracking were evident, in line with the course of output. This improvement has also been observed in relative terms (graph III.2.13); while in 1993 resources generated accounted for 1% of sales, in 1999 they reached 7.6%. In France the funds generated by industrial corporations followed a similar trend to their Spanish counterparts, with negative rates between 1991 and 1993 and positive rates as from 1994 (with the exception of 1996), and also with signs of backsliding in 1999. Unlike with the Spanish corporations, there were scarcely no effects in relative terms, moving from 5.2% of sales in 1993 to 6.7% in 1999.

The change in income tax is highly correlated with the profits obtained by corporations, but also affects tax regulations and the amendments to such regulations recently (annex VIII shows the different taxes affecting Spanish and French corporations). The ratio "income tax/ net turnover" (see graph III.2.13) allows a comparison between the two countries and the contribution to the Treasury. Throughout the series analysed, except in 1995, French corporations set aside a bigger percentage of their total sales to income tax than Spanish companies. In both countries, it can be seen that, during the economic recession period (1992 to 1994) and because of the high correlation with the results of the corporations, income tax remained below 1% of sales. In the last three years, this proportion rose until reaching 1.7% in France and 1.5% in Spain in 1999.

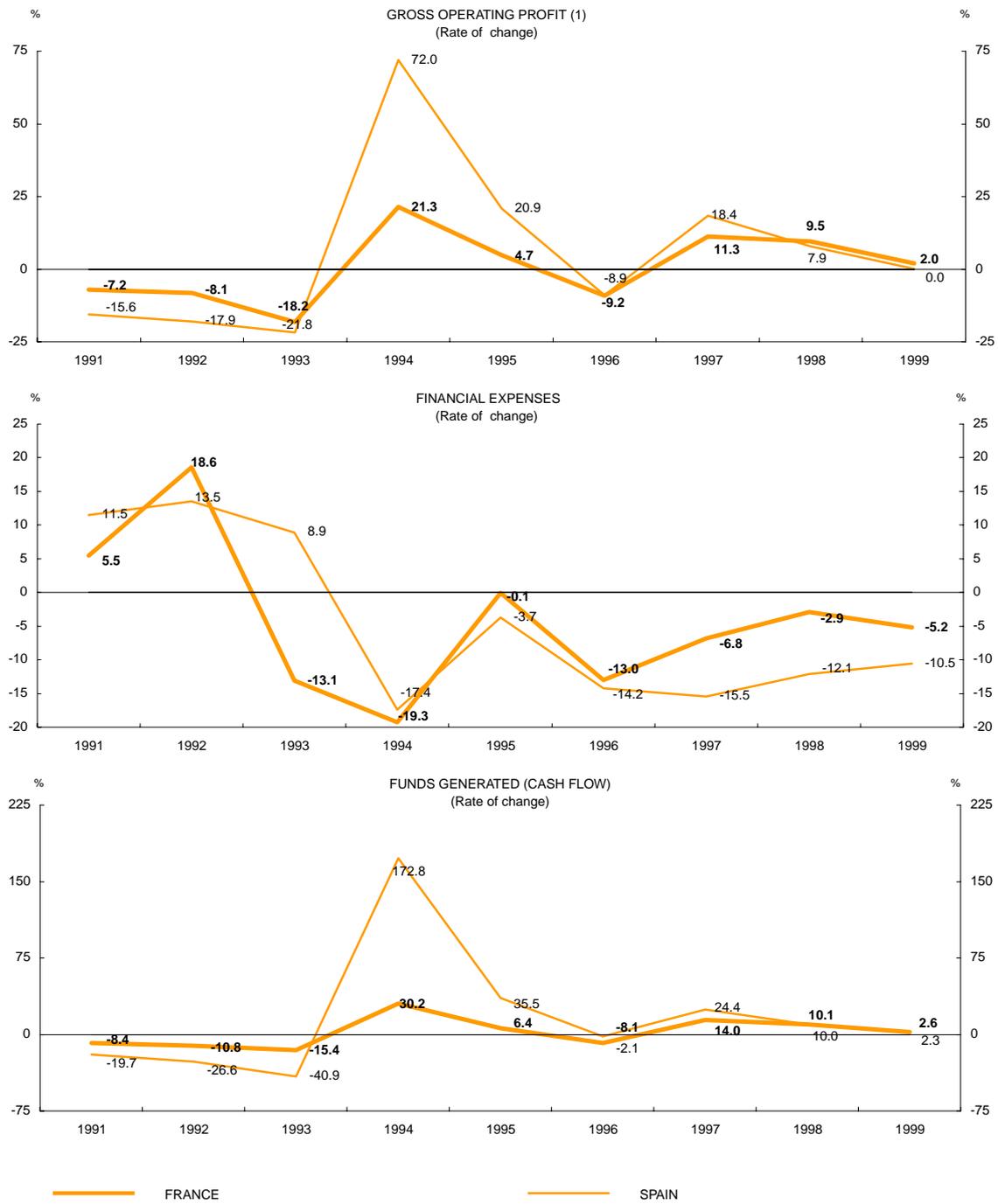
As for ordinary rates of return (11) (both on net assets (R.1) and on equity (R.3)), graph III.2.10 shows that French corporations behaved in a stable manner in the series analysed, while Spanish corporations presented two differentiated periods, behaving very differently in the first (1991 to 1993) from French corporations. French companies showed a moderate fall in the levels of their rates of return, making 1993 the worst year of the series with an R.1 of 7.9% and an R.3 of 7.5%. For their part, Spanish corporations also presented in the same year the worst data of the whole of the series analysed, with 2.1% for R.1 and -7.3% for R.3. In the second period (1994 to 1999), and in relation to productive activity developments, French corporations have continued offering high rates of return and a certain stability, reaching their high in 1999 with an R.1 of about 12.0% and an R.3 of 18%. In Spanish corporations, an up trend was set in train as from 1994, obtaining rates of return of 11.2% for R.1 and 14.9% for R.3 in 1999 (this figure represents the best ordinary return on equity in the whole of the series analysed). On the other hand, the cost of borrowing -or R.2- has followed a downward path caused by the fall in interest rates in both countries; in French corporations the related figure fell from 9.7% to 4.5%, and in Spanish corporations from 11.5% to 4.0%. Along the same lines of this reduction, Spanish industrial corporations started from 1995 to show positive leverage (12), with the maximum to date being reached in 1999, at 7.2%. In France, the best figure was also reached in 1999 (7.5%).

By size, the trends coincide in general with the behaviour of the total, although differences in the levels are appreciable. In French and Spanish corporations, the rate of change of GOP in the three sizes turned around in 1994 from negative to positive values (see graphs III.2.8 of the statistical annex). In 1996, negative rates of change again appeared in the three sizes in

(11) For the numerator of these ratios the Ordinary Net Profit is used, which is defined as Gross Operating Profit plus financial revenue, minus financial costs, minus depreciation and operating provisions.

(12) In this study leverage is defined as: return on assets (R1) less cost of borrowing (R2).

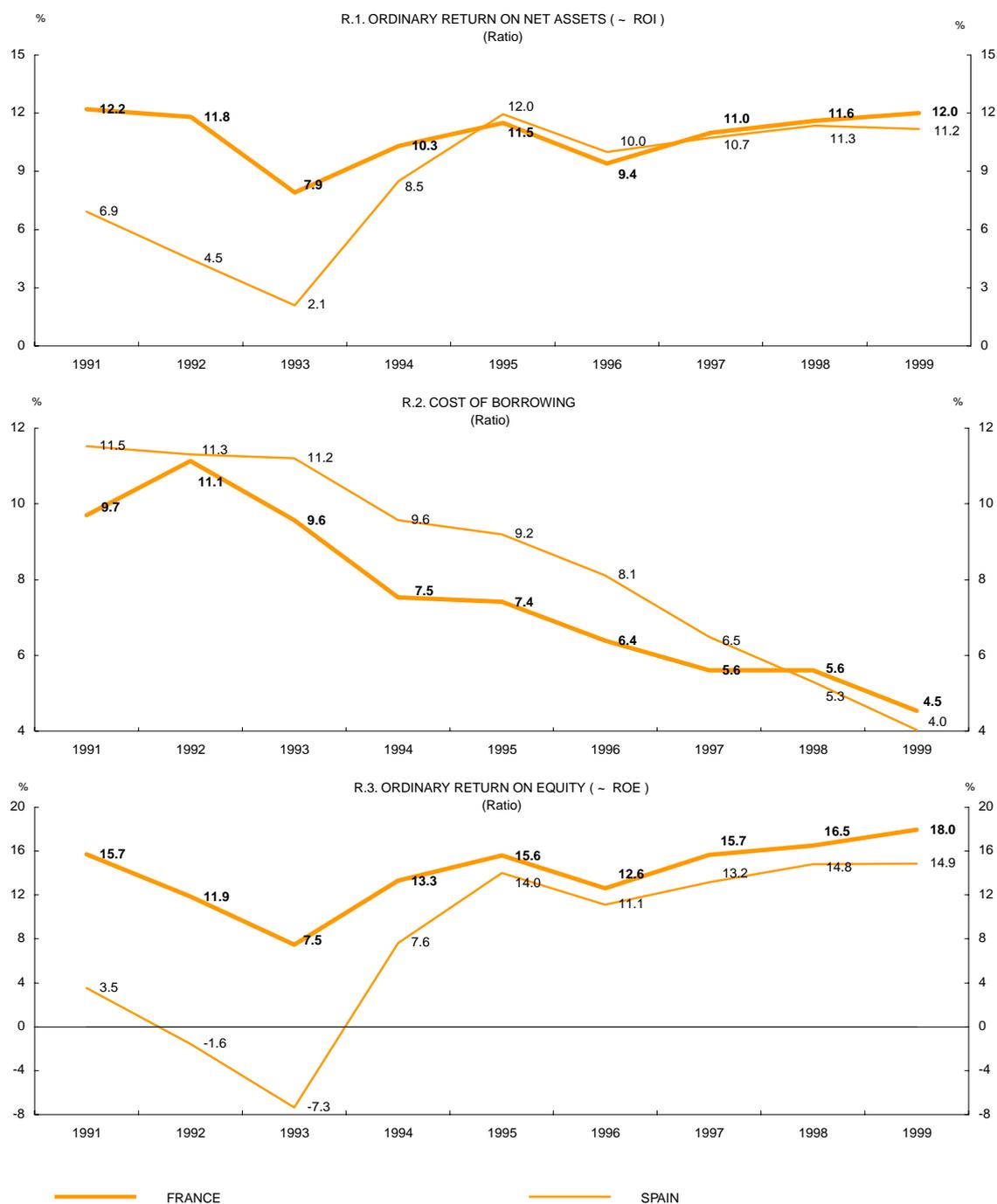
**TOTAL INDUSTRY (SAMPLE)**



Sources: Banco de España and Banque de France.  
(1) Rate of change deflated by industry GDP deflator

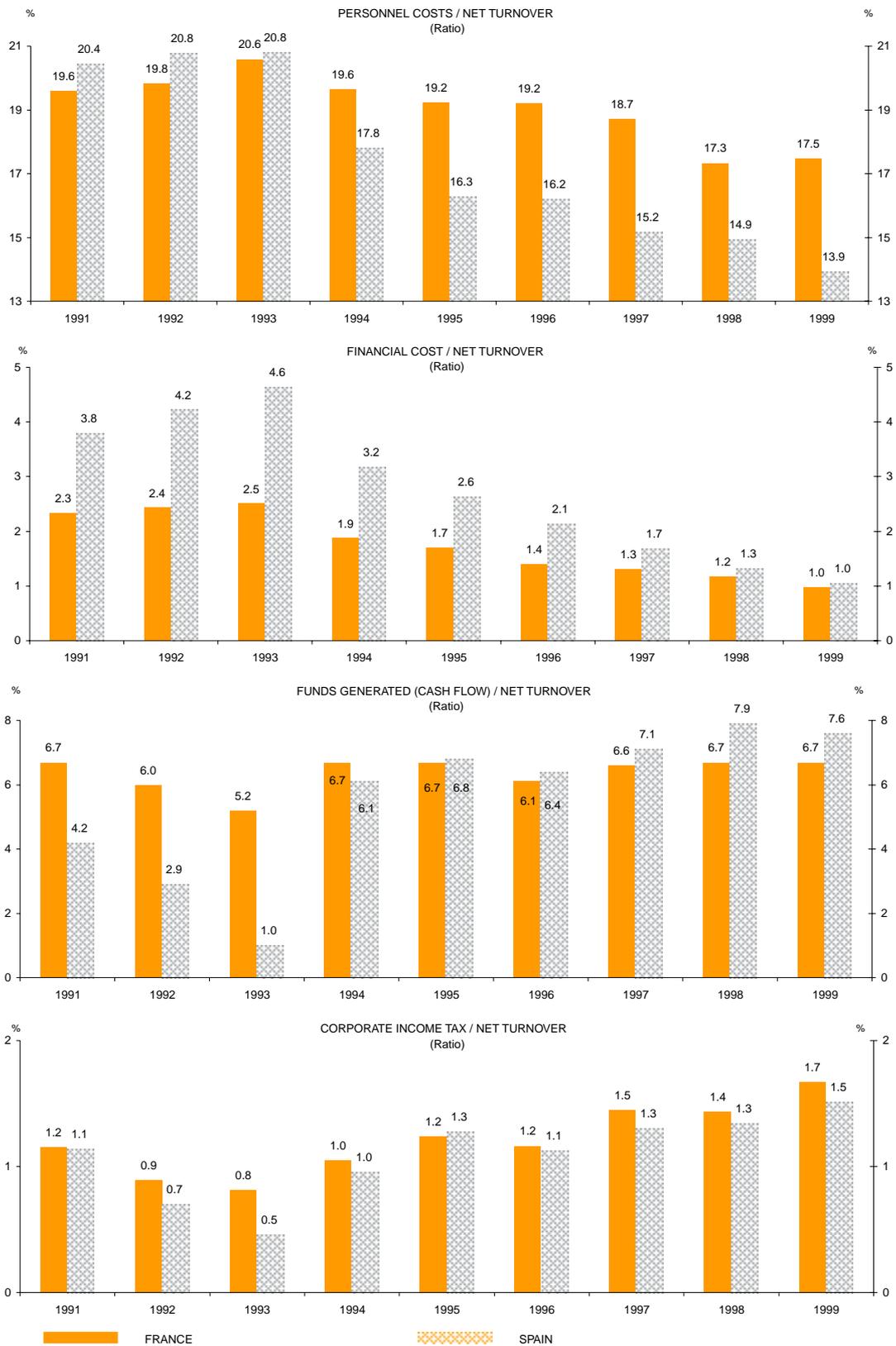
GRAPH III.2.10

## TOTAL INDUSTRY (SAMPLE)



Sources: Banco de España and Banque de France.

## TOTAL INDUSTRY (SAMPLE)



Sources: Banco de España and Banque de France.

France, while in Spain large corporations were the only group that reverted to negative values. From that year onwards positive but increasingly moderate rates have been maintained in France, while in Spain corporations with more than 250 employees returned to negative rates in 1999 with a -4.2% fall. In both countries a close connection between large corporations' results and the economic cycle can be appreciated; in periods of prosperity these companies exhibited the best figures, but during recession years large corporations were also the most affected. In relation to financial costs, and again in the three sizes, significant reductions were observed at Spanish corporations as from 1994, but large corporations showed stronger falls in rates between 1997 and 1999 because of their lesser need for external financing, as has been seen in the previous analysis of the financing structure. In French corporations the reductions are stronger for all sizes. As for funds generated, while Spanish SME continued to post positive rates of growth as from 1994, large corporations were more unstable, reaching a negative rate of change of close to -2% in 1999.

In the analysis of rates of return by size (see graphs III.2.11 in the statistical annex), French small corporations were the most profitable (R.1 and R.3) between 1991 and 1995, despite the cost of borrowing -or R.2- also being the highest. Since 1997, large corporations have shown an economic rate of return similar to small companies, and only in 1999 did large corporations exhibit a higher economic and financial rate of return (12.4% and 18.6%, respectively). In Spain, medium-sized corporations (between 50 and 250 employees) were those with the best ordinary return on net assets and equity in the series analysed. The cost of borrowing was lower for large corporations because of their greater bargaining power. As a consequence of this, financial leverage was positive from 1994 in medium and large corporations and from 1995 in small corporations, standing in 1999 at 9.6 points in the case of medium-sized companies, followed by 7.1 and 1.8 in large and small corporations, respectively.

By sector of activity (graphs III.2.9 of the statistical annex) the same trends in GOP are observed for the total of corporations, but with some qualifying differences. In both countries behaviour was the same in terms of the sectors and of the link to the cycle. The consumer goods industry developed in a stable way, so, non-matched with the cycle, while the rates of change of GOP in the intermediate and capital goods industry were very erratic and influenced by economic developments in both countries. As regards financial costs, in Spain the tendency has been very similar across the three industries, with more drastic reductions in the capital goods industry, while in France behaviour was more erratic and uneven, depending on the industry. The behaviour of funds generated was, like the GOP, volatile in the sectors of the two countries. The exception was the consumer goods industry, which showed a more stable series. This sector is precisely that with the best ordinary return data (on net assets and equity), both in France and Spain (see graphs III.2.12 of the statistical annex), but the other two sectors, have obtained good figures in the last three years, also combined with moderate costs of borrowing and positive financial leverage data.

## 2.5. Investment

To analyse the investment, the rate of change of investment in tangible assets in the industrial corporations of both countries and the rate of change of investment in financial assets for the industrial corporations in France (13) (see graph III.2.14) have been calculated. In France, three different periods can be differentiated. In an initial period from 1991 to 1994, there were falls in the rate of change of investment, of particular significance in 1993, the year

(13) In Spain, it is not possible to calculate this rate of change with the Central Balance Sheet database.



in which capital expenditures decreased by 21.3%. The weakness of demand during these years and the over-utilisation of productive capacity through the lengthening of the duration of use of its productive potential (14), contributed to explaining these data. A second period can be observed, from 1995 to 1996, with positive rates of change of investment, especially in the initial years in which investment grew by 9.2%. In this case, the increase in sales was what drove entrepreneurs to more dynamic investment, although in 1996 the climate of uncertainty that prevailed in 1996 regarding industrial products forced some industrial companies to act prudently, this consisting of a check on the renovation of tangible assets. Finally, a third period between 1997 and 1999 should be distinguished in which rates of change of investment turned negative again, due to companies having preferred to invest on the financial markets, acquiring shares of other companies, as attested to by the rates of financial investment, which posted "record" figures with an increase of 45.2% and 57.7% in 1998 and 1999, respectively.

In the case of Spanish industrial corporations, the rate of change of investment is available in the Central de Balances sample from 1993. In 1994, the worst figure in all the series analysed –a –23.5% decline– was recorded for industrial corporations as a whole. The recession period immediately before this forced companies to be conservative with their investment decisions. In 1995 and 1996, the previous tendency was reversed, with investment growth rates reaching 38.2% and 34.2%, respectively. Against a background of recovering activity and a gradual reduction in interest rates, companies were encouraged to renew their productive equipment. In 1997, another fall in investment came about, again motivated by the fall in activity in 1996, but 1998 and 1999 saw a resumption of the upward trend, with growth rates of 10% and 19%, respectively. Without any doubt the investment decisions in this period were safeguarded by the positive financial leverage figures attained in 1998 and 1999 (6.0 and 7.2, respectively, the highest for the whole of the series analysed).

Since a study on the investment behaviour of companies would remain incomplete by referring only to the descriptive analysis we propose in chapter IV to try in addition to isolate the specific effect of a factor (e.g.: the cash flow effect) "other things being equal" by a dynamic based econometric method.

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(14) Article of the monthly Bulletin of the Banque de France, no. 94 (October 2001) entitled: "La durée d'utilisation des équipements: principaux résultats 1989-2000"



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CHAPTER IV

FINANCIAL CONSTRAINTS AND INVESTMENT  
IN FRANCE AND SPAIN: A COMPARISON  
USING FIRM LEVEL DATA (\*)

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## I. INTRODUCTION

The analysis of the determinants of investment behaviour has long been a key research field in macroeconomics. On one hand, investment spending by firms determines the future productive power of the economy. On the other, fluctuations in investment spending, which is far more volatile than consumption spending, are a driving force of the business cycle. In this respect, the sizeable volatility of investment as an important contributor to aggregate economic fluctuations has often been used to motivate studies on investment behaviour. In particular, within the empirical literature on company investment, the role of financial factors in explaining business fluctuations is a topic that has merited substantial research (1). The recent econometric research on the relevance of liquidity constraints for investment spending has relied on a growing body of theoretical work studying informational imperfections in credit markets. At the same time, this literature has helped explain large fluctuations in investment as a response to small shocks. In this sense, some recent models have highlighted the role of financial market conditions in propagating relatively small shocks (2).

The increasing availability of panel data sets has been an essential element for the development of microeconomic research on the links between real and financial decisions. In particular, panel data allow a researcher to adequately test the cross-sectional implications of the models assuming problems of asymmetric information between borrowers and lenders. Moreover, the use of micro data has several additional advantages: more adequate measures of the variables of interest can be obtained; cross-sectional variation improves the precision of the estimates; and the potential biases arising from aggregation across firms, simultaneity or omitted variables may be better addressed (3). Nevertheless, the use of individual data also entails some problems: the most common of these are the implicit biases in the composition of the samples and the usually short time dimension of the panels.

Within this strand of the literature dealing with the microeconomic modelling of investment, several recent papers have addressed the challenge of establishing cross-country

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(1) See Schiantarelli (1996) and Hubbard (1998) for recent surveys of this literature.

(2) See, for instance, Bernanke, Gertler and Gilchrist (1999).

(3) See Hsiao (1986) for the potential advantages of the use of panel data, Blundell, Bond and Meghir (1996) and Bond and van Reenen (2002) for excellent surveys of the microeconomic literature on company investment, and Deutsche Bundesbank (2001) for a collection of papers on investment behaviour based on the use of panel data sets. Finally, within the Monetary Transmission Network of the Eurosystem, several papers have focused on the link between monetary policy and investment using microeconomic data sets: Butzen, Fuss and Vermeulen (2001), Chatelain et al. (2001), Chatelain and Tiomo (2001), Gaiotti and Generale (2001), von Kalckreuth (2001), Lünnemann and Mathä (2001) and Valderrama (2001).

comparisons in the analysis of the role of financial factors in company investment decisions (4). The aim of these papers is to identify cross-country differences in the impact of financial constraints on investment and to link these differences to specific characteristics of the countries (in particular, on the financial systems). But cross-country studies face the difficulty of harmonising information drawn from national sources which, in most cases, follow different accounting rules (5).

In this chapter, we analyse corporate investment decisions in France and Spain, focusing on the role of financial constraints in explaining investment behaviour. For this purpose, we take advantage of very carefully harmonised data sets (see Chapter 2 for details) that allow for the use of variables homogeneously defined in both countries. More precisely, the information used consists of two panel data sets of industry firms selected from those reporting information to the Central Balance Sheet Offices of the Banque de France and of the Banco de España over the period 1991-1999. Harmonisation of databases is a key issue in cross-country comparative studies, since the removal of differences in accounting practices is a necessary condition to interpret differences in results as real differences in behaviour.

So as to test for the existence of liquidity constraints, we conduct a test of excess sensitivity of investment to cash flow using a standard Euler equation model. The choice of this methodological approach is justified by the fact that this model, by implicitly controlling for all expectational influences, is less affected by the usual criticism to the excess sensitivity to cash flow tests (cash flow proxies demand shocks rather than indicating the existence of liquidity constraints). More precisely, both the theoretical model and the testing strategy used in this chapter closely follow Bond and Meghir (1994). These authors present an empirical model of investment based on the Euler equation of an extended version of the standard neoclassical model of investment. This model assumes that the firm faces a hierarchy of costs for the alternative sources of finance and leads to different characterisations of investment behaviour for firms pursuing different financial policies.

This chapter is organised as follows. *Section 2* reviews the literature on investment with financing constraints. *Section 3* describes the main features of the structural model of firm investment, derived in Bond and Meghir (1994), which is based on the Euler equation methodology. *Section 4* presents the definitions and the descriptive statistics of the variables used in the analysis. *Section 5* provides the main results on the testing of the empirical implications of the hierarchy of finance model. Finally, the conclusions are drawn in *section 6*.

## 2. INVESTMENT, FINANCING AND ASYMMETRIC INFORMATION: THEORETICAL CONSIDERATIONS

### 2.1. The relevance of financial conditions for investment decisions

The perfect capital market assumption, on which empirical investment models have traditionally been based, implies that in a world without taxes it is irrelevant for firms to decide between internal and external resources when financing their investment projects. The existence of asymmetric information between fund suppliers and borrowers implies the break-up of

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(4) See Bond et al. (1997), Hall, Mairesse and Mulkay (1999), Bond, Harhoff and van Reenen (1999), Chatelain et al. (2001), Laeven (2001) and Love (2001) for cross-country microeconomic studies on company investment.

(5) CECB (2000) illustrates the difficulties inherent to the task of harmonising accounting data from different countries.

the irrelevance of the decision between internal and external financing. There are alternative microfoundations for the link between firms' financial structure and their investment spending. Among the most important are distortionary taxation, transaction costs and the costs of financial distress. Building information asymmetries and/or distortionary taxation into credit-market modelling has yielded two kinds of results, which complement each other, with a direct impact on firms' investment behaviour. First, the most widespread conclusion of these models is that the cost of external funds faced by each firm depends on its financial condition. Second, some of these models conclude that, under certain circumstances, the existence of incomplete information on the quality of firms' investment projects translates into lenders failing to adjust interest rates to the particular situation faced by each firm while imposing, instead, quantitative constraints on the volume of credit granted. These results warrant the relevance of financial structure as a determinant of firm investment.

The first of the above results, namely the dependence of external financing costs on the firm's financial condition, is the most widespread forecast in the vast literature (6) incorporating the existence of asymmetric information in credit market modelling. According to these works, information asymmetries between lenders and borrowers warrant the existence of a spread or premium between the costs of external and internal resources. This premium may be capturing, among other factors, the monitoring costs –associated with the existence of a risk of failure– that investment projects entail for lenders. Moreover, the above-mentioned literature suggests that this external finance premium depends on the borrower's financial condition. Thus, Bernanke and Gertler (1989) present a model where such a premium depends conversely on the net wealth that can be provided as collateral. The larger the collateral in relation to the volume of credit, the fewer the incentives for the borrower to embark on risky investment projects. Alternatively, in other works, including Bond and Meghir (1994), and Alonso-Borrego (1994), the external financing cost is shown as a function of the level of indebtedness by capital unit. Besides, Estrada and Vallés (1998) test, for Spain, a model that considers the net indebtedness level as a determinant of the external financing cost.

As regards the second result –the existence of credit rationing – its rationale is founded on the incapacity of credit suppliers to observe the returns on investment projects. The likelihood of the credit not being repaid makes lenders' expected returns depend not only on the interest rate set, but also on the risk associated with the projects they finance. As noted by Stiglitz and Weiss (1981), changes in the interest rate set by lenders may have a dual effect on the average risk of their credits as a whole. First, the adverse selection effect (whereby firms taking higher risks and considering the likelihood of repaying their credits rather low are the most willing to accept higher interest rates) leads to a situation where lenders, if they decide to raise the interest rate, end up financing firms that take higher risks. On the other hand, there is an incentive effect, whereby increases in interest rates may induce firms to embark on projects with fewer possibilities of success but more potential returns. For all these reasons, it can be accepted that the interest rate maximising the credit suppliers' expected returns ( $r^*$ ) is such that credit demand exceeds credit supply (i.e. they set up a lower interest rate than the rate that would balance the demand for and the supply of lending funds). In other words, if lenders raise the rates they set above  $r^*$ , the increase in induced average risk is such that their expected returns decrease. Thus, equilibrium in the market for credit can be characterised by rationing.

This kind of model is observationally equivalent to those suggesting that the spread between the costs of internal and external financing depends on the firm's financial condition, in-

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(6) Two frequently mentioned examples of such literature include Bernanke and Gertler (1989), and Greenwald and Stiglitz (1993).

sofar as they forecast that funds availability for each company will depend on observable characteristics reflecting such condition. Therefore, in a group of firms having investment projects with similar expected returns, constraints will apply to those with weaker financial conditions (according to certain observable characteristics). Thus, Gertler (1988), and Calomiris and Hubbard (1990) note that access to external financing will depend on agents' net wealth.

In sum, models incorporating the existence of asymmetric information between fund suppliers and borrowers (or alternatively, the existence of distortionary taxes on the different sources of funds) reveal the influence of agents' financial condition on the terms of access to external financing (cost and availability). Consequently, firms' investment behaviour will be subject to their financial conditions. In particular, when information asymmetries exist, the neoclassical investment model provides a partial view of agents' behaviour, since the investment level will depend not only on the capital path that the firm wants, but also on its financing possibilities (7). Thus, this theoretical approach allows for the introduction of financial variables into the investment equations. The two variables most frequently used in empirical studies are the level of indebtedness and, above all, internal resource generation capacity. Indebtedness has been used as an indicator of the firm's financial soundness which, as mentioned above, can condition the cost of its external resources or access thereto. Along these lines, the seminal work of Bond and Meghir (1994) considers the cost of external resources as an increasing function of the debt ratio. However, empirical studies have not always confirmed this relationship. Thus, Mato (1989), for instance, finds a negative influence of the indebtedness ratio on the cost of external resources and mentions, among other possible reasons, that this ratio is not exogenous but is, in turn, a decreasing function of their cost.

## **2.2. Sensitivity of investment to the internal generation of resources**

Undoubtedly, the financial variable most used in investment equations based on the existence of asymmetric information has been cash flow, i.e. self-financing capacity. This variable, insofar as it reflects the funds available to the firm, is expected to be positively correlated to the investment level. Besides, it is expected that this positive effect on investment of variables measuring the capacity to generate own resources will reveal itself more clearly in those firms where asymmetric information problems are more pronounced. Moreover, this positive correlation is reinforced, as Fazzari and Athey (1987) show, due to the self-financing capacity acting as an indicator of the financial soundness of the firm. Therefore, lenders use it to discriminate between credit borrowers, since they are not able to see accurately the quality of investment projects owing to the existence of asymmetric information.

This basic hypothesis about the sensitivity of investment to variables which proxy the capacity to generate resources internally being higher for those firms subject to credit constraints has been recently tested in a wide range of works. The strategy followed has been to estimate investment equations for different sub-samples of firms, sorted according to a priori criteria that seek to identify financially constrained firms (or with relevant asymmetric information problems). In this vast literature, the seminal work of Fazzari et al. (1988) should be mentioned. It identifies as potentially constrained firms those not paying dividends in recent years. This type of approach has been used with alternative criteria by other authors: links to industrial grouping (Hoshi et al., 1989), age and size (Devereux and Schiantarelli, 1990, and Estrada and Vallés,

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(7) Building information asymmetries into a perfect competition framework means that firms face an intertemporal problem of profit maximisation, subject in each period not only to technology availability, but also to a maximum debt level or to a function of the cost of external resources, increasing in some indicators of their soundness.

1998), firms' credit rating (Whited, 1992) and dispersion in the firm's share ownership (Schaller, 1993). In general, the division criterion par excellence in this literature is size, since there are several reasons suggesting that the consequences of asymmetric information problems are more noticeable in the case of small firms. Among these reasons, Caminal (1995) highlights that there are economies of scale in supervision and control tasks, and therefore it is more costly for borrowers to monitor small firms, and for firms to provide information to their lenders. Nevertheless, as argued in Chatelain et al. (2001), size might not be a sufficient or even correct indicator of informational asymmetries for some countries.

In the recent literature, the hypothesis of the sensitivity of investment to the internal generation of resources has been tested using a wide range of econometric models of investment: from reduced-form models to the estimation of Euler equations. In all cases, the models are augmented with a variable measuring the self-financing capacity. The use of a reduced-form investment equation augmented with cash flow presents a basic limitation: it does not allow the sensitivity of investment to the internal generation of resources to be unequivocally associated with the prevalence of finance constraints or, more generally, with the existence of asymmetric information between borrowers and lenders. Under this approach the positive and significant coefficient of variables that approximate the self-financing capacity in investment equations may be explained by alternative hypothesis. Specifically, the most usual critique of these approaches is that the cash flow variable may, instead of giving evidence on liquidity constraints, be approximating future investment opportunities. Moreover, Giner and Salas (1997) show that the result of the sensitivity of investment to financial variables may be due not only to the existence of finance constraints but also to the imperfections in the control mechanism on capital which make possible the channelling of monetary flows towards investment projects that reduce the value of total assets. These authors indicate that when there are information asymmetries between shareholders and managers and the latter pursue a growth target, the firm will invest to excess. Moreover, they point out that the investment rate of the firm that invest to excess shows a greater sensitivity to the generation of resources than that of the firm which does not over-invest, for three reasons. First, because the external capital market will not provide monetary resources for the financing of projects that reduce the firm's market value. Second, firms' managers do not want to turn to debt financing because it would increase the probability of failure. Third, because the firm is less profitable, the internal generation of funds will also be lower and, thus, the finance constraint will be present in a greater number of cases.

In the context of the excess sensitivity tests, the structural investment models, like the Q model or the Euler equation, display an undeniable advantage with respect to reduced-form investment equations. Structural models explicitly control for expectational influences on the investment decision. That implies that if the model turns out to be mis-specified because a financial variable is significant, this should not be attributed to an expectational influence.

Nevertheless, the use of structural models for testing for the presence of financial constraints can be criticised. On one hand, the existence of serious measurement problems of some variables included in the structural models cast some doubt on the validity of the empirical implementation of these models. On the other, it has been claimed that adding financial variables to the structural models is a joint test of all the assumptions of the model and not only of the assumption of no financial constraints. Consequently, results from the empirical literature testing the excess sensitivity of investment to cash flow and other financial variables are consistent with the existence of significant financial constraints, but these tests could also be detecting other sources of mis-specification in the investment models used.

Some recent papers have tried to discriminate between alternative hypotheses that explain the significance in investment equations of the coefficient of variables measuring self-fi-

nancing capacity. First, Fazzari and Petersen (1993) propose the additional inclusion of working capital (8), along with the above-mentioned variables, in a Q-model of investment. The rationale behind this proposal is as follows: if cash flow is measuring future investment opportunities, working capital – also positively correlated to sales and profits – should have a positive coefficient in the investment equation; conversely, if cash flow is evidencing finance constraints, working capital – which would be entering into competition with investment for a limited volume of resources – should have a negative coefficient in the investment equation. Second, Gilchrist and Himmelberg (1995) use a structural model to overcome the identification problem associated with distinguishing the role of cash flow as a proxy for future investment opportunities and as a means of alleviating credit constraints. The distinctive feature of their approach is the inclusion, among the determinants of investment, of a predictor of future investment opportunities – called Fundamental-Q – built from a set of relevant variables, including cash flow. Gilchrist and Himmelberg estimate, for different sub-samples, a specification that includes simultaneously the Fundamental-Q variable and cash flow, obtaining as a result that the latter only has an additional explanatory power for the sub-sample of firms identified a priori as financially constrained. Third, Gilchrist and Himmelberg (1998) construct and estimate a structural model which incorporates financial frictions and which is used to identify the “fundamental” versus the “financial” determinants of investment. They find that investment is responsive to both fundamental and financial factors and that small firms and firms without bond ratings show the strongest response to financial factors (9).

Overall, although the interpretation of the findings of the literature linking financial variables and investment is controversial, the empirical evidence available tends to favour the hypothesis of the existence of asymmetric information between borrowers and lenders (10). Firms with relevant asymmetric information problems will face high external financing costs or constraints on the amount of credit demanded.

### 3. THE MODEL OF INVESTMENT

In this section we first present the main features of the theoretical model of investment derived in Bond and Meghir (1994) and we then describe their testing strategy to study the validity of the empirical implications of the model. The Bond and Meghir (1994) model (BM model in what follows) is based on the hierarchy of finance approach to corporate finance and provides a theoretical basis to justify the sensitivity of investment to the availability of internal funds usually found in the empirical literature. Basically, the BM model assumes a hierarchy of cost for the alternative sources of financing (i.e., internal funds have a lower cost than external funds) and implies a different characterisation of investment for firms facing different financial situations. More precisely, from the first-order conditions of the optimisation process of a standard neoclassical model of investment with quadratic costs of adjustment, they derive a Eul-

(8) They define working capital as liquid assets and stock less liquid assets and short-term debt.

(9) Laeven (2001) and Love (2001) estimate structural models based on the Euler equation for investment using firm-level data from large sets of countries, following the approach in Gilchrist and Himmelberg (1998).

(10) See Kaplan and Zingales (1995) for an exception to this result. These authors focus on the sample of firms that Fazzari et al. (1988) consider as financially constrained and, using off-balance-sheet information, analyse whether firms are not effectively constrained. Paradoxically, they found that firms effectively constrained are few and, moreover, for these firms, the sensitivity of investment to cash flow is lower. Kaplan and Zingales point out three possible explanations to these results: first, firms effectively constrained may be conditioned by creditors to reducing debt; second, the consideration of an intertemporal constraints framework may vary the allocation of resources generated between saving and investment; and, third, the existence of adjustment costs in the investment planned may condition the investment response to shocks on generated resources.

er equation that relates investment rates in successive periods. They show that for the firms which are liquidity-constrained, the standard Euler equation is not a valid model to describe investment behaviour. In the model, a firm is liquidity-constrained if it generates insufficient net revenue to finance all the investment it would be optimal at the cost of retained earnings and it does not find optimal to issue new shares. However, for those firms that are not liquidity-constrained, investment behaviour is described by the standard Euler equation, even if those firms face a hierarchy of financial costs.

To test the empirical implications of their hierarchy of finance model, Bond and Meghir follow a threefold testing strategy. First, they estimate the standard Euler equation for the whole sample of firms. A rejection of the model is expected due to the presence of liquidity-constrained firms in the sample that would lead to an excess sensitivity of investment to measures of internal finance. Second, they estimate the basic Euler equation augmented with dividends or new share issues. Again, the presence of liquidity-constrained firms would justify the significance of these variables in the investment equation. Third, they estimate the Euler equation model allowing all coefficients to vary depending on their allocation to the different financial regimes.

### 3.1. The theoretical model

As earlier mentioned, in this section we present the main features of the hierarchy of finance model derived in Bond and Meghir (1994).

The firm's managers are assumed to maximise the present value of net distributions to shareholders, subject to the flow of funds identity, to the equation of motion of the stock of capital and to non-negativity constraints on dividend payments and new share issues. Thus, the optimisation problem for the firm is:

$$V_t = \max_{\{K_{it}, B_{it}\}_0^\infty} E_t \left[ \sum_{s=0}^{\infty} \beta_t^s \left( \gamma D_{it+s} - N_{i,t+s} \right) \right], \quad [3.1]$$

subject to:

$$D_{it} = P_{it} [F(K_{it-1}, L_{it}) - G(K_{it-1}, I_{it})] - w_{it} L_{it} - P_{it} I_{it} + (1 - f_t) N_{it} + B_{it} - (1 + i_t) B_{it-1} \quad [3.2]$$

$$I_{i,t} = K_{i,t} - (1 - \delta) K_{i,t-1} \quad [3.3]$$

$$D_{it} \geq 0 \quad [3.4]$$

$$N_{it} \geq 0 \quad [3.5]$$

where  $E_t$  is the expectations operator conditional on the time  $t$  information set  $\Omega_t$ ,

$\beta_t^s = \prod_{k=1}^s (1 + r_{t+k})^{-1}$  is the  $s$ -period discount factor, which discounts period  $t + s$  to  $t$ , and  $r_t$  is the firm's nominal required rate of return between periods,  $D_{it}$  are dividends,  $\gamma$  is the tax discrimination parameter that determines the relative tax benefit of dividends against capital gains,  $f$  is a transaction charge that has to be paid per unit of new share issues,  $F(\cdot)$  is the firm's production function gross of adjustment costs,  $G(\cdot)$  is a convex adjustment cost function,  $L_{it}$  is the

labour input,  $K_{it}$  is the stock of physical capital,  $w_{it}$  is the price of labour,  $B_{it}$  is the firm's total debt,  $i_t$  is the interest payable on debt,  $N_{it}$  is the value of new shares issued,  $p_{it}^I$  is the price of investment goods and  $p_{it}$  is the price of output.

The main elements of the BM model may be summarised as follows:

- Two sources of discrimination between retained earnings and new share issues are introduced: a differential personal taxation on both sources of funds and transactions costs associated with new share issues. Thus, the cost of internal finance is lower than the cost of new share issues.
- The introduction of debt displays three main features: a) there is a probability of bankruptcy; b) both this probability of bankruptcy and the interest rate on debt depend positively on the amount borrowed; and c) there is a tax advantage to borrowing. Thus, depending on the amount borrowed, the cost of debt may be: 1) lower than the cost of internal finance; 2) between the cost of internal finance and the cost of new shares; and 3) higher than the cost of issuing new shares.
- The solution of the model allows for three possible financial regimes for a firm. In Regime 1 ( $D_t > 0, N_t = 0$ ), firms generate enough cash flow to finance investment and pay dividends. They use debt to finance investment up to the point where the cost of borrowing equals the cost of internal funds. In Regime 2 ( $D_t = 0, N_t = 0$ ), firms exhaust all their net revenue to finance investment and issuing shares is too costly for them. They can finance a higher level of investment only by borrowing. In regime 3 ( $D_t = 0, N_t > 0$ ), firms exhaust their net revenue to finance investment but they have sufficiently attractive investment opportunities to finance part of their investment by issuing new shares (11).

In this set-up, firms in Regime 2 are liquidity-constrained in the sense that a windfall increase in revenue would lead to a higher level of investment. However, firms in Regimes 1 or 3 would not change their optimal levels of investment when receiving extra revenue. In the first case, they would pay higher dividends. In the second case, they would reduce the volume of share issues and, thus, they would face a lower cost of financing but they would not change the level of investment.

### 3.2. The empirical model and the testing strategy

Bond and Meghir show that for firms in Regimes 1 and 3 a standard Euler equation model (without financial regimes) should describe their investment behaviour. To implement the above-mentioned empirical strategy, an empirical investment specification is needed. For this purpose, some additional assumptions are introduced:

- $F(\cdot)$  is constant returns to scale, so that the marginal product of capital can be substituted without assuming a parametric form for the production function. We assume that the required time to build and install one unit of capital is one period.
- Imperfect competition in the product market is allowed for.

(11) According to the BM model, firms should not simultaneously issue new shares and pay positive dividends. Bond and Meghir (1994) provide several explanations to justify this type of behaviour: cross-sectional heterogeneity of  $\gamma$ , transaction costs of trading shares and signaling role for dividends.

- The adjustment cost function  $G(\cdot)$  is of the form:  $G(K_{i,t-1}, I_{it}) = \frac{b}{2} \left( \frac{I_{it}}{K_{i,t-1}} - a \right)^2 K_{i,t-1}$ , where the parameter  $b$  reflects the importance of adjustment costs ( $b > 0$ ).
- The assumption of rational expectations implies that  $E_t(X_{it}) = X_{it} + \varepsilon_{it}$ , where  $\varepsilon_{it}$  is a forecast error orthogonal to information available in period  $t$ .

Using these specifications yields the following Euler equation under the null of no liquidity constraints:

$$\frac{I_{i,t+1}}{K_t} = \beta_1 \frac{I_{it}}{K_{i,t-1}} + \beta_2 \left( \frac{I_{it}}{K_{i,t-1}} \right)^2 + \beta_3 \frac{Y_{it}}{K_{i,t-1}} + \beta_4 \frac{\Pi_{it}}{K_{i,t-1}} + \beta_5 \left( \frac{B_{it}}{K_{i,t-1}} \right)^2 + \eta_i + d_{t+1} + \varepsilon_{i,t+1} \quad [3.6]$$

where the ratio of production to capital  $\frac{Y_{it}}{K_{i,t-1}}$  controls for imperfect competition, and  $\frac{\Pi_{it}}{K_{i,t-1}}$  is gross operating profit. The fixed firm-specific effect  $\eta_i$  can be interpreted as accounting for firms characteristics, as well as the time-invariant components of differences in, e.g., product demand, capital intensity, and growth opportunities, whereas the time-specific effect  $d_{t+1}$  can be interpreted as capturing aggregate business cycles. Under the null of no financial constraints, it can be shown that  $\beta_1 \geq 1$ ,  $\beta_2 \leq -1$ ,  $\beta_3 > 0$  (if imperfect competition),  $\beta_4 < 0$  and  $\beta_5 < 0$ . Under the alternative of liquidity constraints, equation [3.6] is mis-specified because investment is related to financial conditions. More precisely, in the presence of liquidity constraints, investment spending should be positively influenced by revenue or cash flow. Thus, the expected negative sign for  $\beta_4$  should not be obtained under liquidity constraints. This fact is the basic idea behind the testing strategy of the BM model. As has already been mentioned, the strategy is threefold and may be summarised as follows.

1. Estimation of the standard Euler equation for the whole sample of firms. A rejection of the model is expected due to the presence of liquidity-constrained firms in the sample that would lead to an excess sensitivity of investment to measures of internal finance. The usual criticism of the excess sensitivity tests (i.e. cash flow proxies future investment opportunities) is less relevant for the Euler equation approach since all relevant expectational influences should be captured by the one-step-ahead investment forecast.
2. Estimation of the basic Euler equation augmented with dividends or new share issues. Under the null of no liquidity constraints, the coefficient of the added variables should not be significant. Again, the presence of liquidity-constrained firms would justify the rejection of the null.
3. Estimation of the Euler equation model allowing all coefficients to vary depending on their allocation to the different financial regimes. For those firms that are not a priori liquidity-constrained, the coefficients should be in accordance with the predictions of the standard Euler equations.

To control for unobserved individual effects, endogeneity of explanatory variables and the introduction of the lagged dependent variable among the regressors, we estimate model [3.6] by transforming all variables in the model using the orthogonal deviations transformation (see Arellano and Bover, 1995) and using a Generalised Method of Moments (GMM) (see Arellano and Bover, 1995).

lano and Bond, 1991). If the error term  $\varepsilon_{it}$  is serially uncorrelated, lagged values of the right-hand variables dated  $t-2$  and earlier would be valid instruments. However, if  $\varepsilon_{it}$  is MA(1), instruments dated  $t-2$  are no longer valid.

#### 4. THE SAMPLES: DESCRIPTIVE STATISTICS

The empirical analysis is conducted on two panel data sets constructed from the harmonised balance sheets and profit and loss accounts of French and Spanish industrial firms. The French sample comprises 45,111 observations (corresponding to 6,965 firms) obtained from a database compiled by the Banque de France. The Spanish sample includes 13,631 observations (corresponding to 2,208 firms) obtained from a database compiled by the Banco de España. Note that in the Spanish case, given the variables required for the analysis of this chapter, those firms forming part of the database of annual accounts filed with the Mercantile Registries (CBBE/RM or CBB) are excluded from the sample. In both countries, the period considered is 1991-1999.

Table IV.1 displays the size composition in both samples. In general, taking the whole population of enterprises in both countries as a benchmark, large firms are over-represented in our samples. Nevertheless, although skewed towards larger firms, these samples may be considered as representative of the industry sector of each economy. In fact, they contain higher shares of small and unlisted companies than the standard databases used in the empirical literature. The median number of employees is 48 in France and 49 in Spain, and in both cases the fraction of listed companies is below 3%. Therefore, our samples seem to be well suited for addressing an empirical investigation of the relevance of financial frictions on investment decisions, since they contain a significant share of firms that are potential candidates to be liquidity-constrained.

The definitions and acronyms for the variables used in our analysis are presented in table IV.2. Table IV.3 reports the descriptive statistics for these variables. Overall, although samples were cleaned of outliers by removing extreme percentiles from the variables used in the regression, there is still a wide dispersion in most of the variables. It is worth noting that the Spanish sample, despite being slightly more homogeneous in terms of size, displays a higher dispersion in some variables. Thus, the ratio of the standard deviation to the mean value is higher in the Spanish sample in almost all the variables. The exceptions are the number of employees, the external finance cost and the ratio of the gross operating profit to the stock of capital. The dispersion is significantly larger in the return on assets and in the cash stock.

Table IV.4 displays the median values for the main variables for the sub-samples of firms defined according to the splitting criteria that is used in the following section: payment of dividends in two consecutive periods. This descriptive evidence seems to suggest that those firms that do not pay dividends are potentially liquidity-constrained. First, this table is consistent with the existence of an external finance premium that reflects the monitoring costs that investment projects entail for lenders. The more pronounced the asymmetric information problems between a firm and their fund suppliers are, the larger this external finance premium should be. In our case, we have found that, in both countries, the median cost of debt is significantly higher for firms that do not pay positive dividends. In the French case, the difference in the median cost of debt between those firms that do not and those that do pay positive dividends is 0.5 p.p., whereas in the Spanish sample this difference is almost 2 p.p. Second, in both countries firms that do not pay positive dividends display a higher level of indebtedness. Again, this difference is larger in the Spanish sample. Third, in both countries firms that pay positive dividends have, in relative terms to their capital stock, a higher level of liquid assets and generate, again in

TABLE IV.1  
SIZE DISTRIBUTION OF FIRMS AND OBSERVATIONS BY MEAN EMPLOYMENT

	France					Total
	n < 20	20<n≤100	100<n≤250	250<n<500	n>500	
<b>No. of firms</b>	1,083 15.5%	3,894 55.9%	1,141 16.4%	450 6.5%	397 5.7%	6,965 100.0%
<b>No. of obs.</b>	6,611 14.7%	25,319 56.1%	7,581 16.8%	2,984 6.6%	2,616 5.8%	45,111 100.0%

	Spain					Total
	n < 20	20<n≤100	100<n≤250	250<n<500	n>500	
<b>No. of firms</b>	368 16.7%	1,180 53.4%	353 16.0%	168 7.6%	139 6.3%	2,208 100.0%
<b>No. of obs.</b>	2,190 16.1%	7,260 53.3%	2,259 16.6%	1,078 7.9%	844 6.2%	13,631 100.0%

Percentage of Listed Companies (Firms and Observations)

	France		Spain	
	Listed	Total	Listed	Total
<b>No. of firms</b>	117 1.7%	6,965 100.0%	64 2.9%	2,208 100.0%
<b>No. of obs.</b>	773 1.7%	45,111 100.0%	359 2.6%	13,631 100.0%

relative terms to their capital stock, higher flows of internal funds (considering both gross operating profits or the cash-flow variable). Fourth, in both countries the median size of the firms paying positive dividends is larger. Finally, the ratio of investment to the stock of capital is again higher in both countries for firms paying positive dividends.

## 5. EMPIRICAL RESULTS

As mentioned in section 3, Bond and Meghir (1994) present a direct test of the empirical implications of the hierarchy of finance model. Their model predicts that the same firm may be financially constrained in some periods but not in others; and that the firm's current dividend and new share issuing behaviour should signal which financial regime the firm is currently in. Thus, they claim that firms in the financially-constrained regime should be paying zero dividends and issuing no new shares in two consecutive periods, while firms in the unconstrained regimes should either be paying positive dividends or issuing new shares. In order to implement their testing strategy, we simplify the taxonomy of final regimes. We distinguish only two financial regimes (12). Firms paying zero dividends in two consecutive periods are in the constrained re-

(12) In fact, Bond and Meghir (1994) also use this simplification since the number of observations in their sample in Regime 3 is very low.

## VARIABLE ACRONYMS AND DEFINITIONS

Variable Acronyms	Description of Variable
I/K	Gross Investment / Capital = $I(t) / K(t-1)$
S/K	Sales / Capital = $S(t) / K(t-1)$
Y/K	Production / Capital = $Y(t) / K(t-1)$
CF/K	Cash Flow / Capital = $CF(t) / K(t-1)$
CS/K	Cash Stock / Capital = $CS(t) / K(t-1)$
GP/K	Gross Operating Profit / Capital = $GP(t) / K(t-1)$
B/K	Total Debt / Capital = $B(t) / K(t-1)$
YP	Number of Employees
ROA	Ordinary Return on Net Assets (R1)
EFC	External Finance Cost (R2)

gime; otherwise firms are classified as being in the unconstrained regime. We obviate the consideration of new shares issues, the main reason being that in both samples the proportion of firms issuing new shares is very small.

Table IV.5 displays the estimates for the basic Euler equations using the complete sample in both countries. As already mentioned in section 3, we use GMM, include a complete set of time dummies and, in order to solve the estimation problem stemming from the potential presence of unobserved individual effects, estimate the model using the orthogonal deviations transformation proposed by Arellano and Bover (1995). All the reported GMM estimates correspond to one-step estimates with asymptotic standard errors robust to heteroskedasticity. We present two columns for each country. In the first (column (1) for France and column (3) for Spain), the instrument set includes all the regressors dated from  $t-2$  to  $t-4$ . In the second (column (2) for France and column (4) for Spain), we assume an MA (1) error and exclude instruments dated  $t-2$ . In both countries, there are important differences between the estimates in both columns. This is especially the case for the coefficients of the lagged investment terms (which, as Bond and Meghir argue, are more likely to be biased if the error term is serially correlated). Comparing both sets of estimates, we find that the exclusion of the most recent lags (those dated  $t-2$ ) reduces the precision of the estimates. Nevertheless, in spite of this fact, given the tests of the validity of the instruments (13) and since the coefficients on the lagged investment terms, although correctly signed, are much smaller in absolute values than the predictions of the theoretical model in the absence of financial constraints, we rule out instruments dated  $t-2$  and, in what follows, focus on the second set of results.

Focusing on the results in columns (2) and (4), we find that the coefficients of the lagged investment terms, although larger than in the estimates with instruments dated  $t-2$ , are still below the predictions of the theoretical model (14). The coefficient of production is positive, indicating the existence of imperfect competition. The debt coefficient, although correctly signed, is far from being significant. Nevertheless, the major departure from the predictions of the theoretical model under the null of absence of financial frictions is the

(13) In the French case, both the Sargan test in column (1) and the Sargan difference test support the rejection of the  $t-2$  instruments. In the Spanish case, instruments dated  $t-2$  cannot be rejected. Nevertheless, for the sake of comparability with the French results and given that the point estimates – reported in column (4) – for the lagged investment terms are closer to their theoretical values we also focus, for the Spanish sample, on results excluding instruments dated  $t-2$ . The pattern of results does not substantially differ when including them.

(14) Under the null of no financial constraints, the theoretical model predicts  $\beta_1 \geq 1$  and  $\beta_2 \leq -1$ .

## DESCRIPTIVE STATISTICS

TABLE IV.3

## FRANCE

Variable	Mean	St. dev.	Percentiles				
			Min	25%	50%	75%	Max
I/K	0.139	0.144	0.002	0.048	0.094	0.174	1.026
S/K	4.123	3.771	0.717	2.001	3.001	4.779	79.800
Y/K	3.718	3.488	-0.737	1.818	2.727	4.287	79.800
CF/K	0.332	0.312	-0.652	0.161	0.262	0.411	4.219
CS/K	0.284	0.634	0.000	0.017	0.086	0.302	26.500
GP/K	0.196	0.302	-2.637	0.047	0.122	0.256	5.920
B/K	0.592	0.651	0.013	0.219	0.402	0.709	9.780
YP	169	933	1	27	48	120	63,258
ROA	0.116	0.422	-33.090	0.045	0.105	0.179	69.200
EFC	0.084	0.527	0.000	0.046	0.064	0.089	73.000

## SPAIN

Variable	Mean	St. dev.	Percentiles				
			Min	25%	50%	75%	Max
I/K	0.148	0.184	-0.156	0.035	0.092	0.193	1.285
S/K	4.477	4.673	0.370	1.808	3.032	5.362	64.359
Y/K	4.538	4.676	0.348	1.841	3.094	5.362	64.359
CF/K	0.339	0.444	-1.081	0.114	0.228	0.424	4.154
CS/K	0.370	0.895	-0.071	0.024	0.103	0.332	19.870
GP/K	0.409	0.441	-1.142	0.169	0.296	0.504	4.737
B/K	0.711	0.926	0.000	0.140	0.447	0.918	9.858
YP	199	769	1	26	49	131	15,665
ROA	0.130	0.782	-29.727	0.056	0.111	0.188	79.500
EFC	0.178	0.610	0.000	0.064	0.105	0.161	40.000

positive coefficient of the gross operating profit term (15). The expected sign for this coefficient is a negative one because the gross operating profit is proxying the marginal productivity of capital. However, if the null hypothesis is incorrect, the availability of internal funds would positively affect the level of investment. Thus, a positive sign for the coefficient of the gross operating profit might be signaling the existence of liquidity constraints. Over-

(15) This result is also obtained when using cash flow instead of gross operating profit to estimate the standard Euler equation model.

TABLE IV.4

## DESCRIPTIVE STATISTICS (MEDIAN BY SUB-SAMPLES)

Variable	FRANCE		SPAIN	
	Dividends = 0	Dividends > 0	Dividends = 0	Dividends > 0
Number of observations	30,532	14,579	10,771	2,860
S/K	2.938	3.138	3.016	3.100
Y/K	2.653	2.874	3.076	3.137
CF/K	0.222	0.351	0.194	0.377
CS/K	0.058	0.192	0.090	0.177
GP/K	0.134	0.216	0.273	0.396
B/K	0.444	0.323	0.515	0.223
YP	46	56	44	86
ROA	0.081	0.154	0.099	0.168
EFC	0.066	0.061	0.108	0.090

all, the results in table IV.5 provide evidence suggesting that the Euler equation model without financial regimes is mis-specified.

The second step in the BM testing strategy is to estimate the standard Euler equation augmented with the dividends to capital ratio. Under the null of no financial regimes this variable should not display any significant information content for the investment decision. As table IV.6 shows the coefficient of the dividends to capital ratio is significant (although it is only marginally significant in the Spanish sample), while the remaining coefficients of the model do not significantly differ from those reported in columns (2) and (4) of table IV.5. Thus, this table provides some additional evidence (albeit somewhat weak) favourable to the rejection of the basic Euler equation model without financial regimes.

Finally, under the hypothesis of existence of financial regimes we should expect non-linear behaviour of investment in the sense that estimated coefficients in accordance with the predictions of the standard Euler equation model without financial regimes should be found only for those firms that are not liquidity-constrained. However, for liquidity-constrained firms estimates should reflect some degree of excess sensitivity of investment to financial variables. Thus, in the third step of their testing strategy, BM define a dummy variable  $S_{it}$  that takes the value 1 when the firm is liquidity-constrained and interact this variable with all the regressors. The coefficients for the unconstrained sample are those corresponding to the non-interacted terms. Analogously, for the constrained sample the parameters are the results of the sum of the non-interacted terms with the corresponding interaction terms.

To implement this test, in this chapter we define a dummy variable  $S_{it}$  that is zero when dividends are positive in periods  $t$  and  $t-1$  (16). As BM do, we consider that this variable  $S_{it}$  is

(16) To allow for a signaling role for dividends, Bond and Meghir (1994) use two alternative criteria to classify a firm as being constrained: first, if current dividends are low relative to the firm's average payout; and second, if the firm cuts dividends.

THE BASIC EULER EQUATION MODEL

TABLE IV.5

	FRANCE		SPAIN	
	(i)	(ii)	(iii)	(iv)
$\frac{I_{i,t-1}}{K_{i,t-2}}$	0.132 (0.020)	0.529 (0.211)	0.211 (0.042)	0.456 (0.236)
$\left(\frac{I_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.170 (0.025)	-0.777 (0.346)	-0.190 (0.044)	-0.444 (0.325)
$\frac{GOP_{i,t-1}}{K_{i,t-2}}$	0.079 (0.012)	0.093 (0.031)	0.015 (0.019)	0.042 (0.044)
$\frac{Y_{i,t-1}}{K_{i,t-2}}$	0.014 (0.002)	0.008 (0.004)	0.014 (0.004)	0.018 (0.007)
$\left(\frac{B_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.004 (0.001)	-0.001 (0.003)	-0.002 (0.001)	-0.003 (0.003)
$m_1$	-32.96	-6.17	-16.54	-4.37
$m_2$	-0.28	-0.33	0.18	-0.44
Sargan	92.80	39.30	74.60	35.50
(p-value)	(0.04)	(0.50)	(0.33)	(0.67)
Difference-Sargan		53.50		39.10
(p-value)		(0.00)		(0.12)
Instruments	t-2, t-3, t-4	t-3, t-4	t-2, t-3, t-4	t-3, t-4

Notes: The estimation method is orthogonal deviations GMM. Time dummies are included.  $m_i$  is a serial correlation test of order  $i$  using residuals in first differences (asymptotically, this test follows a standard normal distribution). Sargan is a test of the over-identifying restrictions (asymptotically  $X^2$ , degrees of freedom). Difference-Sargan is a test of the validity of the additional instruments (asymptotically  $X^2$ , degrees of freedom). See Table IV.2. for the definition of the variables.

endogenous and, consequently, we instrument it. Finally, we only add the interaction of this variable with the gross operating profit to capital, since this is the most direct test for the absence of financial constraints. Moreover, the introduction of the complete set of interaction terms substantially reduces the precision of the estimates. The results are reported in table IV.7. When a different coefficient across observations in the two sub-samples is allowed for, we find that, in the Spanish sample, the point estimate for gross operating profit is zero for the unconstrained sub-sample and positive and significant for the constrained observations. In the French sample, the point estimate for gross operating profit is still positive and significant (although its size is smaller than in the model without the interaction term) for the unconstrained sub-sample, whereas the point estimate for the interaction term is also positive and significant suggesting that, as expected, the investment behaviour of firms in the constrained regime display a higher sensitivity to the internal generation of resources. Therefore, our results suggest that the rejection of a standard Euler equation model of investment without financial regimes comes from the presence in both samples of a sub-set of companies that are liquidity-constrained, in the sense that their investment is positively linked to the availability of internal finance.

The main findings of the study broadly reproduce those obtained by Bond and Meghir (1994) using a sample of quoted U.K. manufacturing firms over the period 1974-1986. Moreover, our results are consistent with those found in Alonso-Borrego (1994). He estimates a simi-

## TESTS FOR THE ABSENCE OF FINANCIAL EFFECTS

	FRANCE	SPAIN
	(i)	(ii)
$\frac{I_{i,t-1}}{K_{i,t-2}}$	0.517 (0.211)	0.491 (0.221)
$\left(\frac{I_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.717 (0.344)	-0.558 (0.267)
$\frac{GOP_{i,t-1}}{K_{i,t-2}}$	0.109 (0.032)	0.070 (0.045)
$\frac{Y_{i,t-1}}{K_{i,t-2}}$	0.008 (0.004)	0.016 (0.007)
$\left(\frac{B_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.002 (0.003)	-0.003 (0.003)
$\frac{D_{it}}{K_{it-1}}$	-0.232 (0.101)	-0.305 (0.170)
$m_1$	-6.59	-5.20
$m_2$	-0.11	0.10
Sargan	45.80	43.10
(p-value)	(0.56)	(0.67)
Instruments	t-3, t-4	t-3, t-4

See notes to Table IV.5.

lar model for a sample of Spanish firms over the period 1987-1990. The standard Euler equation model is rejected for the sample containing both dividend-paying observations and non-dividend-paying ones. Furthermore, when the coefficients are allowed to vary depending on the dividend policy, a higher degree of excess sensitivity to cash flow is found for those firms paying zero dividends. In addition, using a two-stage procedure to correct the potential sample selection bias, he estimates the standard Euler equation model for the sub-sample of firms paying positive dividends and confirms that the model is not rejected for that sub-sample.

Finally, it is worth noting that Chatelain et al. (2001), estimating a neoclassical model of investment for two samples of firms – French and Spanish – very similar to the ones used in this study, rejects that small firms display a higher degree of excess sensitivity of investment to cash flow relative to large firms. Our results seem to confirm, as was suggested in that paper, that size might not be a sufficient indicator, for some countries, of informational asymmetries.

## 6. CONCLUSIONS

This chapter has analysed the role of financial constraints in explaining investment behaviour using two unbalanced samples of French and Spanish industry firms over the period 1991-1999. For this purpose, this chapter has closely followed the methodological approach imple-

TABLE IV.7

## TEST FOR THE ABSENCE OF FINANCIAL REGIMES

	FRANCE	SPAIN
	(i)	(ii)
$\frac{I_{i,t-1}}{K_{i,t-2}}$	0.490 (0.199)	0.449 (0.223)
$\left(\frac{I_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.681 (0.313)	-0.413 (0.285)
$\frac{GOP_{i,t-1}}{K_{i,t-2}}$	0.069 (0.031)	-0.001 (0.044)
$\frac{Y_{i,t-1}}{K_{i,t-2}}$	0.008 (0.004)	0.017 (0.007)
$\left(\frac{B_{i,t-1}}{K_{i,t-2}}\right)^2$	-0.002 (0.003)	-0.004 (0.003)
$S_{it} \frac{GOP_{it-1}}{K_{it-2}}$	0.041 (0.024)	0.106 (0.044)
$m_1$	-6.71	-5.21
$m_2$	-0.06	0.60
Sargan	40.80	43.20
(p-value)	(0.76)	(0.67)
Proportion of observations with $S_{it}=0$	0.32	0.21
Instruments	t-3, t-4	t-3, t-4

See notes to Table IV.5.

mented by Bond and Meghir (1994). These authors present an extended version of the standard Euler equation model of investment. This extended model assumes that the firm faces a hierarchy of costs for the alternative sources of finance and leads to different characterisations of investment behaviour for firms pursuing different financial policies.

Overall, our results suggest that there are significant differences in investment behaviour which are closely linked to the financial situation of firms. More precisely, our results corroborate the empirical finding that investment displays excess sensitivity to measures of internal finance for a sub-set of firms; in particular, the evidence found is consistent with the investment expenditure of firms paying zero dividends being constrained by the availability of internally generated funds.

Although our results display some slight departures from the theoretical predictions of the extended model, they provide an empirical basis for the excess sensitivity of investment to financial variables. Therefore, the evidence presented contributes to explaining the rejection of the standard Euler equation model of investment. This model is rejected on several grounds. First, in the estimates of the standard Euler equation for the whole sample of firms, a positive and significant coefficient is found for the internal funds variable that can be explained by the presence of liquidity-constrained firms in the sample that would lead to an excess sensitivity of

investment to measures of internal finance. Second, in the estimation of the basic Euler equation augmented with dividends, this variable turns out to be significant. We argue again that the presence of liquidity-constrained firms in the sample justifies this result. Finally, in the estimation of the Euler equation model allowing all coefficients to vary depending on their allocation to the different financial regimes, a higher excess sensitivity to internal funds is found for the a priori liquidity-constrained firms. Nevertheless, the negative and significant coefficient for the internal funds variable for those firms that are not a priori liquidity-constrained is not found. A possible explanation for the latter result, as argued by Bond and Meghir (1994), is that the sample selection criteria used to identify the existence of liquidity constraints might be somewhat weak in the sense that firms could have incentives to pay positive dividends. Thus, firms could decide to pay positive dividends even if liquidity-constrained.

Finally, it is worth pointing out that the patterns of results in both countries do not seem to display significant differences (although a formal statistical test of the differences has not been conducted since the databases have not been pooled). What is more telling, our results broadly reproduce those obtained by Bond and Meghir (1994) for a very different sample, namely quoted U.K. manufacturing firms over the period 1974-1986. Thus, these results confirm that the analysis of the dividend policy of the firms is useful for identifying the potential presence of financial constraints on investment spending.

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## ANNEXES ON INSTITUTIONAL FACTORS

- I. FUNDAMENTALS OF ECONOMIC GROWTH
  - II. LABOUR MARKET
  - III. FINANCIAL LEASING
  - IV. FINANCIAL SYSTEMS
  - V. INSOLVENCY LAW
  - VI. PENSION FUNDS AND EMPLOYEE SAVINGS SCHEME
  - VII. CONTRIBUTIONS TO SOCIAL SECURITY
  - VIII. TAXES LEVIED ON COMPANIES
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ANNEX I

FUNDAMENTALS OF ECONOMIC  
GROWTH IN FRANCE AND SPAIN

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## 1. INTRODUCTION

In this annex there is an analysis of the evolution of the Spanish and French economies from a long run perspective. The analysis will be centred around the variable which best summarizes a country growth process; the GDP per person. It has been focused in the period 1960-2000. Along the last forty years there have been deep changes in both economies, but the change has been the more dramatic in Spain, which has been immersed in a catching up process for most of the period. Along this annex there will be a comparison of the performance of the Spanish and French economies in the framework of the European economy, i.e. whenever the data are available, the relevant variables for both *Spain* and *France* and the aggregate of the 12 countries, which constituted the *Euro area* in 1999 are offered. Section 2 presents the comparative evolution of the two economies as shown by the level of GDP per person and outlines how the real convergence of the Spanish economy towards the European levels has proceeded, distinguishing the periods of faster convergence and others in which convergence has been slow or lacking. In section 3 it focuses on the main determinants of the relative performance of the two economies; labour productivity and the employment/population ratio. In section 4 it goes a bit deeper in the analysis of the determinants of productivity. The process of capitalization, and the technical progress (proxied by Total factor productivity) are the two variables whose evolution is shown here. Finally, in section 5 it looks at the forces, which have driven the observed evolution of total factor productivity: investment rate (1), human capital, infrastructures, R & D expenditure etc.

## 2. EVOLUTION OF GDP PER PERSON

In graph 1.1, the evolution of GDP per person in France and Spain and the aggregate of 12 countries, which today constitute the euro area (2) is presented. The GDP per person growth rate has been, on average, higher in Spain than both in France and the euro area (2.3% in Spain, 2.0% in the euro area and 1.9% in France). This evolution reflects the catching-up process of the Spanish economy, which started from a very backward relative position at the beginning of the seventies (3). In fact, in 1970 the GDP per person was in Spain 73% of the Euro Area

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(1) Although the most obvious effect of increases in the Investment rate is to increase the level of capitalization of the economy, it must be noted that the capitalization process (i.e. the increase in the K/L ratio) has multiple externalities which are associated to the technological progress

(2) No data for the Euro Area or any other European aggregate are available in ADB database for the sixties.

(3) Note the sixties was even a faster growth period in Spain, in fact, it was in the early sixties when a fast growth process started. The data for France start in 1963. When comparing the growth process in the two countries in the sixties, an accumulative differential growth rate of 0.5% between Spain and France can be observed.

level, having reached 80% of this level in 1997. The main features of the growth pattern of the two countries are better observed in graph 1.2. Firstly, the cyclical evolution of the French economy is much closer to the Euro area than the Spanish economy (4). The Spanish growth pattern is far more volatile than the pattern observed both in France and in the European aggregate. As a consequence, the convergence process of the Spanish economy has been unevenly distributed along the last thirty years; in fact convergence has occurred only in the booming periods (up to 1975, 1985-1991 and since 1995) while both in the seventies recession, which was particularly deep and long, and in the much shorter but intense one which took place in 1992-1994, the Spanish economy diverged from the European average.

### 3. DETERMINANT FACTORS IN THE EVOLUTION OF GDP PER PERSON

In this section it's decomposed GDP per person as the product of three terms: one demographic variable; the fraction of the population within the age range 16 to 64 years old, and two variables which capture essential aspects of the relative performance of any country; the employment/ working-age population ratio and labour productivity. The aim in doing such decomposition is to determine in which of these variables the differences between the two countries are higher. This is shown in graph 2. Both, France and Spain labour productivity increased relative to the European countries. The positive differential is quite small for France (5) while it is sizeable for Spain. In fact, while the level of labor productivity in Spain was below 75% of the European average in 1970 (71% relative to France), the gap had reduced to 8 p.p. in 1996 with respect to the Euro Area (14 p.p. with respect to France). The slow growth rate in the evolution of productivity, which has been one of the features of the Spanish economic developments in the late nineties, has resulted in a diverging path in labour productivity in the last few years (see graph 2.2).

The ratio of employment to the total working-age population which both in Spain and France was above the average European level before the first oil crisis, declined in both countries. While the fall of this ratio has been smooth in France, in Spain it reflected heavily the decade of economic slowdown (1975-1984) and the short but deep 1992-1994 recession. In Spain the sharp decline in the fraction of employed out of the working-age population up to 1985 was mainly a consequence of a dramatic drop in the employment level; between 1970 and 1985 the Spanish economy destroyed 1.2 million net jobs, which meant that in 1985 the employment level was a 10% lower than in 1970. In top of that, the growth of working age population was higher in Spain than in France, trend that can be explained as a consequence of two different factors; the end of the migration process, interrupted with the European economic crisis (6) and the coming to age of the baby boomers. Overall, employment went down from 67% of the working-age population in 1970 (106% relative to the euro area) to 59% in 2000 (95% of the euro area), having experienced quite deep changes along the last thirty years; in 1985 it reached the minimum of 51% of the working-age population (89% in relative terms). The recovery which took place in the last eighties increased the ratio of employment to working-age population up to 56% in 1990 (94% of the European average), falling down again as a

(4) The correlation between the French and European growth rates along the period 1970-1997 is 0.86, while the correlation between the Spanish and the European growth is only 0.64. Standard deviation of the growth rate differentials with respect to the Euro Area is 0.77 for France and 1.77 for Spain along 1979-1997.

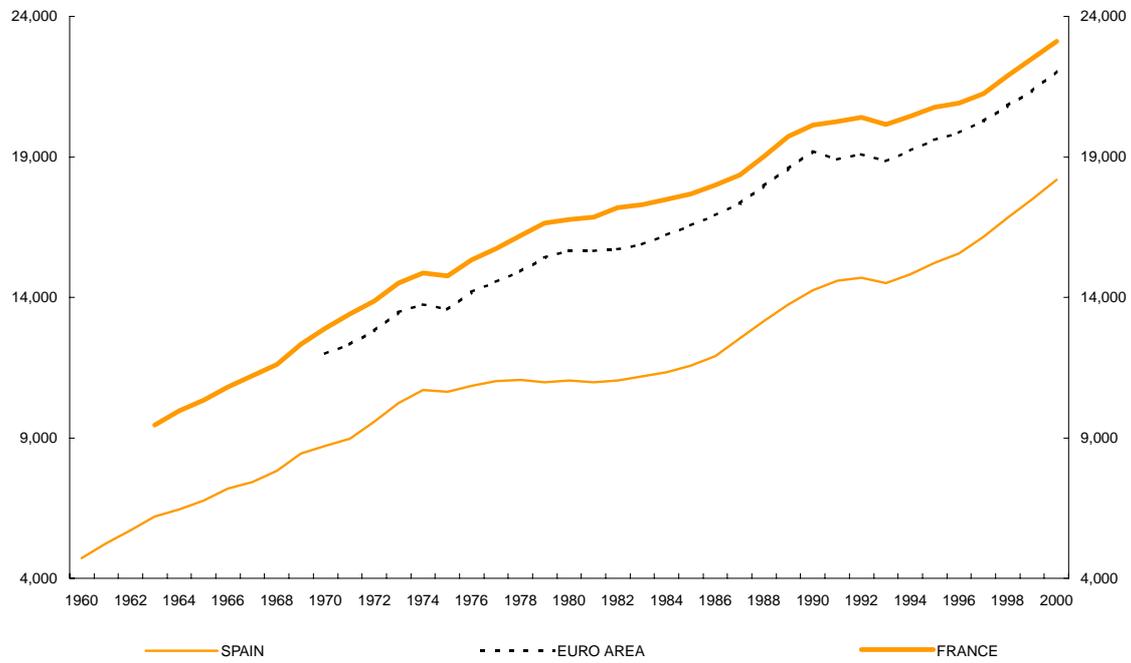
(5) Labour productivity grew in the Euro area at an average accumulative rate of 1.9%, 2.0% in France and 2.6% in Spain along the thirty years 1970-2000.

(6) The flow of Spanish emigrants to European countries was very important along the sixties, the gross migration ratio was about 0.3% and net migration about half of this figure per year during that period. After 1973 gross flows diminished dramatically and a net migration became positive up to 1980 reflecting the return of immigrants.

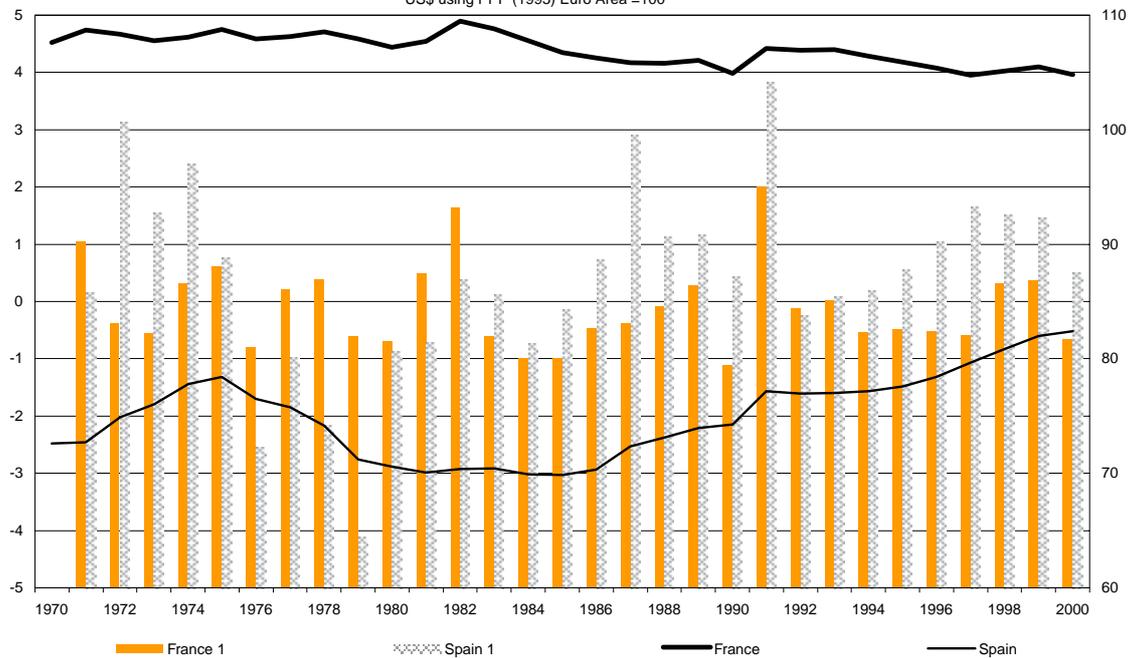
GRAPH 1

## GDP PER PERSON

Graph 1.1 GDP / person  
US\$ using PPP (1995)



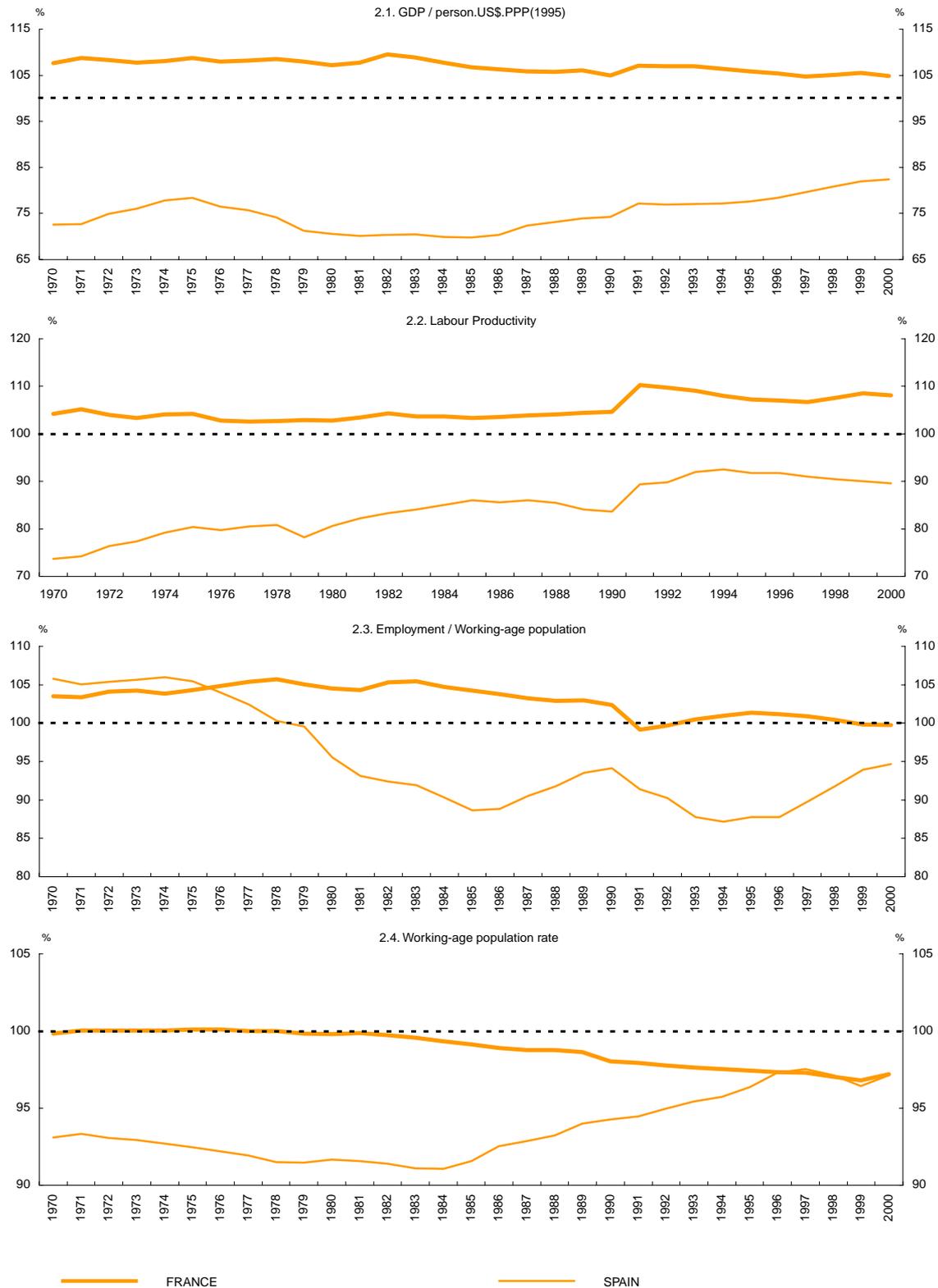
Graph 1.2. GDP per person. Level and growth rates differentials  
US\$ using PPP (1995) Euro Area =100



Source: OECD ADB database

GRAPH 2

## FACTORS IN THE EVOLUTION OF GDP PER PERSON (EURO AREA = 100)



Source: OECD ADB database

TABLE 1

## PER CAPITA GDP GROWTH AND ITS COMPONENTS

<b>SPAIN</b>	<b>1970-1975</b>	<b>1976-1985</b>	<b>1986-2000</b>	<b>1970-2000</b>
<b>Per capita GDP</b>	<b>4.1</b>	<b>1.0</b>	<b>3.1</b>	<b>2.5</b>
Labour productivity	4.7	2.8	1.6	2.6
Employment / Working-age population	-0.5	-2.3	1.0	-0.4
Working-age pop / Total Population	-0.1	0.6	0.4	0.4
<b>FRANCE</b>	<b>1970-1975</b>	<b>1976-1985</b>	<b>1986-2000</b>	<b>1970-2000</b>
<b>Per capita GDP</b>	<b>2.7</b>	<b>1.8</b>	<b>1.8</b>	<b>2.0</b>
Labour productivity	2.9	2.2	1.6	2.0
Employment / Working-age population	-0.3	-0.8	0.3	-0.2
Working-age pop / Total Population	0.1	0.5	-0.1	0.1
<b>EURO AREA</b>	<b>1970-1975</b>	<b>1976-1985</b>	<b>1986-2000</b>	<b>1970-2000</b>
<b>Per capita GDP</b>	<b>2.5</b>	<b>2.0</b>	<b>1.9</b>	<b>2.1</b>
Labour productivity	2.9	2.2	1.3	1.9
Employment / Working-age population	-0.4	-0.7	0.6	-0.1
Working-age pop / Total Population	0.0	0.6	0.1	0.2

Source: OECD ADB database

consequence of the early nineties recession and experiencing a fast recovery along the last years as a result of a strong job creation which overlapped with the increasing trend in women labour participation rate.

The third explanatory factor behind the observed evolution of GDP per person is the trend in working age-population as a fraction of the total population, which can be seen as a broad measure of the potential human resources of a country. In France this variable has experienced a slow increase along the past thirty years; from 62% recorded in 1970, to 65% in 2000; which represents a slight decline relative to the euro area (from 100% in 1970 to 97% in 2000). In Spain the growth of working age population was much faster, going from 58% in 1970 to 65% in 2000; which means that the 7 p.p. gap, which existed relative to the Euro area was almost closed by 2000.

Table I summarizes the characteristics of the growth process. The most relevant feature being that, from the long run perspective of the last thirty years, it has involved net job destruction in all the three areas. Growth has relied in productivity gains; it is the well known process of *growth without jobs* which has been characteristic of the European economy in the last decades. In the case of Spain, these features are accentuated, both the labour productivity gains are higher than in Europe, and the decline of employment as a fraction of working-age population has been stronger than in the average of countries belonging to the Euro area. In other words, between 1970 and 2000, the Spanish economy has converged towards the average European level despite the fact that its overall poor employment performance has translated in a reduction of 8 p.p. in its employment/working-age population ratio (from 67% in 1970 to 59% in 2000 which implies going from 106% of the European level to 95% a reduction of 11 p.p.). Convergence has mostly relied on productivity. Going back to graph 2 to determine what are the variables which explain the still existing gap between the GDP per person in Spain and in the euro area, it could be said that in 2000 the gap in terms of GDP per person was 18 p.p. relative to the euro area. Of these, 10 p.p. were accounted by labour productivity, 5 p.p. by the ratio of employed to working-age population and the remaining 3 p.p. by the fraction of the working-age population. Next section will look more closely to the determinants of the evolution of labour productivity.

TABLE 2

## LABOUR PRODUCTIVITY, TFP AND K/L SUBSTITUTION

SPAIN	1970-1975	1976-1985	1986-2000	1970-2000
<b>Labour productivity</b>	<b>4.9</b>	<b>3.4</b>	<b>1.4</b>	<b>2.7</b>
K/L contribution	2.1	1.9	0.7	1.3
Total factor productivity	2.8	1.6	0.7	1.4
FRANCE	1970-1975	1976-1985	1986-2000	1970-2000
<b>Labour productivity</b>	<b>3.3</b>	<b>2.4</b>	<b>1.8</b>	<b>2.3</b>
K/L contribution	1.5	1.0	0.6	0.9
Total factor productivity	1.8	1.4	1.2	1.3

Sources: AMECO and own estimations.

Capital-labour contribution is estimated using labour cost share in value added in 1995.

#### 4. LABOUR PRODUCTIVITY AND ITS DETERMINANTS

Given the central role played by labour productivity in explaining the growth process, it is worthwhile to look deeper in the determinants of this variable. Labour productivity is just a proxy of the level of efficiency attained by an economy, and its evolution is determined by the capital labour ratio and a measure of technological progress synthesized by total factor productivity (TFP).

In table 2 it is presented a decomposition of the labour productivity growth rate into its two determinants. In the first place it can be observed that the relative faster growth in the Spanish labour productivity along the last thirty years is mostly explained by a higher contribution of the capital-labour ratio, in other words the process of capital-labour substitution has been more intense in Spain than in France, while the growth rate in total factor productivity has been quite similar in the two countries for the entire period. However, it is noteworthy to observe that the evolution of total factor productivity has been more stable in France than in Spain (graph 3); note that for the last five years technological progress has been quite slow in Spain. Before analysing which are the factors that, according to the growth theory literature, determine the evolution of TFP, it is interesting to look briefly at the main trends of the capitalization process in the two economies. In graph 4 the evolution of the business sector capital-labour ratio in France and Spain is shown (7). In France this ratio almost triplicated between 1970 and 2000, while in Spain the capitalization was faster, multiplying by a factor close to four. The convergence of the Spanish economy to the levels of capitalization prevalent in France was particularly fast in the sixties and up to beginning of the eighties (graph 4.2). Overall the process implied a sizeable closure of the capital-ratio gap; from levels below 60% at the late sixties to 90% in 2000.

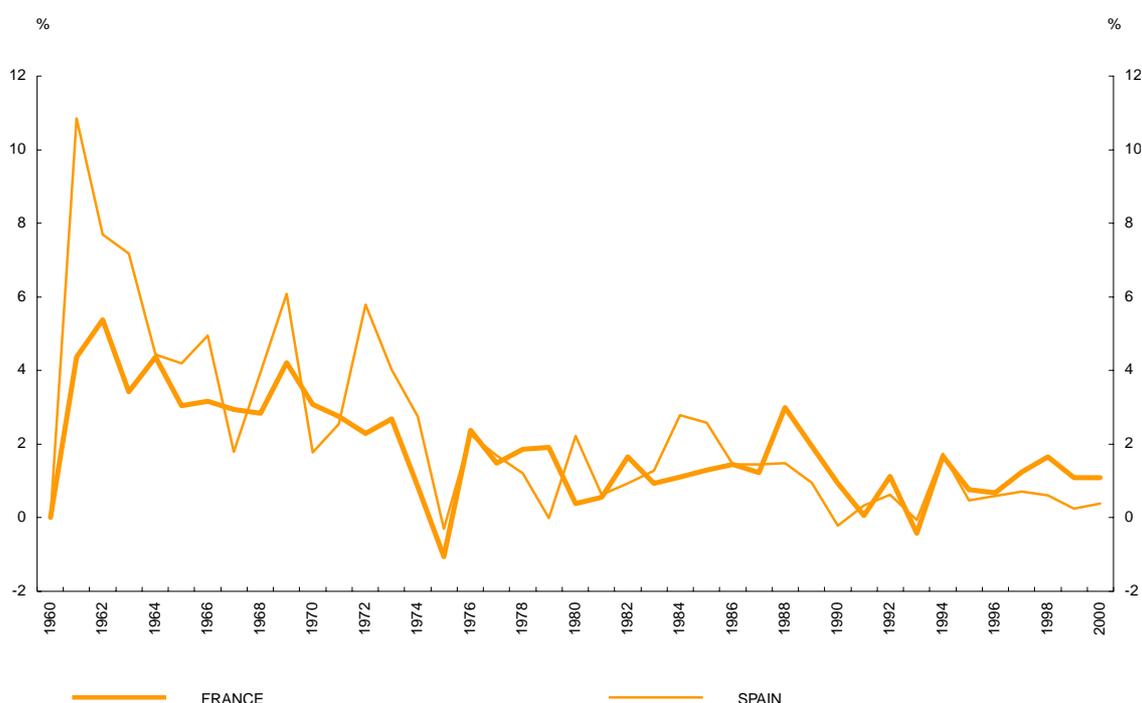
The reason behind the fast convergence in the capital-labour ratio observed up to the early eighties was not the existence of a big difference in the investment rate between the two countries (in fact, the private non-residential investment rate was lower in Spain than in France until 1972, and only somehow higher in the period 1973-1982) but the fact that the Spanish economy was in a relative backward position at the beginning of that period (8). From 1986 the

(7) No data were found for the capital stock in the euro area or any other aggregate of European countries.

(8) The explanation being that, assuming decreasing returns to capital, the same investment rate generates a higher capital stock growth in the most retarded country.

GRAPH 3

### TOTAL FACTOR PRODUCTIVITY GROWTH RATE



Source: OECD ADB database

private investment rate in Spain has been continuously above the French rate; the difference being particularly high since 1996, period in which the average private non residential investment rate was 14.3 % of GDP in Spain as compared to 11.4% in France.

## 5. THE DETERMINANTS OF TOTAL FACTOR PRODUCTIVITY

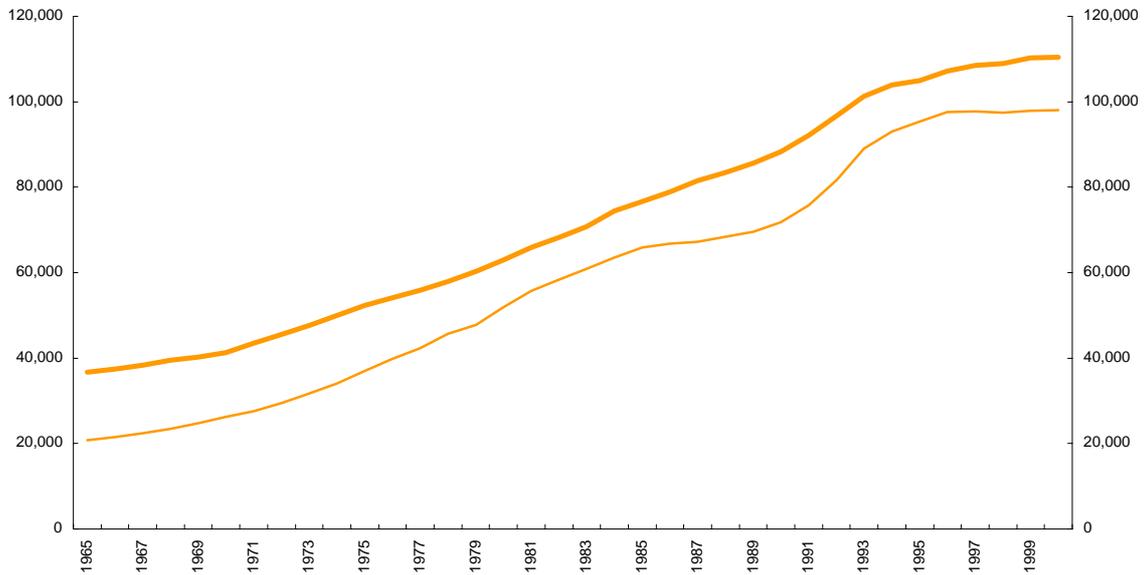
As it was mentioned in section 4, TFP is superior to labour productivity as an indicator of an economy growth potential, as its evolution abstracts from changes in factor inputs (labour and physical capital) focusing on the degree of efficiency with which these inputs are combined. In this sense, the difference between labour productivity and the capital-labour ratio provides a measure of the efficiency in the utilization of primary factors. According to the growth theory literature this difference should be explained by technological capital stock, human capital and infrastructures. Table 3 presents a set of indicators which proxy the level of these variables in the two countries.

One of the main determinants of the efficient use of the primary inputs is human capital. The channel through which human capital enhances growth is double, in the first place knowledge and training of the workforce has a direct impact on labour productivity, but also, by improving the returns of physical and technological capital, it has an indirect effect on labour productivity. Table 3 has used the average years of schooling of the working age population as a proxy for human capital (9). In 1971, the average Spaniard within the age range 16 to 64 years

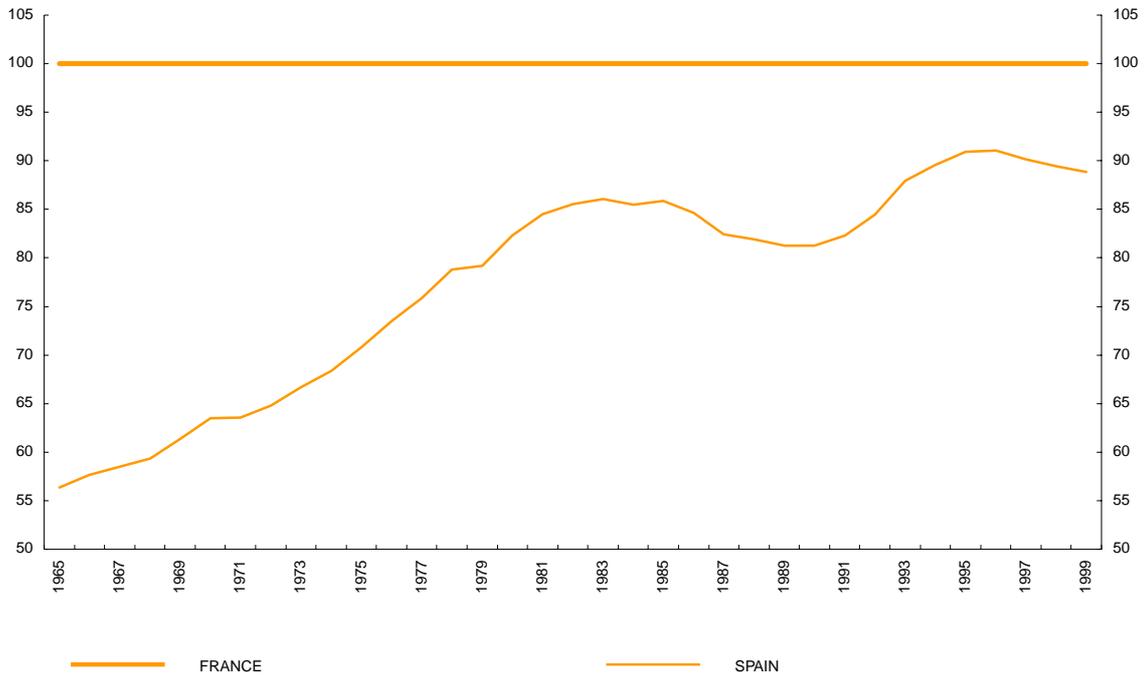
(9) Note that this variable is only a crude proxy of human capital, given that it only computes formal education – without taking into account training- and it doesn't consider education quality differences and other important dimensions of human capital.

**CAPITAL-LABOUR RATIO**

Graph 4.1. The capital labour ratio in the Business Economy.  
In \$ using PPP (1995)



Graph 4.2. SPAIN. The capital labour ratio in the Business Economy.  
FRANCE=100



Source: OECD ADB database

TABLE 3

## TOTAL FACTOR PRODUCTIVITY DETERMINANTS

SPAIN	1971	1981	1991	1998
<b>Human capital</b>				
Average years of education of the working age	5.8	6.4	7.5	8.7
Expenditure on education (as a % of GDP)	--	--	4.7	5.3
<b>Technological capital</b>				
Expenditure on R&D (% of GDP)	--	0.4	0.8	0.9
Business enterprises	--	0.2	0.4	0.4
Government	--	0.2	0.4	0.4
Other national sources + Abroad	--	0.0	0.1	0.1
<b>Infrastructures</b>				
<hr/>				
FRANCE	1971	1981	1991	1998
<b>Human capital</b>				
Average years of education of the working age	8.8	9.6	10.0	10.6
Expenditure on education (as a % of GDP)	--	--	5.7	6.2
<b>Technological capital</b>				
Expenditure on R&D (% of GDP)	--	1.9	2.4	2.2
Business enterprises	--	0.8	1.0	1.2
Government	--	1.0	1.2	0.8
Other national sources + Abroad	--	0.1	0.2	0.2
<b>Infrastructures</b>				
<hr/>				
EUROPEAN UNION	1971	1981	1991	1998
<b>Human capital</b>				
Average years of education of the working age	--	--	--	--
Expenditure on education (as a % of GDP)	--	--	--	--
<b>Technological capital</b>				
Expenditure on R&D (% of GDP)	--	1.7	1.9	1.8
Business enterprises	--	0.8	1.0	1.0
Government	--	0.8	0.8	0.7
Other national sources + Abroad	--	0.1	0.1	0.2
<b>Infrastructures</b>				

Sources: Education at a glance. OECD (2001), OECD Science Technology and Industry Scoreboard

old had received barely six years of education, three years less than the average French adult. Along the almost thirty years elapsed between 1971 and 1998, the level of education increased in France by an average of 0.7 years per decade while in Spain the growth was somehow faster; 1.1 year per decade. Note, however that despite the observed convergence, there remains a substantial difference between the average years of schooling of the working force in the two countries. There has been also included an indicator, which measures the amount of national resources devoted to education (both private and public) as a proxy (10) to the effort devoted to building-up human capital in the two societies. Total expenditure on education was in Spain below the OECD average in 1998 (5.8%) and the gap was wider with respect to France (6.2%). Expenditure on R & D is to be considered as an investment in knowledge that can translate into new technologies and more efficient ways of using existing resources of physical and human capital. As shown in table 3, overall expenditure on R&D in Spain is estimated as 0.9% of GDP in the nineties; which is very far away from the amount of resources devoted to R&D in

(10) However there are many factors which influence the magnitude of this variable. E.g. a country may show a low spending level because of enrolling low number of students or because of delivering educational services in a particularly efficient manner.

most European countries and, in particular only represents 40% of the level attained in France by this variable in 1999 (last available year). It is necessary to distinguish business sector R&D expenditure from public sector expenditure on R&D because the two might have different effects on the evolution of TFP, if, for example, public R&D expenditures are directed at making improvements in areas not directly related to growth (e.g. defence, medical research), any impact on growth could be diffused and slow to come. Having this in mind, it can be observed that not also the overall R&D intensity is much lower in Spain than in its European partners and in particular well below the French level, but also it is distributed differently; while in Spain 49% of R&D investment is performed by the business sector, In France business enterprise R&D accounts for 54% of total R&D activity.

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ANNEX II

LABOUR MARKET IN FRANCE AND SPAIN

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## I. INTRODUCTION

This annex informs about the main aspects of the French and Spanish labour markets with the aim to understand better the behaviour of the employment in the two countries in the last years. Specifically, the characteristics of the labour markets dealt in this annex are the following:

- Minimum age
- Minimum wage
- Contract termination
- Collective dismissal
- Collective bargaining
- Overtime
- Temporary work companies
- Recent labour market measures: Outstanding named in France is the 35 hour working week and in Spain, measures which contribute to make more flexible the labour market.
- Types of contracts in each country

## 2. MAIN CHARACTERISTICS OF THE FRENCH LABOUR MARKET

	<u>Legal Aspects</u>	<u>Other aspects</u>								
<b>Minimum working age</b>	<ul style="list-style-type: none"> <li>Children cannot be employed before they reach the minimum school-leaving age of 16 years.</li> </ul>	<ul style="list-style-type: none"> <li>Young people under the age of 18 are not allowed to work at tasks that are dangerous or beyond their strength. They are not allowed to engage in immoral activities or work in bars, nor are they allowed to work at night.</li> </ul>								
<b>Statutory minimum wage (SMIC)</b>	<ul style="list-style-type: none"> <li>The SMIC (<i>salair minimum interprofessionnel de croissance</i>) is an hourly wage</li> </ul> <table border="1"> <thead> <tr> <th></th> <th>Francs/euros</th> </tr> </thead> <tbody> <tr> <td>1999</td> <td>40,72 F/ 6,21€ as of 1.07.1999</td> </tr> <tr> <td>2000</td> <td>42,02 F/6,39 € as of 1/7/2000</td> </tr> <tr> <td>2001</td> <td>43,72 F/6,67 € as of 1/7/2001</td> </tr> </tbody> </table>		Francs/euros	1999	40,72 F/ 6,21€ as of 1.07.1999	2000	42,02 F/6,39 € as of 1/7/2000	2001	43,72 F/6,67 € as of 1/7/2001	<ul style="list-style-type: none"> <li>The minimum wage increases automatically by ministerial order each time the consumer price index rises by more than 2%. <ul style="list-style-type: none"> <li>adjusted by decree once a year with effect as of 1 July</li> <li>may be adjusted more than once a year</li> </ul> </li> </ul>
	Francs/euros									
1999	40,72 F/ 6,21€ as of 1.07.1999									
2000	42,02 F/6,39 € as of 1/7/2000									
2001	43,72 F/6,67 € as of 1/7/2001									
<b>Termination of employment</b>	<p><b><u>Type of termination</u></b> <u>Unilateral termination</u></p> <p>1) At the employer's initiative</p> <ul style="list-style-type: none"> <li>personal grounds for termination <ul style="list-style-type: none"> <li>+ insubordination</li> <li>+ breach of contract</li> <li>+ serious misconduct</li> <li>+ non-disciplinary grounds</li> </ul> </li> <li>economic grounds for termination <ul style="list-style-type: none"> <li>+ elimination of job <ul style="list-style-type: none"> <li>– with elimination of employee's tasks</li> <li>– with redistribution of employee's tasks</li> </ul> </li> <li>+ transformation of job</li> </ul> </li> </ul> <p>2) At the employee's initiative</p> <ul style="list-style-type: none"> <li>resignation: this only concerns full-time and part-time employment under permanent contract. It is the counterpart to the employer's right to terminate the contract.</li> <li>voluntary retirement</li> <li>termination during probation period</li> </ul> <p>3) Termination by mutual consent</p>	<p><b><u>Termination conditions and compensation</u></b></p> <ul style="list-style-type: none"> <li>No notice period is required in cases of: <ul style="list-style-type: none"> <li>– serious misconduct</li> <li>– employees on probation</li> <li>– force majeure</li> <li>– termination of the contract by a court ruling</li> </ul> </li> </ul> <p>Employers may excuse employees from working out their notice period.</p> <p>⇒ <b><u>Notice period</u></b></p> <ul style="list-style-type: none"> <li>in case of termination by employer: <ul style="list-style-type: none"> <li>– seniority less than 6 months: period set by collective bargaining agreements</li> <li>– seniority between 6 months and 2 years: minimum notice 1 month</li> <li>– seniority over 2 years: minimum notice 2 months</li> </ul> </li> <li>in case of resignation <ul style="list-style-type: none"> <li>– same notice periods as in cases of termination by employer</li> </ul> </li> </ul> <p>However, employees may be exempted from providing notice in certain cases.</p> <p>⇒ <b><u>Compensation</u></b></p> <p><b><u>Termination by employer</u></b></p> <ul style="list-style-type: none"> <li>→ compensation for notice period when employee is not required to work out the notice period</li> <li>→ statutory minimum termination payment when seniority is 2 years or more</li> <li>→ 1/10 of a month's pay per year of service for employees on monthly salaries</li> <li>→ holiday pay</li> <li>→ supplementary compensation for seniority depending on age and years of service</li> </ul>								

<p><b>Redundancies</b></p>	<p>Article L. 321-1 of the French Labour Code states that, “redundancy involves dismissals by an employer for one or more reasons not related to the individual employees as a result of the elimination or transformation of their jobs or substantial modifications in their contract of employment following business problems or technological developments.”</p> <p>In view of this legal definition, a redundancy occurs if the dismissal:</p> <ul style="list-style-type: none"> <li>– is not related to the person of individual employee;</li> <li>– results from the elimination or transformation of the employee’s job or substantial modification of an element in the employee’s contract;</li> <li>– is motivated by “business problems” or “technological developments” or by “restructuring”.</li> </ul> <p><b><u>Social Plan</u></b></p> <p>Social plans are intended to prevent redundancies or limit the numbers of dismissals and facilitate the redeployment of employees whose dismissal cannot be avoided (older employees, etc.)</p> <p><b><u>Mandatory Social Plan</u></b></p> <ul style="list-style-type: none"> <li>▪ in case of dismissals of 10 or more employees in companies with 50 or more employees</li> </ul>	<p><b><u>Employers’ obligations</u></b></p> <p>Before making any employees redundant, employers must:</p> <ul style="list-style-type: none"> <li>– <u>seek opportunities for redeployment</u> in other locations or in other companies in the group</li> <li>– <u>offer a retraining contract</u></li> <li>– <u>inform and consult</u> employee representatives</li> <li>– <u>notify the government</u> (local labour director for the Département)</li> <li>– <u>serve a redundancy notice</u> on the employee by registered letter</li> </ul> <p>Supporting measures for redundancies</p> <ul style="list-style-type: none"> <li>▪ retraining contracts</li> <li>▪ early retirement/redundancy contracts for employees aged 57 or older</li> </ul> <p>Progressive early retirement</p> <ul style="list-style-type: none"> <li>▪ decreasing working hours for full-time employees aged 55 to 65 to half-time.</li> </ul>
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<b>Employee representation</b>	<p>There are four institutions providing employee representation:</p> <ol style="list-style-type: none"><li>1. Employee delegates<ul style="list-style-type: none"><li>– present claims relating to pay, jobs, working conditions and labour code compliance</li><li>– can call in labour inspectors</li><li>– liaise with the works committees and the occupational health and safety committees</li></ul></li><li>2. Works Committees must be consulted on working hours and organisation, training, redundancies, etc.</li><li>3. Shop stewards<ul style="list-style-type: none"><li>– may present all claims to the employer and not only pay claims</li><li>– are the only valid counterparties for employers in negotiating and concluding collective bargaining agreements</li></ul></li><li>4. Occupational Health and Safety Committees<ul style="list-style-type: none"><li>– Advisory and supervisory role</li><li>– Analyse occupational risks and working conditions</li></ul></li></ol>	
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<p><b>Collective bargaining</b></p>	<p>A collective bargaining agreement is an agreement reached between one or more unions representing employees and one or more employers' organisations (or one or more employers acting individually). These agreements cover all issues relating to working conditions, terms of employment and social protection for employees.</p> <ul style="list-style-type: none"> <li>➤ <b>Industry or Company Agreements</b> <ul style="list-style-type: none"> <li>– Agreements covering a whole industry (at national, regional or local level)</li> <li>– Agreements covering one company.</li> </ul> </li> </ul> <p>Industry-wide agreements must involve one or more employers' organisations, whereas company agreements can be signed by one or more employers acting individually.</p> <ul style="list-style-type: none"> <li>➤ <b>Collective bargaining agreements and accords</b> <p>The collective bargaining agreement (for an industry or a company) should cover all matters relating to working conditions and social benefits, whereas a collective bargaining accord only covers one aspect of these issues.</p> <ul style="list-style-type: none"> <li>➤ <b>Industry and interindustry accords</b> <ul style="list-style-type: none"> <li>▪ Industry and interindustry accords deal with a given issue, but concern either the employees working in a single industry or all employees in all industries, as their names indicate.</li> <li>▪ Negotiations within a company with the shop stewards can deal with all matters relating to the employees' status (working conditions and social benefits). The choice of negotiation issues is up to the employer and the shop stewards.</li> <li>▪ Negotiations are mandatory in all companies where one or more union shops have been constituted or, in other words, in companies where one or more shop stewards have been designated.</li> </ul> </li> </ul> </li> </ul>	<p>In the nineteen-sixties France's collective bargaining policy meant that real wages rose in direct correlation to productivity growth.</p> <p>In the nineteen-eighties, collective bargaining policy has had to cope with the following issues: improving business profits through moderate pay settlements while making sure to promote new jobs.</p> <p>The collective bargaining agreement policy should eventually replace the exchange rate as the main parameter used for adjustment within the European Union.</p> <p><b>Importance of collective bargaining in the current process to reduce working hours</b></p> <p>In France, changes in working hours result from legislation, unlike other European countries, where such changes stem from contract negotiations and collective bargaining agreements covering a whole country or a given industry.</p> <p>The Aubry Act on shortening the working week is designed to fit in with the various levels at which collective bargaining takes place and create a link between law-making and negotiations with both sides in industry, particularly employees' representatives. The mandate procedure makes it possible for a union that is representative at the national level to give a mandate to an employee in a company with no union shop stewards to negotiate and sign an agreement on reducing working hours.</p>
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<b>Shorter working hours</b>	<p>The daily working hours for adult employees (aged 18 or older) cannot exceed 10 (Labour Code, Article L-212-1) .  <b>Act 96-502 of 11 June 1996</b> to promote employment by shortening working hours by contract (Robien Act).          Implementing Decree: 14 August 1996</p>			<p>Objective: promoting experiments with shorter working hours to expand employment by offering employers lasting cuts in payroll taxes and contributions.          The reductions in the employers' contributions are 40% in the first year and 30% in the following years when collective working hours are reduced by 10% or more.          The reductions in employers' contributions are 50% in the first year and 40% in the following years when collective working hours are reduced by 15% or more.</p>	
	<p><b>Act 98-461 of 13 June 1998</b>, (1<sup>st</sup> Aubry Act), which repeals Act 96-502 of 11 June 1996. This Act provides guidance and incentives for shortening working hours. It transposes into French law Directive 93/104/EC concerning certain aspects of the organization of working time. The objective is to shorten the statutory working week to 35 hours by 1 January 2000 for companies with more than 20 employees and by 1 January 2002 for other companies. This Act introduced a 1<sup>st</sup> paragraph to article L-212-4 of the Labour Code that stipulates that effective working hours are "hours when the employees are at the employer's disposal and must follow the employer's instructions without being able to occupy themselves with their own personal business."</p>			<p>This Act institutes various measures to encourage employers to shorten working hours in their company prior to the legal deadline through collective bargaining.          Financial support may be paid to companies that have signed agreements meeting the following conditions:</p> <ul style="list-style-type: none"> <li>- a reduction in working hours of 10% or more, with new hiring equivalent to 6% or more of the workforce ("offensive" measures).</li> <li>- a reduction in working hours to prevent redundancies ("defensive" measures).</li> </ul> <p>This government support takes the form of reductions in the employers' social security contributions.</p>	
	<p><b>Act 2000-37 of 19 January 2000</b> came into force on 1 February 2000. It is called the 2<sup>nd</sup> Aubry Act on the 35-hour working week and it deals with negotiated reductions in working hours</p>			<p>The primary objective of the Act is to promote flexibility and thereby collective bargaining agreements. In this manner the Act promotes action by management and labour representatives.          The 2<sup>nd</sup> Aubry Act institutes its own support measures for companies that shorten their working week. This support comes in the form of a lasting reduction in social security contributions. To be eligible, companies must implement a collective bargaining agreement with a 35-hour working week or 1,600-hour working year, along with an undertaken to create new jobs or protect existing ones. This Act addresses all of the practical consequences and repercussions of the changeover to a statutory 35-hour working week and, in particular, the impact of this changeover on the calculation and payment of overtime.</p>	
<b>Incentives for small businesses that shorten working hours in 2001</b>				Reductions in employers' contributions on low and medium wages	
(amount per employee per year)				(amounts rounded up to the nearest French franc)	
	Amounts in French francs			Gross monthly salary	Monthly reductions
	1st year	2 <sup>nd</sup> to 5th years	6th and following years		
10% reduction	6,000	5,000	4,000	6,982	1,818
				7,560	1,550
				8,260	1,275
15% reduction	10,000	9,000	7,500	8,940	1,050
				9,620	856
				10,320	683
Supplement *	1,000	1,000	-	11,020	532
				11,700	403
* New hires under permanent contracts, hires of young people or people in difficulty				12 587	-

<b>Overtime</b>	<p>Overtime is hours effectively worked in excess of the statutory working hours.  Overtime limit: 130 hours per employee per year (Decree 2000-82 of 31 January 2000)</p> <p><b>Overtime between 35 and 39 hours</b>  – Companies concerned in 2000 and 2001: Only companies with more than 20 employees are concerned in 2000 and 2001. The statutory working week for these companies is 35 hours as of 1/1/2000.  – Time off in addition to overtime pay</p> <p style="padding-left: 20px;">a – Transitional rules: 10% extra pay. They apply pending implementation of the final rules:</p> <ul style="list-style-type: none"> <li>• from 1 February to 31 December 2000 for companies with a statutory 35-hour working week as of 1 January 2000 (more than 20 employees);</li> <li>• from 1 January to 31 December 2002 for companies with a statutory 35-hour working week as of 1 January 2002 (fewer than 20 employees).</li> </ul> <p>During the transitional period, employees shall receive 10% extra pay for the 35th to 39th hours worked per week (Act 2000-37 of 19 January 2000, Art. 5, IV and V)</p> <p style="padding-left: 20px;">b – Final rules: 25% extra pay. The final rules will come into force after the transitional period ends:</p> <ul style="list-style-type: none"> <li>• on 1 January 2001 for companies with a statutory 35-hour working week as of 1 January 2000 (more than 20 employees);</li> <li>• on 1 January 2003 for companies with a statutory 35-hour working week as of 1 January 2002 (fewer than 20 employees).</li> </ul> <p>The final rules will apply as of these dates: employees shall receive 25% extra pay for the 35th to 39th hours worked per week (Labour Code, Art. L-212-5, I)</p> <p><b>Overtime in excess of 39 hours</b></p> <p style="padding-left: 20px;">a– companies with a statutory 35-hour working week as of 2000  For overtime in excess of 39 hours per week:</p> <ul style="list-style-type: none"> <li>• 25% extra pay for the 40th to 43rd hours worked</li> <li>• 50% extra pay for the hours worked after the 43rd hour</li> </ul> <p style="padding-left: 20px;">b – former rules still apply for companies with a statutory 39-hour working week in 2000 and 2001:</p> <ul style="list-style-type: none"> <li>• 25% extra pay for the 40th to 47th hours worked</li> <li>• 50% extra pay for the hours worked after the 47th hour</li> </ul> <p><b>Statutory time off in addition to overtime pay</b>  Time off is calculated as a percentage of the overtime worked.  This time off is mandatory compensation that comes on top of overtime pay.</p>						
	<b>Annual overtime quota</b>		<b>Overtime pay</b>				
				36th to 39th hour	40th to 43rd hour	44th to 47th hour	48th hour and after
		130 hours after the 39th hour per week	2001	-	+25%	+25%	+50%
2003	130 hours after the 37th hour per week	2002	+10%	+25%	+50%	+50%	
2004	130 hours after the 35th hour per week	2003	+25%	+25%	+50%	+50%	

<p><b>Temp agencies</b></p>	<ul style="list-style-type: none"> <li>– 3 January 1972: first act regulating temporary work,</li> <li>– Licence required to open a temp agency,</li> <li>– Temp agencies limited by law to providing temporary employees (Act of 3 January 1972),</li> <li>– Ban on temporary work in certain industries,</li> <li>– Temp agencies required to constitute a guarantee fund (Act of 2 January 1979). The fund is designed to ensure payment of wages and social contributions if a temp agency fails. Payments to the fund made through accredited bodies,</li> <li>– Temp agencies required to provide customer companies with a certificate from social security bodies certifying the payment of contributions,</li> <li>– Secondment contract: business contract between the customer company and the temp agency, which is not to be confused with the assignment contract between the temp agency and the temporary employee,</li> <li>– Contract types: <ul style="list-style-type: none"> <li>• A written fixed-term contract is required, otherwise the contract is automatically deemed to be a permanent employment contract,</li> <li>• Limit on successive temporary employment contracts: the contracts can be renewed once, but the renewal can cover a longer term than the initial term,</li> <li>• Maximum term of temporary employment assignments: 18 months, including renewals, 24 months in certain cases,</li> </ul> </li> <li>– Use of temporary employees is limited to 9 cases, including absence of an employee, temporary increase in business, seasonal work, etc.</li> <li>– <b>Ban</b> on the use of temporary employees to replace striking employees.</li> </ul>	<p><b>Specific legal status of temporary employees</b></p> <p>Ordinance of 5 February 1982 (“Auroux Ordinance”) amending the Act of 1972. The new legislation aligns the temporary employees’ status on that of the customer company’s employees, thus ensuring:</p> <ul style="list-style-type: none"> <li>- equal pay,</li> <li>- access to employee facilities</li> </ul> <p><b>Requirements for temp agencies</b></p> <p>June 1992: the agreement on occupational training extended to temporary employees upholding their entitlement to training.</p>
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## FORMS OF HIRING IN FRANCE

	Term	
	Fixed-term	Open-ended
1. Full-time permanent contract (contrat à durée indéterminé (CDI)): the standard legal status for an employer/employee relationship		×
2. Fixed-term contract (contrat à durée déterminée (CDD)): designed to meet temporary manpower needs, must correspond to the completion of a specific and temporary task	×	
3. Temporary employment contract: Temporary employees can be hired under the same conditions as fixed-term contract employees. The employer uses a temp agency	×	
4. Part-time employment contracts: help make manpower management more flexible and help meet the aspirations of employees who want to balance their working life with their life away from work	×	×
5. Seasonal employment contracts: contracts that are signed to cover a season	×	
6. Training and retraining contracts: principle of alternating periods of work and study	×	
7. Intermittent employment contract (reintroduced by the 2 <sup>nd</sup> Aubry Act) for permanent jobs that by nature involve periods of work alternating with periods of no work.		×

Source: *Revue fiduciaire mensuelle*. Contrat de travail : le guide de l'employeur, 879, July - August 2000

## 3. MAIN CHARACTERISTICS OF THE SPANISH LABOUR MARKET

	<u>Legal aspects</u>			<u>Other aspects</u>
<b>Minimum age</b>	<ul style="list-style-type: none"> <li>Labour market entry is prohibited to youths under 16.</li> </ul>			<ul style="list-style-type: none"> <li>Youths under 18 shall not work either at night or in jobs declared by the Government to be unhealthy, laborious, harmful or hazardous to their health and their vocational training.</li> </ul>
<b>Minimum wage</b>		<b>EURO-PTAS/DAY</b>	<b>EURO-PTAS/MONTH</b>	<ul style="list-style-type: none"> <li>Established annually by the Government and applicable to any activity, irrespective of employee's sex and age.</li> <li>A certain amount of money is computed as payment in kind.</li> <li>It cannot be withheld.</li> </ul>
	<b>2000</b>	14.16€/ 2,356 ptas	424.8€/ 70,680 ptas	
	<b>2001</b>	14.45€/ 2,404 ptas	433.45€/72,120 ptas	
<b>Contract termination</b>	<p><b>Types of termination:</b></p> <p><u>Entrepreneur's wishes:</u></p> <ul style="list-style-type: none"> <li>Disciplinary dismissal</li> <li>Force majeure</li> <li>Objective reasons</li> <li>Death, retirement or entrepreneurial incapacity</li> <li>Annulment of entrepreneur's legal status</li> </ul> <p><u>Employee's wishes:</u></p> <ul style="list-style-type: none"> <li>Rejection without a justified reason</li> <li>Rejection with a justified reason</li> <li>Death, retirement or incapacity</li> </ul> <p><u>Joint wishes (temporary contract termination included)</u></p>			<p><b>Severance payment, according to kind of dismissal:</b></p> <ul style="list-style-type: none"> <li>It will be declared from a legal viewpoint as: <ol style="list-style-type: none"> <li>Fair dismissal: there is no entitlement to severance pay.</li> <li>Unfair dismissal: the worker must be reinstated or compensated with 45 days' wages per year with a maximum of 42 monthly payments.</li> <li>Null and void: immediate reinstatement of the employee.</li> </ol> </li> <li>Severance pay: 20 days' wages per year worked. Max. 12 months</li> <li>It will be declared from a legal viewpoint as fair, unfair or null and void.</li> <li>Severance pay: amount equivalent to one year's wages.</li> <li>Severance pay: 20 days' wages per year worked. Max. 12 months</li> <li>Employee must give prior notice.</li> <li>Severance pay: the amount corresponding to unfair dismissal.</li> <li>Severance pay of 15 days' wages in event of death.</li> <li>There is no entitlement to severance pay except in temporary contract termination. In that case, severance pay of 8 days per year worked.</li> </ul>
<b>Collective dismissal</b>	<p>Termination of work contract due to economic, technical, organisational or production reasons, when in a 90-day period this affects at least:</p> <ul style="list-style-type: none"> <li>10 employees in companies with fewer than 100 employees</li> <li>10% in companies with 100 or more and fewer than 300 employ.</li> <li>30 workers in companies with 300 or more employees</li> </ul>			<ul style="list-style-type: none"> <li>Admissible when it contributes to overcoming an adverse economic situation or ensuring the future viability of the company.</li> <li>The entrepreneur must request authorisation in accordance with labour force reduction proceedings.</li> <li>Severance pay: 20 days' wages per year worked. Max. 12 months</li> </ul>

<p><b>Collective Bargaining</b></p>	<p><u>Legal representatives:</u></p> <ul style="list-style-type: none"> <li>▪ Personnel representatives in companies with 10-15 employees</li> <li>▪ Works council in companies with over 50 employees.</li> </ul> <p><u>Basic Principles:</u></p> <ul style="list-style-type: none"> <li>- The <i>legitimacy</i> to bargain of unions and employers' organisations</li> <li>- <i>Statutory extensions</i> whereunder any collective agreement of a scope wider than company-level must be applied to all companies and to all employees of the same regional and sectoral field.</li> </ul> <ul style="list-style-type: none"> <li>▪ The <i>ultra-activity</i> or the indefinite temporal extension of the collective agreement provisions</li> </ul> <p><u>Collective agreement:</u></p> <ul style="list-style-type: none"> <li>▪ Agreement entered into between worker and entrepreneurial representatives, for the regulation of work conditions.</li> <li>▪ Types:                             <ol style="list-style-type: none"> <li>1. At company or lower level (in 1999, 11%)</li> <li>2. At higher-than-company level: geographical, functional or personal (in 1999, 89%)</li> </ol> </li> <li>▪ No turnout: during the time it is in force, the collective agreement shall not be subject to provisions made in agreements of a different scope unless this is otherwise agreed or provided for in a Framework Agreement.</li> <li>▪ Duration: unless otherwise agreed, they will run from year to year</li> <li>▪ Adhesion: legitimate counterparts can adhere to a collective agreement in force.</li> <li>▪ Extension: the labour authority can extend provisions of an agreement to a group of companies and workers in the event of absence of legitimate counterparts to do so.</li> </ul>		<p><u>Characteristics of collective bargaining in Spain:</u></p> <ul style="list-style-type: none"> <li>▪ Geographical centralisation and fragmentation: wide coverage of wage-earners due to statutory extensions. Rare use of opt-out clauses</li> <li>▪ Wage increases very uniform across branches of activity and linked to general price indices, due to nationwide nature of trade unions.</li> <li>▪ Rigidity of wage structures with great difficulty in individualising wage levels through variable supplements. This means that aggregate wages adjust with a great delay to the economy's cyclical phase, and employment is the first variable to be adjusted.</li> <li>▪ Counter-cyclical behaviour of wage drift in comparison with other countries where wage supplements are of greater importance, giving a pro-cyclical character to wage drift and to wage increases.</li> </ul>
	<p><b>Overtime</b></p>	<p>Types</p>	<ul style="list-style-type: none"> <li>▪ Voluntary</li> <li>▪ Compulsory: agreed in collective agreements, individual contracts, or under force majeure.</li> </ul>
<p>Compensation</p>		<ul style="list-style-type: none"> <li>▪ Pay: minimum as an ordinary hour</li> <li>▪ Compensate with paid holidays</li> </ul>	
<p>Limits</p>		<ul style="list-style-type: none"> <li>▪ Maximum of 80 hours per year</li> </ul>	
<p>Exceptions</p>		<ul style="list-style-type: none"> <li>▪ Part-time workers, except force majeure</li> <li>▪ Youths under 18</li> </ul>	

<p><b>Temporary Work Companies (ETT)</b></p>	<p><u>Requirements to perform this activity:</u></p> <ul style="list-style-type: none"> <li>▪ To have an organisational structure: at least 12 permanent contract workers per 1000 or fraction thereof.</li> <li>▪ To engage exclusively in activity proper to the ETT.</li> <li>▪ To have no tax or Social Security obligations pending.</li> <li>▪ To post a financial guarantee for compliance with wage and Social Security obligations.</li> </ul> <p><u>Types of contracts:</u></p> <ul style="list-style-type: none"> <li>▪ Employment contract between the ETT and the worker to render services in user companies: <ol style="list-style-type: none"> <li>1. Fixed-term</li> <li>2. Permanent: worker given "service order"</li> </ol> </li> <li>▪ "As required" contract: entered into between the ETT and the user company.</li> </ul>	<p><u>Worker rights:</u></p> <ul style="list-style-type: none"> <li>▪ Workers assigned to user companies are entitled to receive at least the total compensation established for the job according to the agreement applicable to the user company (Law 29/1999).</li> <li>▪ If the contract has been entered into for a fixed term, workers are entitled to a severance payment at the end of the contract equivalent to 12 days' wages per year of service.</li> </ul> <p><u>Obligations of ETTs:</u></p> <ul style="list-style-type: none"> <li>▪ ETTs are obliged to earmark 1% of the wage bill to worker training for assignment to the user companies.</li> </ul>
<p><b>Recent labour measures</b></p>	<ul style="list-style-type: none"> <li>▪ <u>May 1997. Labour Reform</u></li> <li>▪ <u>September 1997. Multi-year employment plan (in effect from 1997-2000)</u></li> <li>▪ <u>December 1997. Incentives for promoting permanent contracts</u></li> <li>▪ <u>September 1998</u></li> <li>▪ <u>November 1998. Reform of part-time hiring.</u></li> <li>▪ <u>December 1998. Incentives for promoting permanent contracts in 1999.</u></li> <li>▪ <u>December 1999. Incentives for promoting permanent contracts in 2000.</u></li> <li>▪ <u>March 2001. Labour reform</u></li> </ul>	<ul style="list-style-type: none"> <li>▪ Aim: to promote stability in employment.</li> <li>▪ Most important measure: new contract to promote permanent hiring</li> <li>▪ Aims: training for the unemployed and equality between men, women and the disabled.</li> <li>▪ Allowances on employers' Social Security contributions in permanent contracts to the unemployed facing difficulty entering the labour market.</li> <li>▪ 100% rebates on contracts with the unemployed to stand in for workers during maternity leave periods.</li> <li>▪ Promotion of part-time hiring (working day of less than 77% of what is considered habitual).</li> <li>▪ For the first time, an allowance is offered on part-time permanent contracts.</li> <li>▪ Special incentives for permanent hiring of women.</li> <li>▪ Modification of part-time contracts (working day less than habitual without a limit of 77%).</li> <li>▪ Severance payment for temporary contracts: 8 days per year.</li> <li>▪ Penalty on Social Security contributions (36% increase in common contingencies) in temporary contracts of less than 7 days.</li> <li>▪ 100% rebate on the Social Security contribution of the employee replaced during the maternity leave period.</li> </ul>

## FORMS OF HIRING IN SPAIN

TYPE OF CONTRACT	DURATION	
	Permanent	Temporary
1. Regular permanent contract	X	
2. For a specific task or service		X
3. Seasonal contracts due to production circumstances		X
4. Substitution contracts		X
5. Part-time		
1. Ordinary	X <sup>(1)</sup>	X <sup>(1)</sup>
2. Permanent discontinuous jobs	X	
3. Stand-in and partial early retirement		
1. Stand-in		X
2. Partial early retirement	X	
6. Outworker	X <sup>(1)</sup>	X <sup>(1)</sup>
7. Pooled and group work		
1. Pooled		Not counted as employee <sup>(2)</sup>
2. Group		Not counted as employee <sup>(3)</sup>
3. Support	X <sup>(1)</sup>	X <sup>(1)</sup>
8. Apprenticeship		X
9. Training		X
10. Permanent hiring-promoting contract	X	
11. Pre-retirement age	X <sup>(1)</sup>	X <sup>(1)</sup>
12. Disabled workers	X	
13. Employment of specific workers (only the disabled)		X <sup>(1)</sup>

(1) Depending on agreement, this may be permanent or fixed-term.

(2) Since the employees are already employed (whether permanently or not) by virtue of a different contract.

(3) Since the contract is entered into with a group of people, with no independent links with each person.



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ANNEX III

FINANCIAL LEASING IN FRANCE AND SPAIN

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## I. FINANCIAL LEASING IN FRANCE

A business seeking to invest must decide not only what type of equipment or building it wants to invest in, but also how it is going to finance the project, taking into account its financial constraints. If the firm lacks sufficient own funds, it will try to borrow. However, if it is already heavily indebted or if it wishes to make a large investment, the company will have to turn to a rental or leasing arrangement.

Among the numerous types of rental and leasing contracts available, business managers prefer finance leases and financial rentals. The finance lease (*crédit-bail*), a financing technique introduced in the United States around 1950, made its début in France in the early 1960s. A finance lease is a contract under whose terms the use of an asset is granted to a third party (the lessee) by its owner (the lessor) in return for rental payments of a specified amount spread over a given period. In France, finance leases are governed by the Act of 2 July 1966. The Act of 6 January 1986 extended the scope of equipment leasing.

The main advantage of a finance lease for a company is that it allows the firm to invest without having to make an initial outlay. Finance leases can be used to finance acquisitions of movables and property, but companies use them mainly for investing in capital goods.

They are more popular with small manufacturing firms than with bigger companies. They are widely used by small and medium-sized enterprises, which have to contend with major investment requirements and high capital costs, and do not always have adequate own funds. This type of financing allows businesses to keep in step with technological innovation while minimizing the financial risks of investment. The bigger the investment, the more often such arrangements are used.

Of all the industrial sectors, the publishing, printing and reproduction sector continues to make most use of this kind of financing.

Although finance leases are more expensive than bank loans, they have undeniable advantages. First, they are easily obtained and can be used to cover the entire outlay without the firm having to contribute any of its own funds. Second, they preserve the company's ability to borrow, since the leased asset does not appear on the balance sheet until the purchase option is exercised. In addition, they may be subject to advantageous tax treatment, as the rental cost is recorded as a deductible expense from taxable profit. All this makes it easier for companies to renew their plant and equipment.

*Finance leasing (crédit-bail)* is a technique used by businesses for financing movable and property investments. It consists of a lease with a unilateral sale option in favour of the lessee. The lessee has three options: he can return the asset, renew the rental agreement or exercise the purchase option, paying the residual value of the asset stipulated in the contract. The choice of the equipment or building is incumbent upon the lessee. The lessor delegates authority to the lessee to purchase the asset; further, the lessee is responsible for supervising the asset's installation and for guaranteeing compliance with specifications. The lessor performs a solely financial function. The lessee undertakes to meet the rental payments. Failure to do so will result in cancellation of the lease and application of the penalty clause contained in the agreement. The lease always provides for an irrevocable period during which the asset is to be used: for movables, it is usually three to seven years; for property, 15 to 20 years.

Finance leases differ from operating leases, which do not include a promise to sell, and from hire purchase contracts, which come with reciprocal sale and purchase agreements. They are also different from instalment credit agreements, where ownership is transferred immediately.

*The asset-backed finance lease (crédit-bail adossé)* is a specific kind of finance lease.

Some companies manufacture or market capital goods that their customers prefer to rent rather than purchase, for instance equipment using advanced, upgradeable technology, such as IT hardware or public works machinery. A sizeable amount of capital is required for this, and rental payments are not enough to allow the manufacturer to recoup the costs of production sufficiently quickly. One solution is for the manufacturer to sell the equipment to a finance company, which rents the equipment back to the manufacturer under a finance lease agreement. The manufacturer then rents out the equipment to its own customers.

*The leaseback (cession-bail)* is a type of finance lease typically used for property. It enables a company to sell one or more properties (e.g. head office, factory, etc.) to a leasing company, which immediately rents the property back to the company under a property leasing agreement. A property leaseback allows the company to obtain the proceeds from the sale of the building while retaining the use of the building, safe in the knowledge that it will regain ownership according to the terms of the lease. This type of arrangement has major ramifications for the company's financial structure and cash position:

- it improves the firm's working capital by reducing its fixed assets;
- it improves the firm's cash position;
- it increases its off-balance sheet commitments;
- the sale generates a return, usually a capital gain, which can be recorded under taxable earnings either over several years or in a single entry.

*Financial rental (location financière)* is a financing technique used for movable investments. It is a rental agreement with an irrevocable duration. These two features distinguish it from an operating lease. Furthermore, the agreement includes no unilateral sale option in favour of the lessee, nor any indication of the residual value, which differentiate it from a finance lease. The lessee has three options: he can return the asset, renew the rental agreement or negotiate a price with the lessor in order to acquire the asset. The choice of the equipment is incumbent upon the lessee. The lessor delegates authority to the lessee to buy the equipment. And it is the lessee who must maintain and carry out repairs on the rented equipment. The lessor performs

a solely financial function. Unlike in the case of finance leases, the duration of the agreement can be very different from the duration of the asset's economic life. Generally, such agreements run somewhere between six months and five years, but they can last up to ten years. Consequently, the asset's residual value may be significant. From an accounting perspective, these arrangements do not even appear as off-balance sheet commitments, because they are merely rental agreements.

*Long-term rental* agreements are essentially used in vehicle rental. This type of agreement does not include a purchase option.

The term "*financial leasing*" (*location financement*) encompasses all *financial rental* and *finance lease* arrangements. A lease is classified as a finance lease if it transfers to the lessee substantially all the risks and rewards incident to ownership of a given asset in return for rental payments. In principle, a contract of this type cannot be cancelled and ensures that the lessor will recoup the capital invested plus interest.

### **1.1. The accounting treatment of leasing in France**

Owing to the fact that the Fourth EC Directive does not provide any rule for the disclosure of leased assets, the requirements for the disclosure of leasing are not harmonized in the European Union.

In general, it can be stated that under French law the juridical ownership principle forms the basis of disclosure in individual accounts whereas an economic approach can be adopted in consolidated accounts. French financial statements disclose finance-leased assets within the balance sheet of the lessor and not the lessee until a purchase option is exercised.

Under these conditions, the accounting of leasing in individual accounts is not the same in France and in Spain.

In this study, to comply with the French accounting principles, leased assets are not included in the total balance sheet on the assets side and lease commitments are not included in the balance sheet on the liabilities side

However supplementary information provided by members of the Central Balance Sheet Office makes it possible to evaluate the weight of financial leasing and improve the quality of comparisons made between companies.

Therefore extra information is given:

- On the one hand the weight of leased assets can be appreciated by the ratio " net leased assets/total balance sheet ".
- On the other hand the weight of lease commitments has been measured by comparing its amount to the total financial debt.

### **1.2. Restatements used in the French Balance Sheet Data Office analysis**

The ownership concept applied to balance sheets under the French accounting code means that leased assets may not be recorded as an asset and lease commitments may not be

entered as a liability. Consequently, the balance sheets of companies that lease assets are more “streamlined” than those of companies that borrow in order to purchase assets outright.

In order to obtain more meaningful comparisons of the performance of companies, financial leasing is subject to restatement in order to analyse more carefully investment and financial debt.

IAS Standard 17 proposes restating by distinguishing between acquisitions and financing, and booking them separately. This would require monitoring each contract separately. The Central Balance Sheet Office has put in place a simplified restating mechanism:

- it restates all the equipment leases and then the property leases, rather than considering each contract separately,
- the loan amount repaid at the end of each financial year is considered to be identical to the depreciated value of the asset,
- the rate of depreciation follows the pattern of rental payments recorded as charges,
- earnings are adjusted for interest, which is calculated as the sum of all rental payments minus depreciation charges.

The *functional analysis plan* used by the Central Balance Sheet Office includes fixed assets acquired under finance leases. This makes it possible to refine the different levels of earnings and get a more accurate idea of real flows. The approach consists in considering fixed assets acquired under finance leases as having been acquired and financed by a loan that has to be repaid over the duration of the contract.

*The main restatements are as follows:*

*The annual finance lease charge is split into two parts:*

- the first corresponds to an estimate of the depreciation charges that the company would have paid if it had acquired the fixed assets instead of entering into a finance lease agreement;
- the second part corresponds to the interest expense of the imputed loan.

*When the finance lease is entered into, this leads to:*

- an increase in *productive investment*, by the amount of the value of the assets appearing in the contract;
- on the assets side, the tangible assets (*plants and machinery*) are increased by the value of the fixed assets in the finance lease contract.
- on the liabilities side, financial debt (bank loans) are increased by the same amount.

*During the term of the lease:*

*The bank loan decreases at the same pace as the repayments estimated according to the share in capital of the finance lease payments.*

## 2. FINANCIAL LEASING IN SPAIN

Spanish companies, same as French companies, use leasing techniques to invest and to finance their investment projects. All the kinds of leasing that have been enumerated in the previous section for France exist in Spain, and the juridical approach is also the same. The differences between the two countries are referred to the different ways to account the leasing, following the rules established in each National Accounting Plan.

### 2.1. The accounting treatment of leasing in Spain

The Spanish General Accounting Plan, conferred by RD 1643/1990 establishes in its valuation rules a specific reference in relation with leasing accounting.

“When due to the economic conditions of a financial leasing there are no reasonable doubts that the purchase option will be carried out, the tenant should register the operation in the following terms.

The rights derived of financial leasing contracts referred in the above paragraph, should enter in the accounts as intangible assets by its cash price, we have to register in the debit side the entire debts, finance lease payments plus purchase option value. The difference between both prices, the financial expenses of the transaction, has to be registered as expenses to be distributed in several years. The rights registered as intangible assets have to be amortized, whenever necessary, attending to the lifetime of the asset. When the asset is purchased, the value of the rights registered and its correlative accumulated amortization will be cancelled and this amount will be transferred to tangible assets. Expenses to be distributed in several years should be attributed to results according to a financial criterion.

In the case of lease back, when the economic conditions of a sale, related to the financial leasing of sole assets, show out that this is a way of financing, the tenant has to register the transaction in the following way. He has to cancel the asset with its net value and has to recognize the intangible asset with the same value. He also has to register in the liabilities the financial lease payments plus purchase option value; the difference between the debt and the received finance should be registered as expenditures to be distributed in several years”.

To sum up, the Spanish General Accounting Plan, establishes that the financial leasing has to be registered as intangible assets if the asset is going to be bought through the purchase option. On the contrary, the French General Accounting Plan does not contemplate the activation of the leased asset.



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ANNEX IV

FINANCIAL SYSTEMS IN FRANCE AND SPAIN

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## **I. INTRODUCTION**

The analysis of the French and Spanish industrial companies made in chapter III, must be complemented with the analysis of the financial system framework of the two countries, to contribute to the explanations of some patterns of the financial structure of the companies.

This annex reviews the main aspects of the financial markets of the two countries and try to reply to the following questions:

1. What financing sources can companies find in the primary market? More specifically, what types of financing do financial intermediaries offer to companies? And what securities may companies issue and what is the issuance procedure they must follow?
2. Which are the official secondary markets and what do they require of companies wishing to have their securities traded on them?

Knowledge of the general conditions of access to these sources of financing is relevant insofar as the requirements established (their greater or lesser complexity) may explain (greater or lesser, respectively) resort to the sources analysed.

## **2. FRENCH FINANCIAL SYSTEM**

### **2.1. Introduction**

The banking system plays a predominant role in financing the country's economy by extending loans to corporations. However especially in France, the amounts of loans extended to companies were moderate during the nineties.

Direct financing on financial markets has been gradually competing with credit extended by banks. The transformations of the banking and financial system have had consequences on the activity of banks and have sparked off new forms of intermediation. Financial intermediation has gradually developed.

### **2.2. French banking system**

Banks provide funding resources, collect savings and are major participants in the clearing system and offer their customers means of payment. The traditional function of a bank has

TABLE 1

**MARKET SHARE OF CREDIT INSTITUTIONS BY LEGAL CATEGORY. 1999**

(as a %)

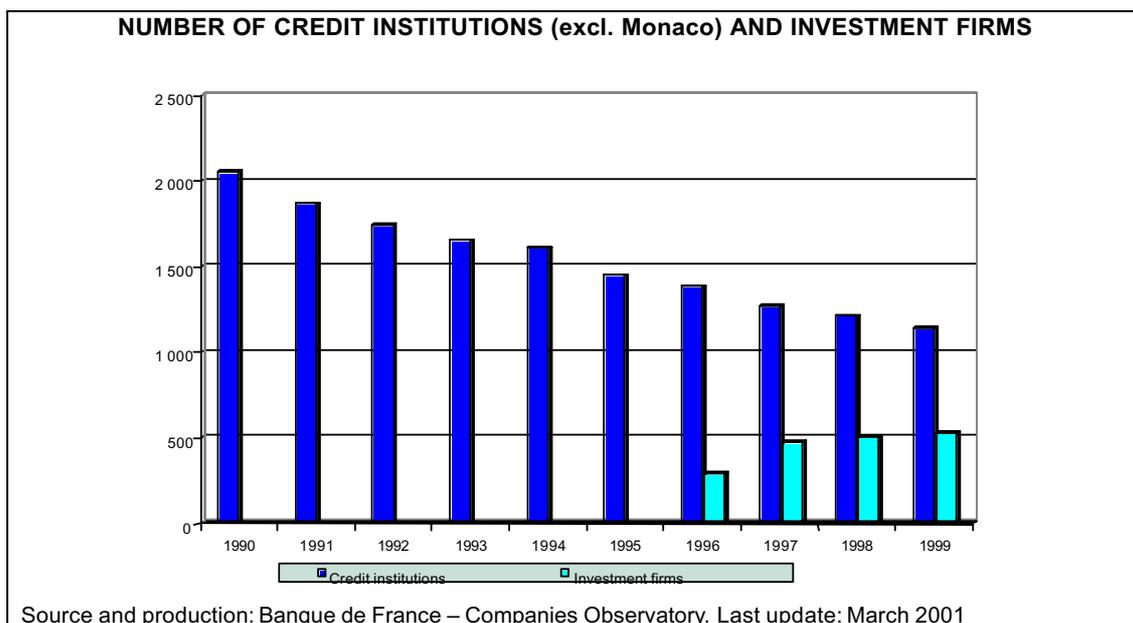
	Number	Deposits	Loans
Banks belonging to the French Bankers' Association	366	38.9	44.3
Mutual and co-operative banks	121	39.8	29.5
Savings banks	31	19.8	7.6
Municipal credit banks	22	0.1	0.1
Financial corporations	605	1.3	11.4
Specialised financial institutions	24	0.1	7.1
<b>TOTAL</b>	<b>1,172</b>	<b>100.0</b>	<b>100.0</b>

Source: Banque de France

been to channel funds available from economic agents with savings (especially households) who want to invest and provide other economic agents with borrowing needs (especially corporations) with long-term funding to finance economic growth. France's banking system played the preponderant role in financing the country's economy up until the middle of the nineteen-eighties.

The French banking system is made up of a diverse range of institutions. The Banking Act defines six legal categories of credit institutions. Between 1987 and 1999, the total number of institutions authorised to carry out banking operations dropped by 45.5% from 2,152 to 1,172.

Since the start of the 1990s, the number of credit institutions has declined by approximately 910 (excl. institutions registered in Monaco). This fall concerned savings banks and financial corporations especially, as well as to a lesser extent banks belonging to the French Bankers' Association and mutual and co-operative banks. It was also due to the application of the 1996 Financial Activity Modernisation Act, which resulted, in particular, in the closure of securities houses. Note that the same Act led to the development of investment firms, the number of which rose from 290 at the end of 1996 to 528 at the end of 1999.



### 2.2.1. *Banks belonging to the French Bankers' Association or commercial banks*

In 1999, there were 366 such banks, which constitute France' oldest and biggest network. Banks belonging to the French Bankers' Association or commercial banks are authorised to carry out all types of banking operations. They can be split into four very distinct groups:

- The "large banks", which have recently been involved in a spate of merger activity. They include BNP, Crédit Lyonnais and Société Générale, Crédit du Nord and Crédit Industriel et Commercial (CIC), all of which have a strong foothold in the regions. Also in this group are Crédit Commercial de France and Paribas, which are mainly oriented towards the corporate market. Since 1996, Société Générale has taken over Crédit du Nord, which was previously controlled by Paribas, Crédit Mutuel acquired CIC in 1998, and BNP took control of Paribas in 1999.
- Trading banks, of which there are around 20. These are credit institutions which have been authorised to provide investment services.
- Regional and local banks. Their number stands at around 50 but it is declining.
- Foreign banks, whose number, by contrast, increased from 120 in 1980 to 181 in 1999. This highlights the increasingly international nature of the Paris financial centre.

In 1999, these four groups together took 38.9% of deposits and issued 44.3% of loans.

### 2.2.2. *Mutual and co-operative banks*

In 1999, there were 121 mutual and co-operative banks. They took 39.8% of deposits and issued 29.5% of loans. This category is the one that has flourished the most in recent years. These banks are not controlled by shareholders but by their members. Their activity is very similar to that of commercial banks. They operate on the basis of decentralised structures and are divided into four networks: Crédit Agricole, Banques Populaires, Crédit Mutuel and Crédit Coopératif. They now include savings banks and provident institutions, which previously had a specific legal form.

### 2.2.3. *Savings banks*

There are currently 34 savings banks in France. Up until the Act of 25 June 1999, savings banks were non-profit institutions authorised to receive deposits and grant loans. They were controlled by the State through the Caisse des Dépôts et Consignations.

The aim of the above-mentioned Act was to adapt the savings banks network, which is the second-biggest French banking group in terms of savings deposits, to the context of increased globalisation and competition. This adjustment was all the more necessary as savings banks have a strong regional and local foothold and are well established on the market for the financing of individuals and local authorities. In 1999, the savings bank network acquired 90% of the capital of Crédit Foncier de France.

The new Act introduced a substantial change to the form of savings and provident institutions, which now have the legal form of a co-operative and come under the authority of a new strengthened central body (Caisse Nationale des Caisses d'Épargne et de Prévoyance). The

adoption of a co-operative status was designed to reinforce the network's place in the local community and to strengthen the relationship between member and institution.

In 1999, savings banks received 19.8% of deposits and issued 7.6% of loans.

#### 2.2.4. *Financial corporations*

There are 605 such institutions. Alongside institutions which receive deposits from the public, a number of other corporations are classified as banks under the Act of 1984. These include corporations specialised in a particular activity, such as car loans, business equipment leasing, property loans, etc. Most financial corporations are subsidiaries of banking groups, but they can also be subsidiaries of commercial or industrial groups, such as DIAC, a subsidiary of Renault. Financial corporations also include the investment firms set up in response to the changes affecting the securities industry.

In 1999, financial corporations received 1.3% of deposits and issued 11.4% of loans.

#### 2.2.5. *Specialised financial institutions*

There are 24 such institutions. Originally, specialised financial institutions were public institutions set up to grant subsidised loans to specific sectors and to SMEs. They included Crédit Local de France, Crédit National, Crédit Foncier de France, Crédit d'Équipement des PME, as well as regional development agencies.

Most of these institutions were adversely affected by deregulation and by the fact that the State dropped its traditional policies of granting subsidised loans. Specialised financial institutions have been involved in widespread restructuring operations. The biggest of these took place in 1996, when CEPME and Sofaris merged to form Banque des PME, while Crédit National and Banque Française du Commerce Extérieur joined forces, creating the Natexis group. Crédit Local de France now belongs to the Dexia group.

#### 2.2.6. *Municipal credit banks*

In addition to the five above-mentioned categories of credit institutions, the Banking Act defined a sixth group: municipal credit banks. This category is smaller than the other five: it comprises just 22 institutions and in 1999 received 0.1% of deposits and granted 0.1% of loans.

Finally, a description of the banking system would not be complete without mention of the Post Office group, whose financial services play an important role.

### 2.3. **The capital market**

The capital market helps to channel available capital into economically useful activities in the public and private sectors at the lowest possible cost. The market plays a regulating role in the distribution of resources.

Equity issues, along with cash flows, are essential sources of financial equilibrium for businesses.

### 2.3.1. The various functions of the capital market

*The capital market is a channel for financing the national economy:* the market attracts a portion of saving and channels it into financing for the real economy. It collects capital from economic agents with savings (households mainly) and provides businesses and government agencies with long-term funding. It helps to finance business growth. The capital market helps to finance business investment. The capital raised through the capital market provides long-term financing in addition to financing derived from retained earnings.

The market provides a short conduit between savers looking to invest their capital and investors who need capital.

*The capital market helps keep investments liquid:* stock market mechanisms adjust the supply and demand of securities, thus helping to promote their liquidity. Unlike other types of investments, in real assets, for example, capital market investments can be realised at any time.

For a market for a security to be liquid, buyers and sellers must be able to find counterparties for their transactions. This is only possible when the market for a security is deep enough, meaning that a large number of securities are in circulation and available to the public, and when the number of daily trades in the security is large enough.

*The capital market is an instrument for measuring equity values:* by quoting prices for a given share, the capital market helps to assess the value of a business. In fact, the banking system, business leaders and tax authorities all recognise share prices, along with other methods, such as financial analysis, as valid indicators of value.

*The capital market promotes change in industry and business structures:* the capital market facilitates business mergers by enabling companies to use their own shares to pay for acquisitions.

The capital market is where securities representing ownership rights (equities) or a debt (bonds) are traded. Equities give their holders voting rights and entitle them to a share of the company's profits in the form of a dividend, whereas bonds pay their holders interest. These distinctions have become increasingly blurred with the emergence of more sophisticated securities, such as convertible bonds, non-voting loan stock, investment certificates and non-voting preferred shares.

The Act of 3 January 1983 gave corporations the right to issue "compound" securities relying on foreign exchange and conversion techniques. Mounting globalisation in the early nineteen-eighties led European operators to emulate the techniques used in the United States.

The Financial Activity Modernisation Act 96.597 of 2 July 1996 was passed to transpose the European Investment Services Directive of 10 May 1993 into French law. The first article of the Act defines a new concept called financial instruments. There are four categories of such instruments:

- shares and other securities that afford or may afford access to equity,
- debt securities other than trade bills (*effets de commerce*) and cash vouchers (*bons de caisse*),
- Units or shares in collective investment undertakings (SICAV, FCP, FCC, SCPI),

TABLE 2

## PROPORTION OF SECURITIES ISSUES IN INVESTMENT FINANCING

Year	Gross securities issuance (in EUR billions)	Investment (in EUR billions)	Issues / Investment (in %)
1992	93.6	229.56	40.8
1993	118.6	214.62	55.3
1994	102.3	217.93	47.0
1995	96.3	222.10	43.4
1996	116.1	222.06	52.3
1997	116.3	222.04	52.4
1998	123.4	237.97	51.9
1999	118.8	253.03	47.0
2000	161.2	269.21	60.0

Sources: OECD and Euronext

- Financial futures (forward contracts on bills, securities, indices and currencies, interest rate futures, swaps, commodity futures and forwards, put and call options on financial instruments).

The capital market encompasses the primary market, where new offerings are distributed, and the secondary market, or stock exchange, where existing issues are traded. The purpose of the primary market is to attract long-term capital to finance the economy. Issues of securities that increase the equity capital of companies are the preferred way for businesses to acquire the external resources that they need to finance their investment.

The gross issuance amount of equities and bonds accounted for an average of 50% of all investment in the period from 1992 to 2000.

On average, issues of equities and bonds account for more than half of the external sources of funds for manufacturing and trading companies. Equities account for only some 20% of investment financing. Manufacturing and trading companies are the second largest beneficiaries of the capital market, behind government agencies and in front of financial institutions. Manufacturing and trading companies raise capital through:

- equity issues,
- bonds issued either directly or through specialised financing bodies.

The table below shows a large increase in issuance in 2000 owing to the big jump in equities issues, which reached EUR 66.8 billion, and a substantial increase in bond issuance, which rose by 35% to reach EUR 49 billion. Corporate bonds accounted for a growing share of issuance, where as government issuance remained steady at EUR 45.4 billion.

An active primary market requires an efficient *secondary market*, where existing issues are traded. Thus, the stock market ensures the liquidity of what are in principle long-term investments.

*The stock market is the market for negotiable securities.* The purpose of the stock market is to bring supply and demand together so that saving invested in securities remains liquid at all times and so that investors can exchange securities for other securities as part of their portfolio management strategy.

TABLE 3

## SECURITIES ISSUES (IN EUR BILLIONS)

Year	Govt. bonds	Other bonds	Equities	Total
1992	30.9	24.9	37.7	93.6
1993	58.8	23.2	36.6	118.6
1994	39.9	21.6	40.8	102.3
1995	40.2	16.4	39.7	96.3
1996	45.9	26.5	43.7	116.1
1997	51.2	20.5	44.7	116.3
1998	52.4	22.0	49.0	123.4
1999	45.4	36.4	37.0	118.8
2000	45.4	49.0	66.8	161.2

Source: Euronext

The stock market helps to distribute corporate capital to the public in the form of shares using two procedures:

- initial public offerings,
- rights issues.

In the case of an initial public offering, the main shareholders of a limited liability company or a limited stock partnership put some of their shares on the market for sale to the public.

Once a company's shares are traded on the market, it can increase the number of its shareholders through capital increases involving the sale of shares for cash.

*The stock market facilitates restructuring.*

Businesses' production structures change frequently through mergers and acquisitions. These operations can be financed by issuing securities and they are easier to carry out when the shares of the companies concerned are already traded on the stock market. The shareholders in the acquired company can be paid in shares or bonds issued by the acquiring company.

In the case of acquisition of a minority interest or a controlling interest, the acquiring company can make a bid offering its own shares in exchange for the acquired company's shares.

TABLE 4

## TRADING (IN EUR BILLIONS)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Equities	101.0	150.5	171.1	160.5	221.1	371.1	527.2	733.4	1,176.2
Bonds	659.3	1,101.3	1,042.9	858.6	988.3	775.8	405.0	61.5	50.4
Total (1)	760.3	1,251.8	1,214.0	1,019.1	1,209.4	1,147.0	932.2	794.9	1,225.9

Source: Euronext

(a) All markets covered by the Paris Bourse

Between 1992 and 1996, publicly traded companies engaged in:

- 584 capital increases involving sales of shares for cash,
- 205 share exchange offers,
- 499 takeover bids,
- 111 initial public offerings.

Prices and market capitalisation measure the market value of the equities and bonds traded on the stock market. This ongoing valuation makes the stock market a valuable indicator for observing the economy.

### 2.3.2. *How the capital market works*

Starting in 1986, traditional open-outcry trading was phased out and replaced by a screen-trading system. As a result, the trading floors in Paris, Bordeaux, Lille, Lyons, Marseilles, Nancy and Nantes were shut down.

There are different market compartments.

#### 2.3.2.1. REGULATED MARKETS

The *Premier Marché* (formerly called the “Cote officielle”), the *Second Marché* and the *Nouveau Marché*.

The listing rules for the *Premier Marché* are much stricter than the rules in the other markets. The *Premier Marché* lists the largest French and foreign companies as well as nearly all government and corporate bond issues.

Fewer than 500 French companies are listed on the *Premier Marché*, but the average market capitalisation has increased substantially owing to privatisation and rising share prices.

The value of trading in *Premier Marché* shares and, more particularly, bonds accounts for 90% of the value of trading in all markets. This, along with the size of the listed companies, testifies to the dynamic activity of the *Premier Marché*.

The *Second Marché* opened in February 1983. It was designed to attract medium sized companies by offering more flexible rules, particularly with regard to the proportion of shares offered to the public. Some large companies are listed on the *Second Marché*, as a first step towards being listed on the *Premier Marché*.

The *Nouveau Marché* opened in February 1996. It was designed for rapidly growing European companies with expansion plans that would like to raise equity financing to speed up their expansion and to obtain stable financing.

The *Nouveau Marché* is not restricted to high-technology firms. Any company, even one that has yet to show a profit, can be listed on this market, if it meets the listing crite-

## SCHEME 1

## LISTING REQUIREMENTS AND PROCEDURES

Criteria	Premier Marché	Second Marché	Nouveau Marché	Marché Libre
	Regulated market	Regulated market	Regulated market	OTC market (formerly "hors cote")
Preferred minimum market capitalisation	EUR 100 m float of EUR 10 m for companies listed on foreign markets	EUR 20 to 30 m	EUR 10 to 15 m	No minimum
Minimum percentage of shares to be offered to public	25% of share capital or 600,000 shares	10% of share capital	100,000 shares worth EUR 5 m, 20% of share capital, including at least half in the form of a capital increase	No restrictions
Other listing requirements	<ul style="list-style-type: none"> <li>. 3-year track record</li> <li>. consolidated financial statements</li> <li>. audited financial statements (interim statements iffy ended more than 9 months ago)</li> <li>. prospectus approved by the COB</li> </ul>	<ul style="list-style-type: none"> <li>. 2-year track record</li> <li>. consolidated financial statements</li> <li>. audited financial statements (interim statements iffy ended more than 9 months ago)</li> <li>. prospectus approved by the COB</li> </ul>	<ul style="list-style-type: none"> <li>. No track record</li> <li>. capital &gt; EUR 1.5 m</li> <li>. founding shareholders' commitment to hold 80% to 100% of their shares for 1 year or 6 months</li> <li>. prospectus approved by the COB with a business development plan</li> </ul>	Publication of a simplified prospectus prior to the start of trading
Usual cost	At least EUR 1 m, varies for direct listings, transfers of Second Marché and foreign market listings, etc.	EUR 200,000 to EUR 300,000 depending on preparation and underwriting costs	7% to 10% of the amount raised	Costs low, except for communication expenses
Choices regarding advertising budgets, road shows and prospectuses largely determine listing costs.				
Market liquidity	In principle, the most liquid market, especially in the case of shares settled on a monthly basis	financial intermediaries ensure market liquidity when required (liquidity and market making contracts)	listing adviser/market maker ensures liquidity: extra shares must be provided to market makers (permanent market making)	This market is usually very narrow
Advantages	<ul style="list-style-type: none"> <li>. easier to place issues with major investors (regulation + liquidity)</li> <li>. bearer certificates</li> <li>. eligible for tax sheltered long-term savings products</li> <li>. change in conversion ratio for convertible bond issues, etc.</li> </ul>		same as on other regulated markets + eligibility as "unlisted" investment for venture capital companies and funds (no restrictions)	
Shareholder information	1) publication of: <ul style="list-style-type: none"> <li>. annual financial statements(consolidated as appropriate) + subsidiaries' financials</li> <li>. interim report and financials</li> <li>. quarterly revenue statements</li> </ul>	same, except for subsidiaries' financials, which should be available same	Same as Second Marché + plus forecasts + market maker's financial analysis mandatory prospectus	Requirements relating to public offerings
2) Corporate actions 3) Permanent disclosure require.	2) publication in BALO (shareholders' meetings; financial operations) 3) notification of SBF of any material change in ownership public disclosure of any event in the company's business that is likely to cause a change in share prices			

COB Commission des Opérations de Bourse (market regulator)

BALO *Bulletin des annonces légales obligatoires*

SBF Former name: *Société des bourses françaises*, the company's new name is Paris Bourse<sup>SBF</sup> SA

ria. Applicants do not need to have a track record of three profitable years, as is the case for the Second Marché. Unlike a listing on the Premier Marché or Second Marché, an IPO on the Nouveau Marché automatically means that the company being listed is increasing its capital.

### 2.3.2.2. UNREGULATED MARKETS

#### **Marché Libre**

The Marché Libre opened on 23 September 1996. The abbreviation OTC was dropped for this unregulated market. It replaced the “Hors Cote” compartment, which was abolished under the Financial Activity Modernisation Act of 2 July 1996.

The Marché Libre is a means of disseminating buy and sell orders and a trading facility for securities issued by companies that are not listed on regulated markets in France. In this market compartment, there are no listing procedures and issuers are not bound by any disclosure requirements.

Orders are matched once a day at 3.00 pm. The Marché Libre is a cash-settlement market. The Paris-Bourse systems handle trades, payments, deliveries and data dissemination.

The main features of this market are the lack of investor protection and the relatively small size of the companies traded.

#### **Delisted Securities**

This compartment is where securities that have been removed from the regulated markets are traded. Such securities are withdrawn from this compartment within six months of delisting and can no longer be traded.

#### **Derivatives Markets**

The first derivatives markets opened in 1986 to enable operators to hedge against various risks, such as exchange rate risk or interest rate risk. More and more long-term lending is indexed on money market rates, which has increased interest rate risk exposure and made interest rates more volatile. Market participants are also concerned about price risk exposure on variable income securities, meaning the risk of making a capital loss on their equities portfolios.

Two types of products are traded on organised derivatives markets:

- futures
- traded options

Futures and futures options are the main financial instruments traded on France’s financial futures markets, Matif, (formerly, *Marché à terme d’instruments financiers*, and now called *Marché à terme international de France*).

A *futures contract* is an agreement on a particular price and a stipulated date under which,

- the buyer takes delivery and pays for a specific amount of the underlying product;
- the seller delivers and receives payment for a specified amount of the underlying product.

Some contracts can be settled with cash payment of the difference between the traded price and the settlement price.

Three categories of products are traded on the MATIF:

1. Interest rate futures for hedging, arbitraging or speculation transactions on long-term, medium-term and short-term interest rates;
2. Stock index futures for hedging equities portfolios or speculating on the future trend in French equities prices, futures contracts on the CAC 40 stock market index;
3. Commodities futures on sugar, coffee, cacao and potatoes.

The key to MATIF's success lies in the enormous popularity of the Notional Future and its offshoot, the Option on the Notional Future. This popularity boosted the MATIF, making it the third largest interest rate futures market in the world in 1988. The Notional, which became the Euro Notional on 4 January 1999, accounted for half of the contracts traded on the MATIF for a very long time.

The other futures traded on the MATIF include the 3-month PIBOR future and the 3-month EURODEM future.

*Traded Options:* Options give their buyers the right (but not the obligation) to buy (call options) or sell (put options) a specified amount of an asset at a price stipulated from the outset before a particular date. The distinctive characteristic of traded options, compared to OTC options, is that there is an organised market where option buyers can resell their options and option writers can buy back their options.

Option contracts are traded on the Monep or Matif markets. These contracts can take different forms depending on the risks being hedged:

- The *Marché des Options Négociables de Paris (MONEP)* lists equity options and CAC 40 index options. These contracts are intended for speculation, arbitraging and hedging with regard to equities portfolios.
- The MATIF lists traded option contracts on the Notional Future in French francs, the 3-month PIBOR future and the 3-month EURODEM future, as well as currency options.

*Equity Options (1):* the *Marché des Options Négociables de Paris (MONEP)* mainly lists call and put options on equities. The stocks chosen as the underlying assets for traded options have to meet certain criteria relating to the size of the floating supply of shares and how representative the stock is of its economic sector. An option contract relates to a set number of shares of the underlying stock and the buyer can exercise the option at any time up until the last trading day before the option expires. The expiry dates fall every three months and option contracts can cover three, six, or nine months.

A call option buyer can decide to buy the underlying shares at any time and the option writer must deliver them at the agreed-upon price (exercise price). A put option buyer can de-

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(1) Société des Bourses Françaises decided to close the market for plain options, options to double and premia in May 1989. These markets had been deserted after the Monep opened in June 1987.

side to sell the underlying shares to the option writer, who must take delivery and pay the agreed-upon price. In both cases, the decision is up to the option buyer. The option buyer pays a premium for this right when buying the option from the writer. The option prices quoted on the market represent the cost of an option for a single underlying share. The premium is equal to this price multiplied by the number of shares.

*Index Options:* A market for trading in options on the CAC 40 index opened in 1988. This type of option, which is not based on a deliverable underlying asset, is very popular in other countries, because index option markets are more liquid, less complex to operate and less costly than equity option markets. Investors can use index option markets to profit from rises and falls in the whole Paris market on the basis of a single trade and without being exposed to risks on specific stocks.

*Interest Rate Options:* the features of options contracts on the 3-month Pibor and the 3-month Eurodem traded on the Matif are similar to the features of the equity option contracts explained above. There are call options and put options, the buyer pays the writer the full premium immediately and option traders must maintain margin deposits that are adjusted for the size of their positions.

*Currency Options:* large corporations use currency options to manage their exchange rate risk. The Matif introduced its first two currency option contracts in May 1994. These were the \$/DEM and the \$/FRF contracts. The underlying asset for both contracts is a spot foreign exchange transaction (\$/DEM or \$/FRF).

## **2.4. The institutional framework in France**

The European Investment Services Directive (ISD), which came into force on 1 January 1996, required the European Union Member States to adapt their national legislation.

France accomplished this by passing the “Financial Activity Modernisation Act” of 2 July 1996. Prior to this date, three types of financial intermediaries had been active on the markets for what are now called investment services:

- credit institutions, which were the only operators on the primary market for issues of new securities. Credit institutions could trade in all financial instruments except transferable securities.
- stockbrokers, whose legal form had been redefined in 1988. Stockbrokers held the monopoly on trading in transferable securities and the exclusive right to trade on the stock market. As stockbrokers, they did not have access to the primary market for issues of new securities.
- Portfolio management companies, which engaged solely in individual portfolio management.

These three types of intermediaries were subject to three separate supervisory authorities and three sets of rules, even when they were engaged in the same types of activity.

### *2.4.1. The New Regulatory Framework*

The new Act defines only two types of intermediaries, which are now called investment service providers:

- credit institutions (banks, savings institutions, etc.),
- investment firms (formerly stockbrokers and portfolio management companies, which no longer exist as distinct legal forms).

Both types of intermediaries can engage in the market activities of their choice, including receiving and transmitting customer orders, executing orders, portfolio management, underwriting and placement, subject to authorisation from:

- the Commission des Opérations de Bourse (COB) in the case of portfolio management,
- the Conseil des Marchés Financiers (CMF) and the Comité des Établissements de Crédit et des Entreprises d'Investissement (CECB) for other activities.

Authorised traders wishing to trade on regulated markets must become members of the markets concerned.

The Financial Activity Modernisation Act distinguishes between two types of markets:

- “regulated” markets are officially recognised as such when they meet a set of criteria relating to operating procedures, listing requirements and disclosure requirements (Premier Marché, Second Marché and Nouveau Marché),
- and over-the-counter markets, which do not have to meet any minimum requirements.

### ***Commission des Opérations de Bourse***

The Commission des Opérations de Bourse (COB) was set up in 1967 and modelled on the American Securities and Exchange Commission (SEC). It is an independent administrative authority managed by 10 commissioners. The COB's role is to ensure investor protection, public disclosure and smooth operation of markets in financial instruments, according to Ordinance 67-833 of 28 September 1967, as amended.

Its key powers relate to supervision of disclosures by companies making public offerings and supervision of market operations. It has specific responsibility for supervision of UCITS, investments in “various assets” and the commercial paper market.

The COB's supervision of disclosures is primarily conducted before information is disclosed. Within the limits set by European regulations governing mutual recognition, which streamline the procedures, the COB approves or rejects the documents (prospectuses, etc.) that issuers are required to publish and make available to the public:

- before listing financial instruments;
- when making a public offering;
- when making takeover bids, exchange offers or buy-out offers.

For these purposes, the COB:

- monitors companies' disclosures;
- authorises new mutual funds. Issues of money market instruments are subject to special rules: only unrated issuers are required to publish a financial presentation report. This report must be filed with the COB and the Banque de France by the issue date at the latest, regardless of the maturity of the securities;
- grants authorisation to credit institutions and investment firms to engage in portfolio management;
- ensures the legality of transactions. French law prohibits insider dealing and price manipulation,
- deals with complaints from the public.

The COB also has the right to oppose the listing of a security on a regulated market. It also has the power to impose penalties for violations of its rules.

### ***The Conseil des Marchés Financiers***

The Conseil des Marchés Financiers (CMF) is an industry body governed by a 16-member board. It is the French market authority and its brief covers all operations (except portfolio management) conducted by credit institutions and investment firms on the regulated and OTC markets.

Its main functions are:

- supervision of regulated markets,
- acceptance of business plans and licensing of intermediaries offering investment services (other than asset management),
- acceptance and management of public offerings and takeover bids

The Conseil des marchés financiers (CMF) replaced the Conseil des bourses de valeurs (CBV) and the Conseil du marché à terme (CMT), which were the former regulators of the stock market and futures market respectively.

The CMF is an industry body and the members are appointed at the suggestion of bodies representing firms making public offerings, investors, market intermediaries, including investment firms, and the employees of these corporations and institutions.

The CMF has a plenary assembly, specialised groups and disciplinary groups. A Banque de France representative attends the plenary sessions and has a vote.

The CMF's main tasks are to draft and implement the general regulations that establish the general organisation standards and operating rules for regulated markets, along with the rules applying to investment service providers on best practices, organisation, administration, supervision and security. The general regulations also set the operating conditions for bookrun-

ners, custodians and depositaries. The CMF also examines applications for authorisation to conduct intermediation activities and makes recommendations on the creation, recognition and closure of regulated markets.

It defines the rules for such operations as public offerings and the rules for constituting guarantee funds. It approves the by-laws of clearing houses and guarantee schemes and it approves the master agreements used for transactions in financial instruments, etc.

In comparison to its predecessors, the CBV and the CMT, the Conseil des marches financiers has fewer powers in terms of prudential supervision and authorisation of institutions and in terms of the operating rules for regulated markets. These rules are now set by the undertakings running the markets.

On the other hand, the CMF has broader powers to set the rules for engaging in investment service activities. This represents a substantial responsibility in view of the broad definition of financial instruments given in the first article of the Financial Activity Modernisation Act, the definition of investment services in the fourth article and the definition of related services given in the fifth article. This means that the CMF has taken over the rule-making powers of the central securities depository (Sicovam) and the power to licence bookrunners formerly held by the Ministry of the Economy.

### **Paris Bourse <sup>SBF</sup> SA**

Up until September 2000, the CMF was assisted in its securities market tasks by a market undertaking called, Paris Bourse <sup>SBF</sup> SA, (formerly named Société des bourses françaises –SBF-). In June 1999, Paris Bourse <sup>SBF</sup> SA merged the entities involved in market activities (SBF, Matif SA, Monep SA and Société du Nouveau Marché) and centralised its clearing activities at a central clearing bank called Clearnet <sup>SBF</sup> SA. All of its technology and software engineering activities were also merged to form a new subsidiary called Euronext <sup>SBF</sup> SA. Paris Bourse's main functions were to apply and interpret the CMF's regulations and decisions and to supervise market professionals.

#### **2.4.2. Recent Developments**

The Amsterdam, Brussels and Paris stock markets have merged to form Euronext, the first pan-European stock market.

The merger was announced in March 2000 and, on 22 September 2000 a holding company named Euronext N.V. was set up. Shareholders in the Amsterdam Exchanges, Brussels Exchanges and ParisBourse<sup>SBF</sup> SA received shares in the new company in exchange for their shares.

Three market undertakings, which are all wholly owned subsidiaries, have been set up because of regulatory requirements with regard to listing procedures and takeovers, as well as a desire to have Euronext fit into the specific cultural environment of each country. These subsidiaries are Euronext Amsterdam N.V., Euronext Brussels SA/N.V. and Euronext Paris SA. They are three points of access to a unified market for issuers, intermediaries and investors. In the first half of 2001, trading will be unified, followed by clearing and settlement in the second quarter. The creation of Euronext will enable investors to use a single access point to trade in a broad range of securities and derivatives (futures and options on interest rates, indices, equities and commodities).

Euronext is a *unified market* and will have:

- a single trading platform
- a single order book for each stock, which will make the market for each stock more transparent and more liquid;
- a single clearing house that acts as the central counterparty for all traders guaranteeing payment and delivery for all participants;
- a single securities settlement system.

*Trading:* the most liquid stocks listed on Euronext will be traded continuously throughout the day, with opening and closing call auctions. Less liquid stocks will be trading by call auction only.

As is the case on the French market today, market makers will be able to make markets in both continuously traded and call auction securities.

*Timetable:* the Euronext 100 and Next 150 indices, which were launched on 2 October 2000, are disseminated in real time. The other indices in the Euronext family will be created in the coming months.

New market rules are being drafted. They will be incorporated into the market computer systems once they have been validated by the regulators in the three countries. This process should be completed in the first quarter of 2001.

#### 2.4.3. *General organisation of the French market*

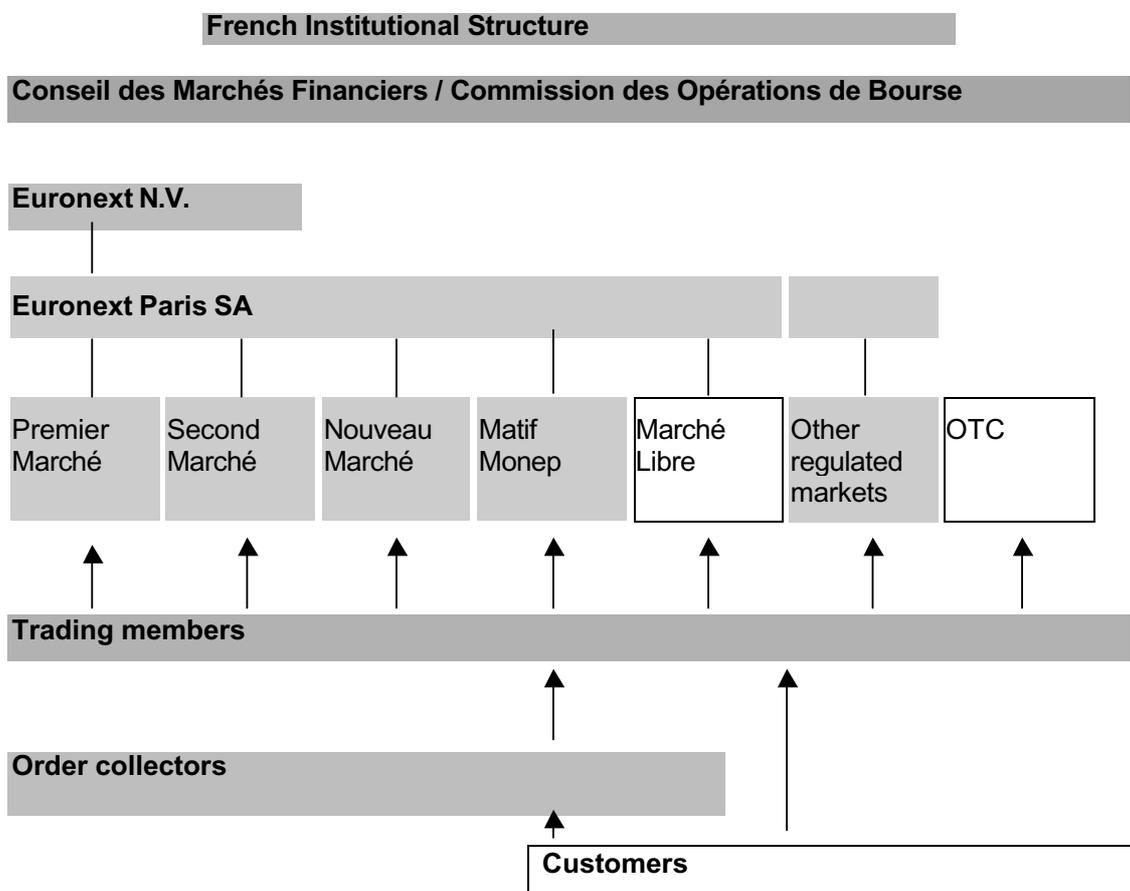
*Euronext Paris SA:*

- sets the market regulations and submits them to the CMF for approval
- admits new listings,
- admits market members
- manages the computerised trading systems,
- disseminates trading and price data,
- registers trades between member firms through its wholly owned subsidiary, Clearnet SA, a clearing house that guarantees payment and delivery of securities bought and sold,
- provides issuers with services for listing their securities and executing their financial transactions.

*Member Firms:* market access had been restricted to *Agents de Change* until this category of intermediary was abolished in 1988 to be replaced by stockbrokers. Today, market access is granted to all French and foreign financial intermediaries established in France.

## FRENCH INSTITUTIONAL STRUCTURE

SCHEME 2



Computerisation has made it possible to offer market access to intermediaries in other countries, who are referred to as “remote members”.

- Trading members are authorised (2) credit institutions and investment firms that have become members of the market in order to execute buy and sell orders;
- Clearing members are the institutions that handle settlement through Clearnet SA, ensuring that deliveries and payments to buyers and sellers are made within the stipulated time limits, once the trading members have executed their trades.

Trading members can also apply to be clearing members and handle all of these operations on their own. Otherwise, they can limit their activities to execution of orders and contract out settlement operations to a clearing member.

*Order Collectors:* when they are not Euronext members, financial intermediaries, such as banks and investment firms, can collect their customers' orders and transmit them to a trading member, thus sparing their customers from further formalities. Order collectors have to be licensed by the CMF and they are authorised to open accounts in their customers' names.

(2) The CMF and the CECEI grant authorisations for trading members located in France. The home country authorities grant authorisations for trading members located in other European Union countries that operate under a European passport.

*Order Transmitters* are not authorised to open accounts, handle securities or receive cash. They are service providers that transmit orders, using computer links in most cases, to the intermediary (trading member or order collector) that manages the customers' accounts.

*Harmonised Listings:* Euronext's functional and technical integration was designed to respect the legal and cultural environment of each country.

The means that the companies listed on Euronext via Paris will continue to operate under French supervision, French regulations and French procedures. As in the past, companies will have to produce a prospectus and submit it to the COB for approval before listing their securities.

Euronext listings will distinguish between new economy stocks (information technology, telecommunications, new media, biotechnology, etc.) and old economy stocks.

*Indices:* The national indices (AEX 25, BEL 20, CAC 40, etc.) will be maintained, calculated and disseminated in the same way.

At the same time, a new family of Euronext indices will be established to give a full reflection of the transnational character of the sectoral components of the listings.

The Euronext 100 and Next 150 indices covering the largest market capitalisations were launched in October 2000. Other indices reflecting the new segmentation of the Euronext market will be introduced in 2001.

The CAC 40 index, as its name indicates, is made up of 40 stocks. The stocks are chosen from amongst the 100 largest market capitalisations on the French market that have the broadest shareholder base amongst French and foreign institutional investors and private investors and that are the most actively traded on a daily basis.

*Trading:* all securities have been traded on a cash basis since 25 September 2000. However, intermediaries can offer their customers deferred settlement service for a limited number of French and foreign stocks traded on the Premier Marché, Second Marché and Nouveau Marchés.

A stock has to meet two criteria to be eligible for deferred settlement:

- it must be a component of the SBF 120 index
- or it must have a market capitalisation of more than EUR 1 billion and the value of daily trading must reach at least EUR 1 million.

Euronext Paris SA publishes the list of stocks eligible for deferred settlement.

*Orders:* they must provide specific information on the validity period and execution price.

*Pricing Process:* trading takes place on a centralised, order-driven market, where member firms act as brokers.

Trading no longer takes place on the floor of the Paris stock exchange building (3). Transactions are now conducted via a screen trading system.

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(3) The Paris stock exchange building no longer houses any trading activity. It is now used as a venue for conferences and other events.

The overall system architecture is based four systems that operate synergistically:

- the central trading system;
- input for the central trading system comes from order routing systems. Orders can be entered by trading members, order collectors or even individual customers using a minitel or internet connection;
- output from the central trading system goes to the real-time data dissemination system and the securities settlement system.

Orders for each stock are automatically ranked by price limit on the central order book as they enter the system.

Two rules determine the order of execution:

- Price: buy orders with higher price limits are executed before those with lower price limits. Conversely, sell orders with lower price limits are executed before those with higher price limits;
- Time. Two orders to buy or sell with the same price limit are executed in chronological order.

There are several stages in the trading day:

- Pre-opening from 7:45 a.m. to 9:00 a.m., when orders are fed into the central order book but no transactions occur;
- Opening at 9:00 a.m., when the system calculates a call auction price that successfully matches the largest number of the orders received;
- Trading from 9:00 a.m. to 5:30 p.m., when trading is continuous and a new order immediately triggers one or more trades if the central order book contains matching orders. The execution price is the price limit for the matching order in the central order book.
- Pre-closing from 5:30 p.m. to 5:35 p.m. when orders are fed into the central order book by no trades take place, as is the case during the pre-opening stage;
- Closing at 5:35 p.m., when a call auction determines the closing prices.

Once a trade is completed, the trading system immediately:

- sends trade confirmations to the trading members that entered the buy and sell orders, with all the information necessary to book the trade;
- sends settlement instructions to the Clearnet clearinghouse;
- updates trading screen data.

*Data Dissemination:* the trading system automatically feeds data to the dissemination system.

*Settlement:* France switched to a book-entry system for all securities. This meant that securities were deposited with authorised intermediaries (banks and investment firms) that hold accounts with the central securities depository SICOVAM (4).

Registered and bearer certificates now only exist as book entries and they circulate only in the form of transfers between intermediaries' accounts.

The settlement system is based on two fundamental principles and a computer system. The system also provides a settlement guarantee from Euronext via its subsidiary Clearnet SA. The two fundamental principles are delivery-versus-payment and a standard time frame for settlement. The available balances of the intermediaries' cash and securities accounts are checked prior to each settlement to ensure that payment is not made for securities that cannot be delivered and that securities are not delivered when payment cannot be made.

Trades are recorded on the customers' accounts on T, the trade date and ownership is transferred. Then, on T + 3, meaning three trading days after the trade, the intermediaries' securities and cash accounts are debited.

#### SICOVAM'S SPECIAL ROLE

Sicovam has initiated and managed major changes on the French market, such as the switch to a book-entry system in 1984, the bearer certificate identification service in 1987 and the Relit computerised delivery-versus-payment settlement system in 1991. The central depository has always anticipated its members' needs and been ready to meet them. Virtually every securities transaction in France involves Sicovam at some point.

It initiated the set of requirements for custodians that have applied since 1 January 1995 to its 700 or so subsidiaries and subsidiaries' subsidiaries that now provide services of unrivalled quality. The requirements introduced segregated accounts for customers, which prevent custodians from using their customers' securities for their proprietary transactions. This change has enhanced the safety of customers' securities deposits.

In 1995, Sicovam joined forces with the Banque de France and its Saturne settlement system for Treasury notes and money market instruments. The result was a single market-wide settlement system called RGV (Relit Grande Vitesse), which started operating in 1998. It was the first settlement system to provide real-time finality of payment.

## 2.5. Financial instruments

### 2.5.1. Equities or Shares

A share is one of the equal parts into which the share capital of a joint stock company or a corporation is divided. The ownership of a share is evidenced by certificates or by entries in a computer data-base. Shares are variable-yield securities.

There are different types of shares:

- Ordinary shares are issued by companies on incorporating and increasing their capital by the issuance of new shares.

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(4) SICOVAM will become Euroclear France in January 2001.

- Preference shares: Preference shareholders are paid a dividend corresponding to a steady interest rate with a limited risk; they have a prior claim over ordinary shareholders whose dividend payment depends on profits.
- Preferred non-voting shares: they have the same face value as the ordinary shares. These shareholders are paid a preferential dividend but are not allowed to vote in the annual general shareholders meetings.

Listed companies may be the target of take-over bids in which the shares are paid for in cash. If shares are offered in exchange for a stake in the company (usually shares issued by the bidding firm), this process is known as a public offer of exchange.

### 2.5.2. Bonds

Bonds are securities that establish the holders' rights as creditors. The key characteristics of these securities are that they are redeemable under the conditions defined at the time of issue and that, except in special cases, they pay annual interest.

Public limited companies, the central government, local authorities and public sector agencies and bodies can obtain the long-term funding they need by issuing bonds.

Each bond issue has its own specific characteristics: maturity, number of securities issued, par value of the securities, interest rate, coupon payment date, issue price, redemption price and redemption procedures.

#### I. Corporate Bonds

In order to protect investors, the only entities legally entitled to issue bonds are:

- public limited companies, except for investment firms,
- Industrial groups and Regional Development Companies (SDR).

When a company borrows money by issuing bonds, it obtains new funds and, in exchange, it incurs the financial expense of making the interest payments and redeeming the bonds.

On the other hand, if a company increases its capital by selling new shares for cash, the funds raised increase the company's equity. It is then up to the company to remunerate the newly issued shares, which entitle the shareholders to a share of the company's annual profit in the form of a dividend payment.

A company's choice between issuing bonds or equities depends on several factors, such as the nature of its funding requirements and its standing on the capital market.

Holders of a single bond issue automatically form a group that looks out for the bondholders' interests.

#### CONVENTIONAL BONDS

This is the most common type of bond. These bonds pay a fixed rate of interest and are redeemed at the price set out in the indenture. Sometimes, bondholders are paid a redemption premium.

## FLOATING AND ADJUSTABLE RATE BONDS

The first floating rate bonds were issued in 1976. The interest on such bonds, which may be paid once or twice a year, is calculated at the end of the period on the basis of the monthly average money market rates or else on the basis of the bond market rate on the date the payment is calculated. The interest paid is equal to the chosen reference rate plus or minus a spread that depends on the issuer's creditworthiness.

The first adjustable rate bonds were issued in 1980. The interest payment for the year or half year is calculated at the start of the period on the basis of the monthly average money market or bond market rates on the issue date and one each successive adjustment date. These bonds created a family of securities paying a fixed income, but over a given period of between 6 months and 3 years, which is shorter than the total life of the bond.

## SUBORDINATED PERPETUAL BONDS (TSDI)

These bonds are only redeemed when the company is wound up and after all the other creditors have been paid off (except for those holding non-voting loan stock). The financial community considers such instruments to be virtual equity, and they reinforce the stable funding of the issuing company.

## CONVERTIBLE BONDS

Companies can issue bonds that can be converted into shares.

The indenture must specify:

- the conversion conditions and basis (e.g. one share for one bond),
- the period during which holders can exchange their bonds for shares. Legal provisions require that such bond issues be convertible at any time.

Companies can also issue bonds that are *exchangeable*:

- for shares that have already been issued and are held by others,
- or for shares that are specially issued for this purpose.

In the second case, the company increases its capital at the same time as it issues the bonds. The shares are subscribed by banks or entities that have bank guarantees.

## BONDS WITH BOND WARRANTS (OBBSO)

Some bonds are issued with a warrant that entitles the holder to subscribe a second bond later on at dates and prices specified in the indenture.

## BONDS WITH EQUITY WARRANTS (OBBSA)

This category of bonds was introduced by the Investment Development and Protection Act of 3 January 1983.

These bonds come with one or more warrants that entitle the holder to subscribe to shares to be issued by the company at one or more pre-stated prices under terms and conditions set out in the indenture. The exercise period for such warrants must not run more than three months past the final redemption date of the bonds.

#### SINGLE COUPON BONDS

One of the advantages of a single coupon bond is that it provides investors with a fixed yield to maturity.

Furthermore, the interest due on a single coupon bond is not paid each year. Instead it is reinvested to earn even more interest, hence the term “compound interest”.

#### ZERO COUPON BONDS

As their name suggests, zero coupon bonds do not pay annual interest. The yield of the bond is deferred until maturity and paid in the form of a large redemption premium.

When bonds are separated from their coupons and the principal and interest payments are traded separately on the secondary market, the resulting securities are called STRIPS (Separate Trading of Registered Interest and Principal of Securities).

Zero coupon bonds and strips are fairly similar and both originated in the United States. They both offer advantages for buyers and investors in terms of duration; since there are no interim interest payments there is no uncertainty about reinvestment yields. They also offer tax advantages since the earnings are taxed later and/or at a lower rate than interest on conventional bonds.

This flexibility means that the issuer can offer a lower yield at the issue date.

The French government introduced strips to the market in 1986 with its “Félins”. These early strips were not very popular, but they did pave the way for the technique that has been legal in France since 1991, by which Sicovam and primary dealers in government securities can strip French Treasury bonds on the secondary market, while reserving the right to reconstitute the whole bonds later on.

#### FRENCH TREASURY BONDS (OATs)

Bonds issued by France’s central government are currently called *obligations assimilables du Trésor (OAT)*. Technically, these bonds are no different from conventional bonds. They are simply bonds with the same indenture clauses as earlier issues, except for the issue price. This means that different tranches can be fungible and subsequent issues can be added to the same listing.

Furthermore, after of the FELIN (*Fonds d’état libres d’intérêt nominal*) strips introduced in 1986 failed to catch on, the central government experimented with a new type of strip in 1992. This involved separating bonds into the corpus, representing the principal and a series of coupons and listing all of them separately on the secondary market. This technique actually creates zero coupon bonds, since the investor does not receive any interim payments before the bond matures.

After converting all of its securities to the euro on 4 January 1999, the French government has naturally become a driving force on the euro market, where all public and private sector issuers will now have to find their places.

#### GOVERNMENT BONDS

The central government stopped using underwriting groups to issue various types of securities when it switched to auctions in the mid nineteen-eighties. However, in 1993, the central government revived the underwriting group procedure for the “Balladur” bond, a 6% bond maturing in July 1997 that raised a total of FRF 110 billion.

#### TREASURY BILLS AND NOTES

Treasury bills and notes are used in addition to long-term debt instruments to provide more flexible cash management in the short and medium term. This is particularly useful at times when interest rates look likely to rise, since investors tend to prefer shorter maturities at such times.

This category includes two types of securities that correspond to different needs:

- *Bons à taux fixe* (BTF) are discount Treasury bills. These bills with maturities of up to one year and no coupon payments are used to meet short-term borrowing requirements resulting from fluctuations in the government’s cash position over the year. They are also used for short-term market intervention. BTFs account for less than 10% of negotiable public sector debt.
- *Bons à taux fixe et intérêt annuel* (BTAN) are fixed-rate medium-term Treasury notes with annual coupon payments. They are issued with maturities of two to five years for medium-term management of government debt. They are a key element in the Treasury’s issuance programmes and they bridge the gap between BTFs and OATs. They account for a large proportion of negotiable public sector debt. The percentage usually fluctuates between 20% and 30%.

#### GOVERNMENT SECURITY ISSUANCE AND MANAGEMENT TECHNIQUES

Being fully aware that the markets are by far its main source of financing, the French government manages its debt to achieve three main objectives:

- reducing the apparent and real cost of borrowing and adjusting maturities as far as possible using all of the techniques that have proven effective in the private sector, such as swaps;
- being a trailblazer for the introduction and development of new instruments on the Paris market;
- ongoing improvements in the timing of government borrowing on the bond market.

The government’s policy relies on several instruments:

### a) Treasury Auctions

Treasury auctions are the preferred technique for issuing government securities in France. Auctions were used to issue current account Treasury notes starting in 1973. Auctions of OATs started at the end of 1985, followed by auctions of BTFs and BTANs. The auction technique is based on the principle of competitive bidding and helps to ensure transparency and investor confidence.

The Banque de France, acting as a service provider for the Treasury and the bidding institutions, developed the Telsat (*télétransmission des soumissions aux adjudications de valeurs du Trésor*) computerised bidding system. The Banque de France Securities Division uses the system to transmit the bids to the Treasury less than one minute after bidding closes.

### b) The Government Debt Management Fund (*fonds de soutien des rentes et valeurs du Trésor* (FSR))

In addition to modernising its issuance policy, the French Treasury had to improve the management of the secondary market for its securities via the intervention of the Government Debt Management Fund. The Fund is entitled to conduct all transactions in all securities issued by the central government. Agency France Trésor, which was established on 8 February 2001 and reports to the Permanent Head of the Treasury Directorate, is responsible for managing all of the central government's cash holdings and debt.

### c) Primary Dealers in Government Securities [*spécialistes en valeurs du Trésor* (SVT)]

The Treasury works with a network of twenty financial intermediaries (including ten foreign institutions) that are specialists modelled on American "Primary Dealers". These specialists in Treasury bonds, bills and notes are responsible for placing issues and making a secondary market for them. By dealing with this network, the Treasury achieves four objectives: it ensures a transparent and liquid secondary market for Treasury securities, it obtains the most accurate information possible about financial markets, it promotes consultations on government security issuance policies and it ensures more international ownership French government securities.

France's primary dealers are generally, but not exclusively, banks. They must respect a series of commitments:

- They must employ a team of Treasury securities professionals to place issues with investors and to trade on the government securities market;
- They must quote bid and asked prices at all times for the main Treasury issues;
- They must make substantial efforts to place Treasury securities;
- They must be regular and substantial bidders at Treasury auctions.

In exchange, the Treasury makes certain commitments to its primary dealers:

- It holds regular meetings with them.
- It involves them in the elaboration of its issuance policy.
- It grants them the right to make non-competitive bids.
- It gives them the right to strip and reconstitute OATs.

Today, OATs account for every one of the top thirty bond listings in terms of market capitalisation and liquidity.

**MARKET ORGANISATION. OVERVIEW AT 1 JANUARY 1999**

Instruments	Certificates of deposit	Commercial paper	Negotiable medium-term notes
Characteristics			
Issuers	<ul style="list-style-type: none"> <li>– Resident and non-resident credit institutions</li> <li>– Caisse des dépôts et consignations</li> </ul>	<ul style="list-style-type: none"> <li>– Resident and non-resident non-bank companies, with 2 years in business, incorporated as public limited companies, public sector firms, cooperatives, EIGs or private companies whose members are all eligible issuers.</li> <li>– Investment firms</li> <li>– EEC institutions and international organisations of which France is a member</li> </ul>	– All eligible issuers of certificates of deposit or commercial paper
Initial maturity	1 day to 1 year	1 day to 1 year	1 day to 1 year or more
Minimum amount	FRF 1 million or the countervalue of FRF 1 million in euro or foreign currency		
Book entry circulation	Mandatory since 26 January 1993		
Rating	Optional Rated issuers are subject to a streamlined disclosure procedure. The rating must be determined by a specialised rating agency on the list drawn up by the Ministry of the Economy		
COB approval terms	COB approval required for unrated issuers not located in France	COB approval required for unrated issuers	COB approval required for unrated non-bank issuers and unrated credit institutions not located in France
	COB approval lapses if the issuer is absent from the market for more than one year. COB can withdraw its approval if the issuer fails to comply with disclosure requirements.		
Issue price	Negotiable debt securities can be issued at a discount and include a redemption premium. If an issue of a negotiable debt security does not guarantee full redemption of the principal, the prospectus must contain a warning to this effect. Furthermore, the proportion of the principal that the issuer guarantees must be specified at the time of issue.		
Issue currency	Euro (including its national denominations) or any foreign currency, unless temporarily banned by the Banque de France.		
Remuneration	No restrictions When the remuneration varies under the terms of an index-linking clause that does not refer to a usual interbank market, money market or bond market rate, the Banque de France must be informed of the index-linking clause prior to issue.		
Buy backs	No restrictions Issuers shall inform the Banque de France of their buy backs on a monthly basis		
Early redemption and cancellation of securities	No restrictions Issuers shall inform the Banque de France of early redemption on a weekly basis.		

### 2.5.3. Money market securities

France's financial markets were traditionally compartmentalised. The short-term financing market (money market) was totally separate from the medium-term and long-term financing market (capital market). Access to the different market compartments was restricted to certain economic agents. For example, individuals and businesses did not have access to the money market, which was open, with a few rare exceptions, to credit institutions only.

#### HISTORICAL BACKGROUND

Under the terms of Act 91-716 of 26 July 1991 (Article 19.1), "negotiable debt instruments are securities issued at the issuer's discretion and traded on a regulated market or over the counter,

**MARKET ORGANISATION. OVERVIEW AT 1 JANUARY 1999** (continuation)

Instruments	Certificates of deposit	Commercial paper	Negotiable medium-term notes
Characteristics			
Guarantee (if any)	<p>The guarantee may be provided by:</p> <ul style="list-style-type: none"> <li>• a credit institution that is eligible to provide such a guarantee</li> <li>• an investment firm that is authorised to issue commercial paper, if said firm directly or indirectly owns at least 20% of the issuer's capital or is at least 20% directly or indirectly owned by the issuer.</li> </ul> <p>In addition, for issuers mentioned in the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> indents of III in Article 19 of the Act of 26 July 1991, an entity that is authorised to issue commercial paper if said entity directly or indirectly owns at least 20% of the issuer's capital or is at least 20% directly or indirectly owned by the issuer.</p>		<p>These securities can be guaranteed under the rules applied to certificates of deposit or commercial paper, depending on the status of the issuer.</p>
Manager, Paying agent	<p>The paying agent must be a credit institution or an investment firm located in France, or the Caisse des dépôts et consignations (credit institutions and investment firms located in France can act as the paying agent for their own securities).</p> <p>Securities can be managed by Sicovam at the issuer's request.</p>		
Placement and trading	<p>Placement and trading by credit institutions, investment firms and the Caisse des dépôts et consignations</p>		
Market supervision, penalties	<p>The Banque de France takes the necessary measures to ensure smooth market operation. The Banque de France may suspend or ban any issuer that fails to comply with the provisions in force.</p>		
Money supply category: securities with initial maturities of up to 2 years	<p>When held by non-financial agents or by financial customers (investment firms and non-money-market funds):</p> <p>M 3 – M 2</p>		<p>Securities issued by credit institutions if held by non-financial agents or by financial customers (investment firms and non-money market funds):</p> <p>M 3 – M 2</p>
Reserve requirements	<p>Except for securities held by credit institutions subject to reserve requirements as part of the ESCB (in which case proof of who the end holder is will be required), the reserve requirement applied to outstanding certificates of deposit issues is 2%.</p>		<p>Except for securities held by credit institutions subject to reserve requirements as part of the ESCB (in which case proof of who the end holder is will be required), the reserve requirements applied to outstanding negotiable medium-term note issues are:</p> <p>? 2% for securities with an initial maturity of up to 2 years;</p> <p>? 0% for securities with an initial maturity of more than 2 years</p>
Disclosure requirements	<p>A financial report must be filed with the Banque de France two weeks before the first issue. The report must be updated on an annual basis.</p> <p>Unrated issuers must file a financial report with the COB 1 month before the first issue and receive the COB's approval. The report must be updated on an annual basis.</p> <p>Unrated issuers must file a half-yearly business report and a quarterly cash position statement with the Banque de France and the COB.</p>		

each of which represents a claim on the issuer for a specified period". The market in such instruments opened in 1985 with short-term securities. It expanded substantially in 1992 with the introduction of negotiable medium-term notes. This event marked the division of the money market into two distinct segments: the short-term segment, where securities with initial maturities of up to one year were traded, and the medium and long-term segment, where securities with initial maturities of over one year were traded. This is still the prevailing pattern today.

Money market securities were introduced as part of the reform of the money market implemented in the mid nineteen-eighties. This reform led to decompartmentalisation of the financial market by increasing the range and quality of instruments available for borrowers and

lenders so that their financing and investment needs could be better met. In very general terms, the reform consisted of making a distinction within the money market between:

*The interbank market*, which is only accessible to credit institutions and the organisations mentioned in Article 8 of the 1984 French Banking Act (Treasury, Banque de France, the financial arm of the Post Office, Caisse des dépôts et consignations, Institut d'émission des Départements d'outre-mer, Institut d'émission d'outre-mer). Regulation 85-17, as amended, also granted partial access to investment firms in 1997.

*The money market*, which is open to all economic agents, but with distinctions between securities depending on the status of the issuers and the maturities.

Up until the regulatory reform of 1998 (see below), there were four categories of securities:

1. *Certificates of deposit (CDs)*, these short-term securities issued by banking institutions were introduced in March 1985;
2. *Bills issued by financial institutions and companies (BISF)*, originally, only specialised financial institutions were allowed to issue such bills when they were introduced in December 1985, then financial companies were given the right to issue them in May 1986, followed by securities houses in March 1987. At first, these securities carried an initial maturity of at least two years, but this requirement was shortened to ten days in March 1987. This category of securities was abolished in 1999, but the same issuers are now entitled to issue certificates of deposit;
3. *Commercial paper (CP)*, is another form of short-term securities introduced in December 1985. They are mainly issued by industrial and commercial companies;
4. The maximum initial maturity of these various securities was set at seven years and securities with longer maturities were traded on the bond market. But with the introduction of *negotiable medium-term notes* in March 1992, the maximum was gradually brought down to one year so that negotiable medium-term notes could be used to provide a continuous range of issues maturing after more than one year.

Issuers and investors now have a continuous range of maturities from very short-term to long-term. At the same time, the minimum maturity of bonds has also been shortened gradually so that it is now possible to issue different types of securities with the same initial maturity.

The latest major reform took place at the end of 1998. It was undertaken to take account of practices on other countries' money markets that are in competition with France's money market and to incorporate the consequences of European unification and, more especially, the Financial Activity Modernisation Act of 2 July 1996, which transposed the European Investment Services Directive of 10 May 1993 into French law. Changes in French laws and regulations had two major aims: modernising the market and opening it up to European and international participants.

The main results of this reform were:

- abolishing the category for bills issued by financial institutions and companies, which had become an excessively narrow compartment, and merging it with the certificates of deposit compartment.

- reducing the minimum maturity for short-term securities from 10 days to 1 day;
- complete deregulation of remuneration of securities;
- opening the certificates of deposit market up to non-resident credit institutions;
- allowing investment firms to issue commercial paper;
- entitling all European investment service providers to engage in securities placement and trading.

### 3. SPANISH FINANCIAL SYSTEM

#### 3.1. Introduction

To finance their real current assets and undertake investment projects, non-financial corporations initially count on funds obtained from current transactions or operations (which, in terms of business accounting, is called self-financing and, in National Accounts terms, gross saving) and on capital subsidies or capital transfers, according to the National Accounts denomination. Insofar as these resources are not sufficient, companies show a financing requirement, needing in this case to obtain additional funds from sources outside the firm itself. The options open are:

1. To resort to financial markets in order to:
  - apply for loans from financial intermediaries, essentially banks and savings banks.
  - place securities (promissory notes, bonds and shares) directly with savers and financial intermediaries.
  - sell financial assets, in particular from the securities portfolio. One particular instance of this means of financing is public offerings.
2. To access one of the two channels through which companies can obtain funds without resorting to the financial market. This involves credit extended by suppliers and financing received from group companies.

Described below are different aspects of the first of these two channels, both from the financial markets (or *primary or issuance markets*), where companies obtain funds through loans and credit institutions, the placing of securities with investors of financial intermediaries and the sale of financial assets, and from the *official secondary markets*, where previously issued shares are bought and sold.

#### 3.2. Primary market for the financing of companies

##### 3.2.1. Financing via credit institutions

A distinction is made in Spain between the following types of credit institutions: banks, savings banks, credit co-operatives, specialised credit institutions (SCIs) and the Official Credit

TABLE 5

## CREDIT INSTITUTIONS. NUMBER OF INSTITUTIONS AND EMPLOYEES

	1997		1998		1999		2000	
	no.	no.	no.	no.	no.	no.	no.	no.
	institutions	employees	institutions	employees	institutions	employees	institutions	employees
Resident banks	159	139,198	152	135,164	146	131,460	141	127,582
Savings banks	51	90,153	51	93,812	50	97,276	48	101,718
Credit co-operatives	97	12,804	97	13,292	94	13,855	92	14,495
SCIs	108	4,936	103	5,154	96	5,229	86	4,889
ICO	1	270	1	263	1	264	1	267
<b>TOTAL</b>	<b>416</b>	<b>247,361</b>	<b>404</b>	<b>247,685</b>	<b>387</b>	<b>248,084</b>	<b>368</b>	<b>243,795</b>

Source: Banco de España Boletín Estadístico

Institute (ICO). The size of each category differs greatly, as can be seen in the tables below. Banks account for around 50% of the total credit extended to other resident sectors (non-financial corporations and households), followed by savings banks with approximately 40%. Between them, credit co-operatives, SCIs and the ICO account for the remaining 10%.

The following table reports the total loans extended by credit institutions to non-financial corporations in the years 1997 to 2000, and their weight in relation to total financing received by corporations in terms of both flows and stocks.

In addition to credit institutions, mention should be made of other companies that contribute to the financing of Spanish companies, essentially SMEs. These are *venture capital companies (VCCs)* and *mutual guarantee companies (MGCs)*. The former are public limited companies, which invest their capital in the temporary and minority-interest financing of innovative SMEs that are non-financial and, in principle, unlisted. They further provide value added in the form of management support.

Mutual guarantee companies are a business promotion instrument, extending credit to SMEs and allowing them to channel, promote and encourage the investment financing guaranteed by MGCs. Their corporate purpose is to offer bank-guaranteed backing or other credit assistance in favour of their SME partners that is acceptable to banks, with the aim of obtaining privileged credit facilities or better credit terms than SMEs would obtain by themselves in the market. They also give advice and assessment on alternative sources of investment finance. They cannot directly extend any type of credit to their SME partners. MGCs may enter such partnerships with any type of SME, irrespective of the activity in which the latter may engage.

TABLE 6

## CREDIT FROM CREDIT INSTITUTIONS TO OTHER RESIDENT SECTORS

	EUR m			
	1997	1998	1999	2000
Resident banks	183,962	209,650	237,078	272,799
Savings banks	133,293	161,912	188,995	227,803
Credit co-operatives	15,462	18,583	22,065	26,031
SCIs	17,633	19,503	23,813	27,281
ICO	3,996	4,205	5,014	5,494
<b>TOTAL</b>	<b>354,346</b>	<b>413,854</b>	<b>476,966</b>	<b>559,407</b>

Source: Banco de España Boletín Estadístico

TABLE 7

## CREDIT FROM CREDIT INSTITUTIONS TO OTHER RESIDENT SECTORS

	1997	1998	1999	2000
Resident banks	51.9	50.7	49.7	48.8
Savings banks	37.6	39.1	39.6	40.7
Credit co-operatives	4.4	4.5	4.6	4.7
SCIs	5.0	4.7	5.0	4.9
ICO	1.1	1.0	1.1	1.0
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Banco de España Boletín Estadístico

Further information on these financial instruments at the service of Spanish companies may be consulted in the electronic version of the document "Corporate finance in Europe from 1986 to 1996" published by the European Committee of Central Balance Sheet Data Offices (ECCB) working group on equity.

3.2.2. *Financing via securities issuance*

The issuance of securities is basically regulated by Spanish corporate law (Ley de Sociedades Anónimas — LSA) and securities market legislation (Ley de Mercados de Valores — LMV), along with the associated complementary provisions. The LSA has specific regulations for each type of security (promissory notes, bonds and equity). By contrast, the LMV contains general provisions with which all securities issuance must comply, irrespective of the instrument issued.

1. To communicate the issue to the CNMV (National Securities Market Commission), furnishing the documents evidencing the issue resolution, the characteristics of the securities issued and the rights and obligations of holders.
2. To have the company's annual accounts audited.
3. To publish a prospectus with the information needed for investors to come to a well-founded decision on the investment proposed to them. This prospectus should be filed with the CNMV.

TABLE 8

## LOANS BY CREDIT INSTITUTIONS TO NON-FINANCIAL CORPORATIONS

	1997	1998	1999	2000
A. Loans to non-financial corporations (flow)	19,459	25,524	29,962	46,533
B. Loans to non-financial corporations (stock)	178,109	201,969	232,163	278,165
A/Memorandum item 1)(%)	32.8	31.3	25.7	24.1
B/Memorandum item 2)(%)	17.7	16.3	15.5	16.5
<b>Memorandum item:</b>				
1. Net incurrence of liabilities (flow)	59,302	81,598	116,728	189,132
2. Total liabilities (stock)	1,005,084	1,242,150	1,498,853	1,687,304

Source: Banco de España Financial Accounts of the Spanish Economy.

On the supply side, several regulatory changes (5) enacted in 1998 paved the way for subsequent private bond issues and capital increases by making the issuance process more flexible, simpler and cheaper, and by extending the range of instruments available. Specifically, the rules introduced the short-form programme prospectus, which enables several issues to be made without having to submit a complete prospectus for each specific issue, and eliminated the prospectus for admission to listing. Moreover, the registration of capital increases has been made possible before they are actually carried out, envisaging the issuance of several types of shares (callable, non-voting stock, preferred dividend stock and preference stock). In addition, the extension of the regulations on asset securitisation (6) added greater flexibility to securitisation operations and widened the range of assets susceptible to securitisation. That said, the effectiveness of these regulations has been limited as yet since the weight of asset securitisation in Spain is less than that in other more developed markets.

On the demand side, the inclusion from 1999 first, of fixed-income securities issued by private companies, and further, of tier-two loans of a certain amount acting as collateral for the ESCB's operations to inject liquidity into the Eurosystem, has boosted the demand for these types of securities by credit institutions. Furthermore, the tax arrangements applicable to fixed-income issues by private companies (which exempt corporations from withholdings on the returns obtained, placing such returns on the same footing as government debt) have boosted the demand for these instruments.

#### 3.2.2.1. COMMERCIAL PAPER ISSUES

Commercial paper is conceived as a short-term financing instrument. The issuance of commercial paper maturing at over eighteen months entails a greater obligation of registration with the CNMV (Order dated 28/5/1999). The LSA stipulates no special regulation for its issue, whereupon it depends on the decision of the Board of Directors. Commercial paper issues can be auctioned directly or their placement negotiated with a bank that undertakes to sell them to its clients.

#### 3.2.2.2. BOND ISSUANCE

· The issuance of bonds by a public limited company shall be approved by its shareholders in general meeting, which may delegate this power to the Board of Directors, except in the case of convertible bonds.

- The LSA stipulates that the book value of the total volume of bonds outstanding may not exceed the book value of own funds (capital plus reserves, including legally authorised asset revaluations) per the balance sheet.
- A bondholder syndicate shall be set up to ensure holders' interests are protected.
- Habitually, these bonds are amortised under the so-called "French system", involving a constant repayment and interest instalment. The sinking fund method that is habitual in the US is rarely applied. Another variant is the zero-coupon issue, where the securities are acquired for their face value (or below it) and are amortised with different premia according to the repayment period. The interest payments are made on the debt maturing.

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(5) Royal Decree 2590/1998 on amendments to the legal regime governing securities markets and Law 37/1998 reforming the LMV.

(6) Royal Decree 926/1998, of 14 May.

**NON-EQUITY SECURITIES OF NON-FINANCIAL CORPORATIONS RESIDENT IN SPAIN**

TABLE 9

EUR m, % and units.

	1997	1998	1999	2000
<b>A. Net issues (EUR m):</b>	<b>-834</b>	<b>-533</b>	<b>2,544</b>	<b>-2,875</b>
Short-term	164	430	1,144	-4,149
Medium- and long-term	-999	-964	1,400	1,274
<b>Issues as % of net incurrence of liabilities (A/Memorandum item 1)</b>	<b>-1.4</b>	<b>-0.6</b>	<b>2.2</b>	<b>-1.5</b>
<b>B. Stock outstanding (EUR m):</b>	<b>21,022</b>	<b>20,611</b>	<b>23,463</b>	<b>21,317</b>
Short-term	5,529	5,921	7,180	3,099
Medium-and long-term	15,493	14,690	16,283	18,218
<b>Stock of securities as % of total liabilities (B/ Memorandum item 2)</b>	<b>2.1</b>	<b>1.7</b>	<b>1.6</b>	<b>1.3</b>
<b>C. No. of issuers (a)</b>	<b>n.a.</b>	<b>9</b>	<b>10</b>	<b>7</b>
Short-term	n.a.	6	5	4
Long-term	n.a.	5	8	6
Memorandum item:				
1. Net incurrence of liabilities (flow)	59,302	81,598	116,728	189,132
2. Total liabilities (stock)	1,005,084	1,242,150	1,498,853	1,687,304

Sources: CNMV and Banco de España (Financial Accounts of the Spanish Economy)

(a) Understood as those whose net issues are positive.

The data in table 9 show that issues by resident companies of non-equity securities in recent years have not grown. Net issues from 1997 to 2000 were negative except in 1999. In the case of fixed-income securities issues, these accounted in 2000 for -1.5% of total financing received (net incurrence of liabilities in National Accounts terms). And in stocks, fixed-income securities accounted that same year for 1.3% of total liabilities. In addition, regard should be had to the great concentration in the use of this channel of financing: only 7 companies obtained net positive financing in the period 1999-2000. Of these, 4 accounted for 75% of the total volume of such financing.

In sum, the information available suggests that the strong increase in fixed-income issues has been concentrated in a small number of large corporations which, circumstantially, have needed large volumes of financing. In any event, the number is not significant relative to the total aggregate of non-financial corporations. The evidence indicates that, despite the changes enacted by the government to create a setting more conducive to issuance activity, other structural factors that take a long time to work through (such as the fragmentation of the industrial apparatus, asymmetrical information problems or Spanish banks' lending policy) continue to constrain the growth of this market.

### 3.2.2.3. ISSUANCE OF ORDINARY SHARES

The issuance of ordinary shares is the commonest form of finance on incorporating and increasing the capital of public limited companies (Chapter 2 of the main body of the study discusses the importance of this type of corporate form in Spain). The specific aspects of company incorporation are included in the LSA, which stipulates the minimum capital stock for a Spanish public limited company at EUR 60,100.

In the Spanish financial system, all capital increases are undertaken via privileged subscription (rights issues), i.e. acknowledging the right of the previous shareholders to subscribe to the

new shares issued. The LSA declares rights issues inapplicable when the capital increase is the result of the conversion of bonds into shares, of the take-over of another company, of part of the assets spun off another company, or of the purchase of shares via a takeover bid.

The price at issue of new shares should be lie between the minimum limit of the face value, for legal reasons, and the maximum limit of the market price, for economic reasons.

To conduct a capital increase the LSA and the LMV impose a series of requirements on a company that must be met so as to ensure the operation is carried out with the proper mercantile and financial safeguards. Those demanded by the LSA are as follows:

1. Approval of the capital increase by the shareholders in general meeting, which may delegate the power to increase capital to the directors, under the terms specified by the law.
2. Acknowledgement of the right of previous shareholders to subscribe preferentially to the new shares in proportion to the number of shares they hold at the time of the increase, over a period of no less than one month, with the aforementioned qualifications and exceptions. Recent regulatory changes (7) have made for more flexible treatment of the waiving of pre-emptive rights, thereby prompting an increase in the number and volume of capital increases.
3. If the capital increase comes about through a public subscription offering, the subscribers of new shares must be provided with a “subscription bulletin” featuring the key data on the increase and on the subscription made.
4. Registration in the Mercantile Register in accordance with the capital increase and its execution.
5. Minimal disbursement of 25% of the face value at the time of the increase being made.

#### 3.2.2.4. ISSUANCE OF NON-VOTING STOCK AND PRIVILEGED SHARES

Public limited companies have the option of issuing non-voting shares that are entitled to a minimum dividend. This minimum dividend should be envisaged in the company’s by-laws and may not be less than 5% of the capital paid in for each non-voting share.

The LSA also provides for the issuance of shares conferring privileges in respect of ordinary shares.

#### 3.2.2.5. PUBLIC SHARE OFFERING (PSO)

PSOs are regulated in Spain by Royal Decree 291/1992, of 27 March, on share issues and public offerings. The content of this legislation is consistent with the associated Community provisions and, specifically, with the terms of Directive 89/2998/EEC on issue prospectuses. This

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(7) Article 159 of the LSA authorised the exclusion of pre-emptive rights under compliance with certain conditions. Subsequently, Laws 37/1998 and 50/1998 enabled listed companies to exclude and moreover issue for a lower-than-actual (listed) value.

legislation defines them as “the offer to the public of negotiable securities on national territory, on behalf of the issuer or a third party, and whose issuance is not subject to compliance with all the requirements envisaged for securities issuance, or had taken place more than two years prior to the date of the public offering”. Subsequently, this Royal Decree was amended by Royal Decree 2590/1998 to introduce an improvement in relation to the undertaking of advertising activities.

The PSO is used for the stock market launch of companies offering their shares to the public. It may or may not be done with a simultaneous capital increase (which is deemed to be a public subscription offering and, as such, is included in national statistics). It is one of the most commonly used instruments for the privatisation of state-owned firms. The main features of a PSO are as follows:

- The public offering is usually associated with the sale of listed shares or shares which, after the operation, will be admitted to listing.
- An initial nominal amount is usually set for the offering, which in some cases may be increased depending on the call options that the underwriting institutions or financial intermediaries intervening in the operation can exercise (green shoe) or on the indication of the offeror.
- The offering may be distributed in different tranches whose size is determined a priori or a posteriori by the offeror, depending on demand:
  - National or international
  - Retail or institutional. Within the retail tranche, in some cases, a tranche for employees is additionally set aside.
- The following figures should be identified in a PSO:
  - Overall co-ordinators: these co-ordinate the offering in all its tranches.
  - Agent: makes collections and payments, carries out pro rata allocations and represents the offeror before non-associated placement institutions.
  - Underwriters: they enter into a commitment to place and underwrite the offering.
  - Syndicate: grouping of institutions involved in the operation.
- Three types of commission payable to the foregoing institutions are defined: management, underwriting and placement.
- There is a standard calendar for these operations.

#### 3.2.2.6. ISSUANCE OF EQUITY UNITS

The predominant form of legal entity in Spain is the private limited company, as reported in Chapter II of the main text of this study. This type of company, along with the other legal forms (co-operatives, general partnerships, limited partnerships, commercial and industrial agencies, public entities), issues equity holdings or units. The step-up in recent years in the crea-

tion of companies – in particular private limited companies – means that it is the issue of equity units along with that of unlisted shares, the predominant means of financing on the primary markets, to which non-financial companies and, especially, SMEs resort (see table 10). Much of the regulation governing private limited companies derives from the rules for public limited companies, although there is a specific law. The main differences between both sets of rules, as far as the content of this document is concerned, relate to:

1. The minimum amount required to incorporate a private limited company is ESP 500,000 (EUR 3,000), compared with ESP 10 million (EUR 60,000) in the case of public limited companies. This amount must be fully paid in (unlike public limited companies, where a minimum of 25% of the face value has to be paid in).
2. The law expressly stipulates that equity units of private limited companies shall not be considered as securities (8), and they may not be represented in the form of securities or book entries.
3. The transfer of equity units is subject to a series of requirements that make it practically impossible to trade them. That explains why there can be no secondary market for this instrument. Private limited company status, as stated in the preamble of the law regulating them, is specifically intended for small-sized undertakings.

Table 10 shows the growing increase in the issuance of variable-yield securities (shares and other equity in National Accounts parlance). The substantial volume of listed share placements that has contributed to the significant increase in the size of Spanish stock markets was due in 1997 and 1998 to the public offerings of securities arising from privatisation, and in 1999 and 2000 to the subscription operations of a small number of listed companies with high financing requirements. These latter requirements were attributable both to the processes of international expansion and mergers and acquisitions undertaken and to the costs of acquiring UMTS licences in the case of telecommunications companies. The issuance of listed shares finally accounted for 9.6% of the total financing received by non-financial corporations in the year 2000.

Drawing on the overall information provided by the financial accounts of the Spanish economy, the main sources of financing have been loans arranged with credit institutions, trade credit and, especially, the issuance of unlisted shares and other equity, in step with the greater number of companies that issue these securities.

### **3.3. Official secondary markets**

#### *3.3.1. Official secondary markets. Traded securities*

Strictly speaking, the secondary markets are not a financing channel for non-financial corporations. However, without them the existence of the primary markets for financing would not be possible, since it is the former which give the system its liquidity and make the purchase of financial assets more attractive to investors, insofar as investors can convert such assets into liquidity when they so require.

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(8) Mercantile law stipulates that equity units are not considered to be securities. The essentially juridical basis of this legislative precept lies in the impossibility of the equity units being represented in the form of securities or book entries. From the economic and macroeconomic-analysis standpoint, equity units, along with other representative forms of shareholders' claims in respect of a company's net worth, come under the category "securities" (caption AF.5 in National Accounts).

TABLE 10

**SHARES AND OTHER EQUITY OF NON-FINANCIAL CORPORATIONS RESIDENT IN SPAIN.  
BREAKDOWN OF PUBLIC SHARE OFFERINGS**

EUR m

	1997	1998	1999	2000
<b>A. Shares and other equity (net flow)</b>	<b>10,016</b>	<b>13,999</b>	<b>29,714</b>	<b>75,031</b>
Listed shares	326	1,378	8,021	18,105
Unlisted shares	3,426	5,141	10,401	44,756
Equity units	6,265	7,479	11,292	12,170
<b>As a proportion of incurrence of liabilities (A/Memorandum item 2.a)</b>	<b>16.9</b>	<b>17.2</b>	<b>25.5</b>	<b>39.7</b>
<b>B. Shares and other equity (stock)</b>	<b>489,737</b>	<b>659,927</b>	<b>825,778</b>	<b>895,670</b>
Listed shares	136,900	192,829	270,429	276,396
Unlisted shares	252,981	370,140	435,095	482,813
Other equity	99,856	96,958	120,254	136,461
<b>As a proportion of total liabilities (B/Memorandum item 2.b) (%)</b>	<b>48.7</b>	<b>53.1</b>	<b>55.1</b>	<b>53.1</b>
<b>Memorandum item 1:</b>				
<b>Public Share Offering (PSO)</b>	<b>10,652</b>	<b>11,072</b>	<b>5,042</b>	<b>2,695</b>
Privatisation	9,852	10,857	772	0
Other	800	215	4,270	2,695
<b>Memorandum item 2:</b>				
a. Net incurrence of liabilities (flow)	59,302	81,598	116,728	189,132
b. Total liabilities (stock)	1,005,084	1,242,150	1,498,853	1,687,304

Sources: CNMV and Banco de España (Financial Accounts of the Spanish Economy)

The official secondary markets in Spain are regulated by the Securities Market Law (SML) (Law 24/1988) and complementary provisions, amended by Law 37/1998, which transposed Directive 93/22/EEC, of 10 May 1993, on investment services in the area of negotiable securities, into Spanish law. Essentially, the following specific aspects were introduced by this legislation:

- The right of all investment services firms to have access to any EU state as a member and, likewise, to have access to or membership of clearing and settlement systems.
- To extend the category of securities to other financial instruments present in our markets.
- To distinguish between regulated (including official secondary markets) and unregulated markets, which is crucial for the design of the operating arrangements for the single securities market.

Several kinds of fixed-income and variable-yield securities are traded on the Spanish secondary markets, issued by corporations and public entities (the State and other official agencies). Corporations mainly issue commercial paper, ordinary and convertible bonds, and shares. A distinction should be drawn between the following secondary market segments:

- The private fixed-income stock market.
- The AIAF (Spanish Securities Dealers' Association) fixed-income market, specialising in the trading of private fixed-income securities and "matador" bonds.
- The government debt book-entry market specialising in the trading of government debt securities.

TABLE 11

## STOCK MARKET TURNOVER

	EUR m			
	1997	1998	1999	2000
<b>Equity market (a)</b>	163,261	261,276	291,975	492,980
<b>Market capitalisation (Madrid Stock Exchange)</b>	214,039	295,157	383,403	414,961
Of which, new technologies	-	-	-	23,835
<b>Fixed-income market (b)</b>	54,217	53,148	44,718	39,692
Government debt	21,890	603	160	73
Regional government debt	30,043	51,791	42,858	38,723
Other	2,284	754	1,700	896

Sources: Madrid Stock Exchange management company, Spanish stock markets and CNMV.

(a) Includes financial and non-financial corporations.

(b) Effective volumes.

Regarding the secondary markets for equity, the SML, via the so-called first market, “new market” and second market, confers exclusivity rights on the Spanish stock exchanges for the trading of this type of security. Securities traded on the official secondary markets may be in the form of securities or, what is currently more usual, in book-entry form, a computerised accounting entry of the rights conferred by the securities to which they refer.

The SCLV (Securities Clearing and Settlement Service) is the Spanish central securities depository. It is entrusted with the accounting record of book-entry securities and the exclusive management of transactions entered into on Spanish stock markets, on the AIAF fixed-income market and on the Market for Latin-American securities (Latibex). All matters relating to the SCLV are regulated “without prejudice” to the authority of the Spanish Regional (Autonomous) Governments.

### 3.3.2. The stock market in the Spanish financial system

#### 3.3.2.1. ORGANISATION

The securities stock exchanges are the mainstay of the secondary market. The exchanges are institutions that provide economic agents with the infrastructure and facilities needed to trade both bonds and equities. In Spain the exchanges are created and regulated by law, following the model of the Germanic and Latin countries rather than the Anglo-Saxon model, where stock exchanges are the result of the private association of their members:

- There are Stock Exchanges in Madrid, Barcelona, Bilbao and Valencia, with substantial differences in size. Each Exchange is governed by a Management Company, which is in the form of a public limited company and whose shareholders are the members of the Exchange. The management companies oversee and manage the Exchanges, seeking to ensure their members comply with regulations. They steward the daily functioning of the stock market by means of the Trading Commission.
- The Exchange members – essentially agency brokers and securities-dealer companies – are legal entities that can buy or sell directly on the Exchange. Any individual or

corporation that is not a member of the Exchange can conduct purchases and sales via a market member. Dealers can transact operations acting as a principal or on account of third parties. Brokers can only do the latter.

- Securities market supervision and inspection are entrusted to the CNMV (National Securities Market Commission), a public agency with its own legal personality that is governed by a Council designated by the Government and the Ministry of the Economy. The CNMV has to ensure that the securities markets evidence transparency and proper price-setting.
- In accordance with the provisions of the SML, the four Stock Exchange Management Companies set up a Stock Exchange Company which created the Exchange Interconnection System for automated quotation (SIBE) or the “continuous market”. As regards non-financial corporations, approximately half of all issuing companies are listed. As can be seen in table 12, the continuous market concentrates the biggest volume of trades.
- Further to an Order issued by the Ministry of Economy and Finance on 22 December 1999, a specialised new market for stock exchange trading was created. Duly named “New Market” (NM), it commenced operating on 10 April 2000. The reasons behind this were the fact that the legal framework previously in place was insufficient to cover high-technology firms’ financing requirements.
- There is a second market geared to small and medium-sized companies in which admission and listing requirements and the subsequent periodic information involve less demanding obligations. To date, the second market of the Spanish bourses is very small.
- The registration for accounting purposes of securities admitted and not admitted to trading on the Stock Exchanges and the management of the clearing and settlement of securities and of cash arising from the trading of stock market transactions is entrusted to the above-mentioned Securities Clearing and Settlement Service (SCLV by its Spanish name). The capital of the SCLV is held by the management companies of the various Spanish exchanges and member entities.

### 3.3.2.2. SECURITIES TRADING SYSTEMS

On the basis of how they are transacted, stock market operations can be classified as normal market operations, on one hand, and special and exceptional operations on the other. Normal market operations are conducted through the interaction of supply and demand via trading systems habitually organised and purpose-designed by the Stock Exchanges, and which give rise to official prices or quotes. There are three trading systems for these normal operations:

- Continuous market: the main trading system (see table 12).
- Traditional ring-trading or open outcry system.
- Electronic Fixed-Income System: for the trading of fixed-income securities and warrants.

TABLE 12

## VOLUME OF EQUITY TRADES: EXCHANGE INTERCONNECTION SYSTEM AND RING TRADING

	EUR m			
	1997	1998	1999	2000
<b>Exchange Interconnection System</b>	<b>160,937</b>	<b>257,844</b>	<b>286,046</b>	<b>488,863</b>
<b>Ring trading:</b>	<b>2,234</b>	<b>3,432</b>	<b>5,929</b>	<b>4,118</b>
Madrid Stock Exchange	1,502	2,564	4,631	2,846
Barcelona Stock Exchange	483	375	865	631
Bilbao Stock Exchange	237	283	182	256
Valencia Stock Exchange	102	211	251	385
<b>Total</b>	<b>163,261</b>	<b>261,276</b>	<b>291,975</b>	<b>492,981</b>

Source: Stock Exchange Company and management companies of the Stock Exchanges.

Special and exceptional operations are traded both on the Continuous Market, under the Special Operations Market module, and in ring trading. The operations are called “special” because they are transacted outside the trading systems and at a different time. Subsequently, they are communicated to the Stock Exchange supervisory bodies, for the market’s information. They must meet the following requirements:

- The price shall not be more than 5% higher or lower than the highest or lowest closing exchange rates or weighted average exchange rate.
- The amount shall not be less in equity securities than 300,000 euro (this is also so for fixed income), or 20% of the average daily effective amount traded in the last calendar quarter in the case of continuous market trades, or 120,000 euro and 25% in the event of ring trading. In both systems there are two limitations to the execution of transactions: the first is related to price swings – both up and down – in each session, which are limited: the second involves the volume of transactions, for which a limit is also defined.

Exceptional operations are also arranged outside the trading systems, but their execution requires express authorisation from the Stock Exchange supervisory bodies. Minimum volumes must exceed 1.5 million euro if securities quoted on the continuous market are involved (300,000 euro in the case of ring trading) and 40% of the average effective amount traded in the last calendar quarter.

If a company, a group of companies or a group of individuals is intending to acquire a significant interest in a corporation, a special situation arises leading to the formulation of a takeover bid (OPA by their Spanish name). OPAs are conducted outside the stock market and have their own specific regulations (RD 1197/1991). Subsequent Royal Decrees, the latest being RD 1676/1999, of 29 October, have amended the former in order to eliminate certain regulatory costs, but without detracting from the safeguards for investors in the company targeted by the takeover bid.

### 3.3.2.3. INVESTOR SAFEGUARD REGULATIONS

Securities-dealer companies and agency brokers, securities issuers and all market participants are subject to a series of obligations geared to protecting investors. Spanish regulations

oblige securities issuers to provide the stock markets with regular information: twice yearly they must disclose their complete financial statements, and quarterly they must give a preliminary estimate of yearly earnings. As promptly as possible they must also report any event or decision that may appreciably influence the price of the securities they have issued. They are further bound to annually audit their accounts and report both on their significant holdings in other listed companies and on their holdings and purchases of own shares.

#### 3.3.2.4. CONDITIONS FOR THE STOCK MARKET LISTING OF A COMPANY'S SHARES

Conditions differ according to the type of securities it is sought to have listed. At the time of this paper being drafted, a distinction is drawn between traditional securities and the shares of companies related to the new technologies or high-growth industries. Different conditions again must be distinguished for the second market (that for SMEs).

- I. For traditional securities, certain legal, financial and reporting requirements must be met for stock market listing:

*Legal requirements:*

- Regular situation of the company from the legal standpoint. The company should have been operating for at least two years.
- Freely tradable shares.
- The number of shareholders with a holding of less than 25% of capital stock shall be equal to or higher than 100.

*Financial requirements:*

- Minimum capital: minimum capital stock of 200 million pesetas (1.2 million euro), without counting in this figure the capital of the shareholders who have a stake equal to or greater than 25%.
- Minimum profitability in recent years: the 1967 Stock Market Regulations established the requirement of profits in the two prior years or in three of the past five years. Subsequently, this stipulation was reformed by means of the Ministerial Order of 19 June 1997, and compliance with any of the following circumstances was set in its place:
  - Justification, by the issuer, of profits being obtained in the coming years. The Ministerial Order of 22 December replaced this requirement with that involving the filing by the issuing entity with the CNMV of a report on its business and financial prospects and the consequences of this for earnings over the coming years.
  - That the issuing entity should have been incorporated as the result of a merger, spin-off or contribution of a branch of activity.
  - That the issuer is undergoing reorganisation or economic restructuring or privatisation by a state-owned entity.

*Reporting requirement:*

- To have disclosed its financial statements for the three years prior to the application for listing.
2. The so-called New Market: forum for trading of the securities of companies in innovative high-technology sectors or in other sectors offering great possibilities of future growth. The market is regulated by the Ministerial Order of 22 December 1999. The CNMV Circular 1/2000, of 9 February, implemented the most specific aspects of the listing and permanence of accepted securities, and established trading rules.

This market is characterised by its listing and reporting transparency rules, which are better fitted to the particularities of the types of companies involved. The Spanish “New Market” came on stream on 10 April 2000. It differs from the traditional stock markets in the following significant respects:

*Admission to listing:*

- Filing of a report from the issuing company on business and earnings prospects for the coming years.

*Reporting transparency:*

- Greater reporting transparency is required, which is attained through the description, in the prospectus for admission to listing, of the risks associated with the company’s activity; the disclosure of the lock-ups affecting shareholders with significant stakes; and, at least once a year, the publication of a report on the business performance and outlook for the future. In addition to the disclosure of lock-ups, that of the position of such shareholders in future capital increases is required.

*Price fluctuation:*

- Given the greater volatility of the prices of these shares, fluctuation limits are wider than on the traditional stock markets. Specifically, there are no limits in the case of the first listing and, subsequently, it is set at 25% (which can be extended during the session) against 15% on the traditional market.

## 3. The second market for securities

For listing, corporations must apply to the CNMV and to the related Stock Exchange Management Company, complying with the following requirements:

- Minimum paid-in capital and reserves not less than 25 million pesetas (150,250 EUR)
- Full audit of the company by acknowledged experts.
- Contract with a counterparty company to smooth the supply of securities and money to the market.
- The audited annual report, balance sheet and profit and loss account shall be sent annually to the CNMV and Stock Exchange Management Company.

- Trading is under special ring-trading arrangements whose results are disclosed separately in the Official Trading Bulletin.

### 3.3.2.5. CONDITIONS FOR THE SUSPENSION AND EXCLUSION FROM THE STOCK MARKET OF A COMPANY'S SHARES

#### *Grounds for suspension:*

The CNMV may suspend the trading of a company's shares on the Spanish stock exchanges in the event of:

- Special circumstances that may disturb the normal conduct of transactions or that may advise suspension with a view to protecting investors.
- The company failing to meet its periodic reporting obligations.
- A takeover bid being made against the shares of the company.

#### *Grounds for exclusion:*

- The CNMV can rule that the market listing of those shares whose dissemination, frequency and volume of trading does not reach set minimum limits be excluded. Exclusion may also be requested by the company that issued the shares. In this case, if the CNMV considers that exclusion may impair the legitimate rights of the shareholders, it may turn down the request or make it conditional upon the presentation of a takeover bid.

### 3.3.3. Other official secondary markets

#### 3.3.3.1. (SPANISH SECURITIES DEALERS' ASSOCIATION) FIXED-INCOME OFFICIAL SECONDARY MARKET

- The Ministerial Order of 1 August 1991 recognises the AIAF as an official secondary market for national securities on which commercial paper, medium- and long-term private fixed-income securities (commercial paper, mortgage certificates, mortgage bonds and other mortgage certificates) and "matador" bonds are traded. A Ministerial Order of 27 July 1995 approved the conversion of AIAF into a plc, authorising its articles of incorporation in the light of its future transformation into an official market.
- The market is open (all types of financial intermediaries can operate directly on it), decentralised and flexible.
- Transactions are mainly between wholesalers, whereby the market is notably liquid for large-value operations but not for operations of small amounts, since the minimum trade is 25 million pesetas (EUR 150,250)
- Securities listing rules on this market are similar to those set for trading on fixed-income securities markets.
- The registration, clearing and settlement service for Spanish private fixed-income instruments listed on the AIAF market was run by the company Espaclear S.A. until 1 January 2000, at which point it was absorbed by SCLV (Securities Clearing and Settlement Service, S.A.), which took over all of Espaclear's former activities.

TABLE 13

## TURNOVER ON AIAF

	EUR m			
	1997	1998	1999	2000
<b>Fixed-income AIAF market (a)</b>	21,173	43,120	86,269	99,826
Commercial paper (b)	4,447	7,935	25,284	46,425
Bonds certificates and other securities (b)	10,950	28,761	58,572	52,189
"Matador" bonds	5,776	6,424	2,413	1,212

Source: AIAF

(a) Nominal volumes.

(b) Securities issued by credit institutions and non-financial corporations.

## 3.3.3.2. THE PUBLIC DEBT BOOK-ENTRY MARKET

- This is an official market on which public debt in the form of book entries is traded. The Central Depository and the Securities Clearing System of the Spanish Public Debt Book-Entry Market, with which all securities listed on this market are registered, is called CADE. The Banco de España, through the book-entry system, is the market's governing body and manages CADE which, as it is a department within its organisation, lacks legal personality.
- CADE is a real-time settlement system that manages debt issues, their redemption, interest payments and transaction balance transfers on the secondary market.
- The market members are financial institutions, who may operate on their own account or on behalf of third parties.
- On 7 June 2000 the Banco de España and the SCLV set up a new company called "Promotora para la Sociedad de Gestión de los Sistemas Españoles de Liquidación, S.A.". The company's corporate purpose was to study, prepare and promote the legal, organisational and technical changes needed to unify the clearing, settlement and registration systems currently entrusted to the book-entry system and to SCLV. This integration is open to the regional central depositories (Barcelona, Bilbao and Valencia), and to the registration and settlement system for the derivatives markets (MEFF), if they decide to participate. The commercial name of the company created is "IBERCLEAR", and its capital is 55%-held by the SCLV and 45%-held by the Banco de España.

TABLE 14

## TURNOVER ON THE PUBLIC DEBT MARKET

	EUR m			
	1997	1998	1999	2000
<b>Public debt book-entry market (a)</b>	12,352,112	14,478,979	13,109,675	13,788,917
Spot (b)	1,700,197	1,747,709	1,817,465	1,585,460
Repos	10,577,350	12,676,285	11,254,309	12,186,364
Forward (b)	74,565	54,985	37,901	17,903

Source: Banco de España

(a) Includes only transactions with government securities.

(b) Nominal volumes.

TABLE 15

## DERIVATIVE MARKETS

	<b>Fixed income: MEFF-Fixed income</b>	<b>Equities: MEFF-Equities</b>	<b>Commodities: Citrus Fruit</b>
<b>Futures</b>	Interest rate futures: <ul style="list-style-type: none"> <li>· MIBOR 90 days</li> <li>· MIBOR 360 days</li> <li>· 5-year notional bond</li> <li>· 10-year notional bond</li> <li>· 30-year notional bond</li> </ul> Interest rate spread futures: <ul style="list-style-type: none"> <li>· DIFF contract (1)</li> </ul>	Index futures: <ul style="list-style-type: none"> <li>· IBEX 35</li> </ul> Individual equity futures.	Futures contracts on navel- navelina and Valencia-late oranges
<b>Options</b>	Futures contracts options: <ul style="list-style-type: none"> <li>· MIBOR 90 days</li> <li>· 5-year notional bond</li> <li>· 10-year notional bond</li> <li>· 30-year notional bond (US options)</li> </ul>	Index options: <ul style="list-style-type: none"> <li>· IBEX 35 (European options)</li> </ul> Equity options: <ul style="list-style-type: none"> <li>· Shares of several listed companies (US option)</li> </ul>	

Source: MEFF

(1): Disappeared in 1999.

- On 18 October 2000 the Board of Directors of IBERCLEAR adopted the decision to use the technical platform lending support to the public debt book-entry system to implement the incorporation of national private fixed-income securities listed on the four Spanish stock exchanges and on the AIAF fixed-income market. And this without prejudice to initiating measures allowing, as soon as possible, the unification of the management of the fixed-income and variable-yield systems with the very means of the future Management Company to be set up once legal and technical considerations allowed.

### 3.4. The official derivatives markets

The Spanish financial derivatives markets are currently organised by MEFF HOLDING, S.A. This company holds the shares of another two corporations: MEFF fixed income and MEFF equities. MEFF Holding came into being in 1992 as the result of the merger of MEFFSA (Spanish Financial Futures Market) and MOFEX (Spanish Financial Options Market). The merger has helped streamline the derivatives market, with MEFF fixed income looking after the trading of bond futures and options, and MEFF equities the trading of equity futures and options. On 8 September 1995 the Valencia Citrus Fruit and Commodities Futures Market commenced operating, trading orange futures.

The main organisational functions of these companies in respect of the derivatives markets are as follows:

1. They define the types of contracts traded.
2. They determine which agents can operate directly on the market.

TABLE 16

## TURNOVER ON MEFF DERIVATIVES MARKETS

EUR m

	1997	1998	1999	2000
<b>MEFF derivatives markets (a)</b>	<b>3,286,810</b>	<b>2,668,336</b>	<b>966,975</b>	<b>689,214</b>
Fixed income	3,012,658	2,111,985	378,065	109,655
Short-term	1,631,754	1,125,422	20,262	205
Medium- and long-term	1,380,904	986,543	357,803	109,450
Equity	274,152	556,351	588,910	579,132
Ibex 35	270,719	549,329	574,109	549,132
Individual options	3,433	7,022	14,801	30,462
<b>Financial derivatives markets (no. of contracts in thousands)</b>				
Financial futures (b)				
3-year notional bond	3	-	-	-
5-year notional bond	6	27	-	-
10-year notional bond	12,649	9,413	3,615	1,095
Mibor 90	1,480	1,134	13	-
Mibor 360	48	20	-	-
IBEX-35	3,638	5,185	5,102	4,183
Price spreads (c)	10	3	-	-
Financial options (b)				
3-year notional bond	-	-	-	-
5-year notional bond	-	-	-	-
10-year notional bond	1,541	648	1	-
Mibor 90	241	91	2	-
IBEX-35	848	1,010	861	766
Equities	1,485	2,695	8,092	16,581

Source: MEFF

(a) Volumes are expressed in monetary units. They have been obtained by multiplying the number of contracts traded by their size.

(b) The 1997 and 1998 data have been adjusted to the new face value of the contracts.

(c) There are three contracts: the German Diff, the French Diff, and the Italian Diff.

3. They act as a clearing house between buyers and sellers.
4. They set the guarantees demanded of agents assuming future commitments.

The following table offers a schematic presentation of the official derivatives markets in Spain and the contracts traded on them.

The integration of euro area money markets and the elimination of foreign exchange risk have led to stiffer competition among European derivatives markets by appreciably increasing the inter-substitutability of fixed income-linked products traded on these markets. Against this background, the markets have reacted by establishing alliances and, in some cases, modifying their functional structure. The Spanish, French, Portuguese and Italian markets thus entered into an alliance called Euro-Globex, which is the European arm of the worldwide Globex futures market, in which the US CME market also participates.

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ANNEX V

**INSOLVENCY LAW IN FRANCE AND SPAIN**

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## **1. INTRODUCCIÓN**

The insolvency law has direct influence in the recovery of debts by creditors. The level of capitalisation of companies and the level of debts, specially banking debts, tend to depend directly on the legal conventions concerning the degree of protection of creditors' rights provided by the national insolvency procedures.

The insolvency laws in France and Spain are very similar, and in both countries pursue the same objective: to save companies in difficulty and give them the possibility of continuity. This objective has priority over the detrimental effect on creditor rights.

This institutional factor can contribute to explain the high level of capitalization of the industrial companies in the two countries.

Next, there is a summary of the insolvency procedures in each country so that the reader interested can know them.

## **2. INSOLVENCY PROCEDURES IN FRENCH LAW**

### **2.1. Introduction**

The overhaul of the law on companies in difficulty was instigated by Act 84 148 of 1 March 1984, governing «prevention and out-of-court settlements for companies in difficulty»

If preventive measures do not succeed, and the company's available assets are not sufficient to meet its payables, the firm is technically insolvent. Recovery proceedings are then initiated, pursuant to the provisions of Act 85-98 of 25 January 1985 on corporate recovery and liquidation.

Act 94-475 of 10 June 1994 was introduced to make the use of prevention more attractive. It thus bolstered early warning mechanisms and reorganised the procedure for out-of-court settlements. The reform centred on:

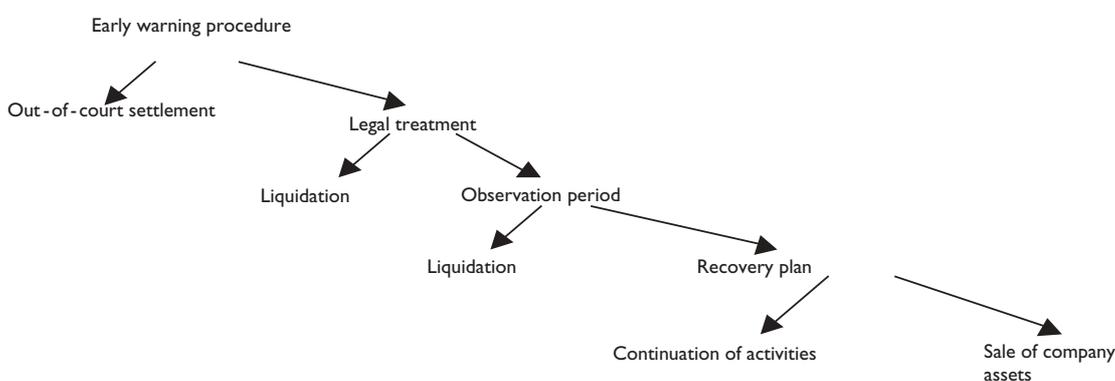
- modernising the procedure through greater transparency and tighter ethical standards for business reorganisations and disposals,
- restoring creditors' rights, and hence the confidence of credit institutions – an important consideration often justified by the need to encourage business lending.

The French system for dealing with struggling companies is based on a two-fold procedure. Before payments are suspended, preventive steps must be taken to avoid failure either by anticipating difficulties, or by solving these problems by means of an out-of-court settlement. If prevention fails, a recovery procedure is then initiated, with a view to saving the ailing company.

(1) The basic objective of the French recovery procedure is to save companies in difficulty. Maintaining economic activity and hence safeguarding jobs is the second most important consideration, while satisfying creditors is the third (Biais and Mallecot, 1996). Although creditors' rights were considerably strengthened by the reform of 1994 (Act 94-475), creditor interests remain explicitly subordinated in French recovery and liquidation procedures.

(2) The fact that French insolvency law is geared primarily towards preventing liquidation is evidenced by the structure and sequence of the procedures.

#### STRUCTURE AND SEQUENCE OF FRENCH PROCEDURES FOR RECOVERY AND LIQUIDATION



## 2.2. Prior to suspension of payments

### 2.2.1. Early warning procedure

Act 84-148, introduced in 1985, provided for a special early warning procedure to be applied as soon as an enterprise shows clear signs of being in financial difficulty. This procedure essentially entails a legal obligation on the part of the company's external auditor (i.e. the statutory auditors), the works council, partners of limited liability companies and shareholders of public limited companies and of the president of the commercial court, in the case of commercial interest groups and sole traders, to draw the management's attention to looming financial problems without notifying a third party.

### 2.2.2. Out-of-court settlements

The same act introduced a procedure enabling companies to reach an out-of-court settlement with their creditors. This procedure may only be initiated by management. A request to initiate this procedure must be accompanied by proposals by management for tackling the company's difficulties. If the president of the court believes that the debtor's proposals will lead to recovery, out-of-court proceedings are opened and a conciliator is appointed. The out-of-court settlement procedure is opened for a maximum of three months, and may be extended by one

month at the request of the conciliator. The president of the court may announce a stay of proceedings to enable the parties to try and reach an agreement. This stay extends to all legal proceedings and all enforcement procedures by existing creditors.

Out-of-court proceedings are intended to an agreement between the debtor, who undertakes to adopt a number of measures to turn around the company, and its creditors, who consent to grant payment deadlines and partial debt forgiveness, in order to avoid court-ordered debt enforcement. If the enterprise fails to reach an out-of-court settlement with its creditors and is no longer able to meet its obligations, it is technically insolvent.

### **2.3. Legal treatment of difficulties**

If an insolvent enterprise fails to reach an out-of-court settlement with its creditors and the company's available assets are not sufficient to meet its payables, recovery proceedings can be initiated. Insolvency procedures are opened when payments are suspended.

#### *2.3.1. Opening recovery procedures*

Following a preliminary examination by a commercial or regional court, the recovery proceedings are declared open. This procedure was instituted under Act 85-98 of January 25 1985. It may either result in the liquidation of the enterprise (immediate judicial liquidation if there is no hope of recovery), or in the opening of an observation period.

#### *2.3.2. The observation period*

Under the *general procedure*, the observation period lasts for a maximum of six months but may be extended twice for a period of six months through a reasoned decision by the court, either on its own initiative, or at the request of the administrator, the debtor or the state prosecutor. Furthermore, under exceptional circumstances, it may be extended for a maximum period of eight months following a reasoned decision by the court, convened at the request of the state prosecutor, under Article L8 Paragraph 2.

Under the *simplified procedure* (applicable to companies with fewer than 50 employees and with a turnover of less than FRF 20 million, excluding VAT) the observation period lasts for four months and may be renewed once, for a further four months maximum following a reasoned decision by the court, either on its own initiative, or at the request of the debtor, the state prosecutor or the administrator, if one has been appointed, as per Article L140, Paragraph 1.

A court-appointed receiver (general procedure) or bankruptcy judge (simplified procedure) examines the company's balance sheet with a view to proposing a recovery plan. The firm's financial situation and recovery capacity are studied in detail in order to decide whether the firm should continue its activities or be disposed of. During this observation period, the company continues to operate and all proceedings against it are stayed in order to preserve the firm's economic potential.

This procedure substantially modifies the situation of the creditors, who no longer constitute a body with a legal personality possessing assets. They form a group whose interests are collectively defended by a court-appointed representative.

As of the order initiating the procedure, individual legal action by creditors and enforcement procedures are stayed. The rule, whereby claims arising prior to the initiating order may not be paid without special authorisation, continues to apply to unsecured and preferential creditors.

The employees of an insolvent firm are given more favourable treatment than other creditors. During the observation period, staff may only be dismissed for economic reasons under exceptional circumstances. The last six months' wages due before the order to initiate legal proceedings enjoy preferential payment rights over all movable or fixed assets. This also applies to compensation due for dismissals that took place before the order to initiate proceedings. The last sixty days' wages (to a limit of a monthly ceiling) must be paid within ten days of the opening of legal proceedings (reinforced rights of preference which contravene the principle of non-payment of existing claims). Wages due after the decision to open proceedings are paid as normal at their due date.

In order to encourage financing so that the company can continue its business, and for the allocation of credit after the opening of recovery proceedings, creditors whose claims arise after the decision to initiate proceedings enjoy preferential rights. Pursuant to Article 40, these claims are paid at their due date if the company continues to operate.

At the end of the observation period, an assessment of the enterprise's economic health and conditions is carried out, and a decision is made in favour of a recovery plan or judicial liquidation (continuation or disposal).

### 2.3.3. *The final stage*

The court-approved recovery plan lays down the terms and conditions for either the continued operation of the enterprise by the debtor, or its sale to a third party.

#### 2.3.3.1. RECOVERY

A plan for continued operation is however only approved if there is a genuine prospect of turning around the enterprise and of satisfying the claims of its creditors (Article 69). The debt owed to the creditors is restructured. Debtholders may agree to write off a portion of their loan and may also agree to reschedule payments. The continued operation of the firm may also be subject to the discontinuation, addition or disposal of certain business lines. The court may demand the replacement of one or more managers, if this is key to the survival of the company. During the application of the plan, the company director continues operations while honouring his commitments.

However, if continued operation by the debtor is impossible but recovery appears to be possible, disposal seems to be the most suitable means of ensuring that all or part of this business and jobs are saved and liabilities settled. In the event of partial disposal, and in the absence of a continuation plan for the company, the assets not included in the disposal plan are realised, as in the event of liquidation.

#### 2.3.3.2. LIQUIDATION

A company is liquidated either at the end of the observation period or without an observation period if the debtor's activity ceases or recovery is evidently impossible. In the liquida-

tion order, the representative of the creditors is appointed as liquidator. The order which opens or declares judicial liquidation bans the debtor from exercising his functions and orders a halt to company operations.

If the sale of the firm is ordered, the firm effectively disappears. The company's capital is entirely amortised and its debts are written off. The assets of the firm are sold. Proceeds from the sale of company assets are used to repay the creditors, who cannot necessarily expect their claims to be satisfied in full or even in part. Creditors share the proceeds from the sale in accordance with their ranking (precedence is given to creditors with reinforced rights of preference and new creditors).

The same priority ranking prevails in the case of court-ordered liquidation if there is no hope of rescuing the firm. On completion of the liquidation procedure, the debtor is discharged from his remaining liabilities. Unpaid creditors may only take individual legal action against the debtor in the case of fraud or personal bankruptcy. Debts are paid in the following order: creditors with reinforced rights of preference, secured creditors, unsecured creditors, holders of subordinated debt, shareholders.

#### 2.3.3.3. PENALTIES IMPOSED ON DEBTORS, PARTNERS AND MANAGEMENT

**Pecuniary liability:** the court may order the management to wholly or partially make up the shortfall in the company's assets, or it may extend the recovery procedure, to which the legal entity is subject, to the management.

**Personal liability:** personal penalties, in particular personal insolvency (civil law) and personal bankruptcy (criminal law) are only imposed on debtors as natural persons or managers of legal entities with an economic activity in the most serious cases.

If personal bankruptcy is declared, managers are disqualified from managing or controlling a company, as long as liabilities are unpaid. Penalties are attributed for five years but are annulled as soon as the liabilities are completely settled. Bankruptcy carries fines and a prison sentence.

#### 2.3.3.4. THE TREATMENT OF CREDITORS

The implications of French law governing the position of creditors (especially creditor institutions) vary according to the different phases of the insolvency proceedings.

During the observation period the enterprise is shielded from its creditors, existing debts are put on hold and payment of any previous debt is barred in order to grant the enterprise a breathing space. However, claims which arise after the decision to initiate proceedings are exempt from this rule so as to provide a financial incentive to creditors who participate in the further financing of the enterprise (Article 40).

The decision to initiate the recovery procedure interrupts the statutory and agreed interest accruals, as well as all late interest and increments (Article 55). Mortgages, securities, liens, as well as judicial decisions and acts, reflecting or embodying rights in rem, can no longer be made following the opening of the recovery procedure (Article 57).

The role of collateral is therefore reduced, and is only required to maintain the ranking of claims. However, the suspension of payments does not cover goods delivered under reserva-

tion of ownership. Under French law, goods sold under a reservation of ownership clause, making the transfer of title conditional on the full payment of the price, can be claimed if they are in their original state at the time when the procedure is opened (Art. 59 of Act 94-475 of 10 June 1994).

If the enterprise is permitted to carry on its business, it must meet its payment commitments in full. The terms and conditions of payment of existing debts, which must be declared in good time or entered in the register, are fixed with consideration to the creditor ranking stipulated by law and in compliance with the debt reduction and rescheduling terms agreed with creditors.

Pursuant to Article 40 of the 1985 Act, in the event of total disposal or, should the company continue to operate, if claims are not settled at their due date, claims arising duly after the order to open proceedings are paid before all other claims, irrespective of whether they enjoy preferential rights or are backed by collateral. However, employees' claims, which come with preferential rights or reinforced rights of preference, and claims for very small amounts (Article 76) shall be paid immediately.

Furthermore, creditors in possession of collateral shall be paid first when the security is sold, and the proceeds from the sale are shared out in accordance with the ranking of existing creditors possessing collateral-backed claims as stipulated by law (1).

Act 94-475 of 10 June 1994 on the prevention and treatment of difficulties affecting businesses introduced the following:

- a modernisation of the procedure, through greater transparency and tighter ethical standards for business recovery and disposals,
- restoring creditors' rights and hence of the confidence of credit institutions – an important consideration often justified by the need to encourage business lending.

The second aspect of the reform extended creditors' powers to the implementation regarding the procedure, in that it allowed them to take individual action, and it improved the situation of creditors with collateral-backed claims. As well as introducing measures in favour of collateral-backed creditors, the legal reforms also sought to improve the lot of unsecured creditors.

In the event of liquidation, the ranking of existing and new creditors was redefined when the measures arising from the reform of 10 June came into force (Act 94-475). While payment of new creditors (claims under Article 40) is also subject to preferential treatment, their claims are nevertheless ranked below the (existing) claims of the following creditor groups:

- 1) employees
- 2) court fees relating to the legal proceedings
- 3) creditors holding claims secured by property

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(1) Precedence is given to general preferential rights, which include employees' reinforced rights of preference, preferential social security claims, and of special preferential rights, which above all include collateral-backed claims in the form of liens.

- 4) creditors holding claims secured by movable goods
- 5) creditors holding claims with liens on production facilities and machinery or equipment.

However, in order not to compromise the success of restructuring plans, the ranking of claims under Article 40 is maintained if business is continued. Additionally it should be stressed that, within the category of new creditors, restructuring loans granted by credit institutions are ranked third, below employees' claims and court fees (Dammann, 1996).

### **3. BANKRUPTCY LAW REGULATIONS IN SPAIN (2)**

#### **3.1. Introduction**

The motivation behind the legal regulation of general business insolvency is for two main reasons:

- The need to harmonise the rights of all creditors involved, so that if there is any difference in treatment, this must be justified objectively, avoiding favouritism and advantageous positions, in order to group all creditors into a collective attachment.
- To prevent a disorderly attachment from ruining the possibility of the firm's continuity, with the subsequent damage this entails for the economy in general and employment. This involves giving opportunities to the firm to continue through the collective attachment procedure.

Under Spanish law, the system turns on two main figures: suspension of payments and bankruptcy.

#### **3.2. Suspension of payments**

Suspension of payments is a vehicle to prevent bankruptcy. It can only be voluntarily requested by the debtor, and entails a stop to individual actions by creditors. The latter become involved in the collective procedure whose aim is to reach an agreement with the debtor that allows the insolvency to be resolved at the lowest financial cost possible for the parties, avoiding the possibility of liquidation of the firm, which occurs in bankruptcy.

Requirements for suspension of payments:

- Entrepreneurial status of the debtor.
- It may only be applied for voluntarily by the debtor. In the case of companies, a resolution shall have been approved by the shareholders at a general meeting convened specifically in this connection.
- Suspension of payments shall be declared by a judge. In his/her statement, the suspension of payments shall be qualified as provisional or definitive. In the latter case, credi-

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(2) The bankruptcy law in Spain is now under revision. One of the forecasting changes will be, to give preference in the satisfaction of credits, to those creditors who have real guarantees.

tors whose claims account for at least two-fifths of liabilities may request that bankruptcy be declared.

Characteristics of the agreement:

- The agreement is binding on all creditors, except those who, having right of abstention, should have availed themselves of this right. Those entitled in this connection are the holders of those assets or rights which, while apparently included in the debtor's assets, do not actually correspond to the debtor either because ownership thereof has not been transferred or because they were not in the name of the owner but of a principal, custodian or some similar figure.
- Arrangements for either the postponement of the debt, the partial acquittance thereof or both simultaneously may be established. Once legally approved, this shall be binding on all parties.
- In the event of non-compliance by the debtor with the agreement, the creditors are authorised to request annulment and the declaration of bankruptcy of the debtor.

In sum, suspension of payments is a process designed to prevent bankruptcy. It allows liquidity shortfalls to be resolved without endangering the continuity of a company. Should the process fail, any creditor has the option of requesting bankruptcy proceedings.

### **3.3. Bankruptcy**

Bankruptcy is a judicial procedure which attempts to secure settlement of the debtor's net worth in order to share it amongst a group of creditors ranked according to objective rules of preference. Once the bankruptcy has been testified, there are a series of personal effects for the debtor which, in terms of net worth, essentially involve ineligibility to manage his/her assets.

*Bankruptcy proceedings:*

- 1) To initiate bankruptcy proceedings, the following conditions must be met:
  - Entrepreneurial status of the debtor.
  - Debtor's suspension of current payment of obligations.
  - The declaration shall be made by a judge.
  - The application may be at the request of the debtor or any other legitimate creditor.
- 2) To pursue proceedings, a series of official bodies are required under Spanish law, namely:
  - The *judge*, who declares the bankruptcy and handles the entire procedure.
  - The *trustees* are entrusted with managing the bankruptcy assets and representing the debtor in and outside court. The trustees shall be three creditors appointed in the first shareholders' meeting. They shall have extensive management powers,

their main purpose being to ensure the continuing value of the assets, since these will have to be disposed of at some point to satisfy the creditors.

- The *receiver* is the supervisory and inspection body and liaises between the trustees and the judge.
  - The *general shareholders' meeting* is the deliberating body. Its intercession is necessary whenever the creditors wish to express their will.
- 3) Being a collective procedure, bankruptcy requires a series of transactions affecting both the debtor's assets as a whole and the creditors as a group.
- Body of creditors: the first consequence of the declaration of bankruptcy for creditors is the loss of the right freely to take individual action, which is replaced by joint action. There is room in the group of creditors for all those affected by the solution given to the bankruptcy procedure, i.e. for all those who have no separate right of execution on specific assets of the debtor. There is also a series of specific changes in creditors' rights:
    - Suspension of interest from the bankruptcy declaration date, except in mortgage loans and pledged loans, to the respective guarantee end-date.
    - Maturity of deferred loans.
    - Offsetting of creditor's and bankrupt party's loans.
    - In the event of the bankruptcy of one or more joint debtors, the common creditor may take part in all the bankruptcies for the total amount of the credit, until the total is met.
    - Resolution of bilateral contracts in the course of execution.
  - Debtor's overall assets. Here there are two main transactions: delimitation or leaving in the overall assets only those which, being the debtor's own, can be executed, and to repay into the overall assets those that should be available for execution.

#### *Transactions proper to bankruptcy:*

These are those aimed at liquidating the debtor's net worth to pay the creditors, following the preference and order set by the legal rules. Liquidation involves three transactions:

1. Examination and recognition of credits
2. Ordering of credits: this is of particular relevance in determining the preference or order to be assigned to what has been obtained from the liquidation to the payment of the various credits. Spanish law provides for three possibilities of assigning creditor seniority when making the liquidation.
  - *Right of abstention.* The creditor who is acknowledged as having and exercises this right will not be affected by the agreement; accordingly, if he does not take part in the agreement, his right will remain whole and will not be affected by the possible

partial acquittances of debt agreed. Privileged, singularly privileged and mortgage creditors have this right.

- *Right of separation.* Some creditors are able to encash their credits on assets belonging in principle to the overall assets, but which can be separated to satisfy those credits. This right is enjoyed by the following credits:
  1. Creditors who have pledges made though notarised deed or loan document with the intercession of a broker. The creditor will be able to execute it separately, selling the item on the stock exchange, if it is quoted, or otherwise with the broker's intercession.
  2. In the event of a chattel mortgage and non-displacement pledge, when they are made through a notarised deed or a loan document with the intercession of a broker and officially registered, the mortgaged or pledged assets will not be included in the overall bankruptcy assets unless the guaranteed credit is satisfied.
  3. The naval mortgaged creditor can exercise his/her right against the affected ship or ships if the debtor is declared bankrupt.
  4. The creditor with a chattel mortgage who had begun the mortgage execution before the bankruptcy declaration can act in the same way. And if his/her credit is not covered with the sale of the property, he/she will be considered as a scriptural creditor as regards the rest.

*Common privilege.* This is the right to collect in preference to other creditors, moving to the head of the queue of those who expect to collect on the proceeds from the bankruptcy assets. This privilege comes down specifically to the ordering of credits which are executed by means of a general creditors' meeting called to this end. The ordering involves a classification of the credits and their subsequent ranking, so that the liquid credit of the bankruptcy is not equally shared among the creditors, but must be placed in the related order. Classification is carried out by dividing the credits into two sections: the first includes the credits satisfied with the result of the chattel assets of the bankruptcy; the second includes those which must be paid with the proceeds of the property assets. Article 913 of the Commercial Code establishes the order of the credits that must be satisfied with the proceeds of the *chattel goods*:

- 1) Credits of employees for the last six months' work prior to the bankruptcy.
- 2) Credits arising from obligatory social subsidy and insurance regimes and labour mutualism arrangements for the last six months prior to the bankruptcy.
- 3) Creditors with any preferential entitlement provided for in the Commercial Code.
- 4) Common privilege creditors, and legal mortgage creditors in instances where they may have priority over the chattel goods (3).
- 5) Scriptural creditors along with those accredited as such through instruments or mercantile contracts intervened by an agent or broker.

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(3) Articles 1922 of the Civil Code and 168 of the Mortgage Law dated February 8 1946.

- 6) Common creditors, firstly for mercantile transactions and subsequently for civil transactions.

Article 914 indicates the order for paying the credits of the second section, i.e. those which are the outcome of the *property assets*:

- 1) Creditors with real right, in the terms and order established in the Mortgage Act.
- 2) Singularly privileged and other creditors envisaged in article 913, described above in the section on priority in relation to chattel goods, in the order established therein.
3. Payment to creditors: once the ordering has been carried out, payment can begin. This must be made observing the above-mentioned classification in the two sections. In each section the order established in articles 913 and 914 shall be observed, avoiding paying credits from one range before having paid those preceding it. In each class, creditors will receive their credits irrespective of dates, and if there is not enough to meet payments to an entire class, a pro rata basis shall be used. There is an exception in this rule for mortgage and scriptural creditors, who will collect by order of the dates of their securities.

### 3.4. Actual use of both procedures

In practice, few companies resort to these two procedures. The table below lists the instances of officially declared suspensions of payments and bankruptcies in recent years:

TABLE 1

#### NUMBER OF SUSPENSIONS OF PAYMENTS AND BANKRUPTCIES IN SPAIN

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Suspensions of payments	798	1,135	1,446	969	650	649	479	348	290	223
Bankruptcies	352	507	618	697	695	713	656	548	484	380

Source: INE



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ANNEX VI

PENSION FUNDS AND EMPLOYEE SAVINGS  
SCHEME IN FRANCE AND SPAIN

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## 1. INTRODUCTION

Retirement systems aim to guarantee elderly people the right to an income once their working life is over. Demographic development in most of the western countries is at the origin of the problems posed by the financing of the retirement systems. Pension funds are frequently evoked in the recurring debate over the financing of the retirement system and its recent developments.

Whereas in Spain legislation was introduced in order to promote pension funds, France is unique in Europe in that it has almost no funded pension schemes. Only certain professions are entitled to such arrangements. In France, the problem of funding the retirement system sparked off a debate on employee saving schemes.

## 2. PENSION FUNDS AND EMPLOYEE SAVINGS SCHEME IN FRANCE

### 2.1. Financing retirement – Pension funds

In France, a universal mandatory pension system has gradually been put in place over several hundred years.

The basic state pension system, instituted by the Orders of 4 and 19 October 1945, is based on the “pay-as-you-go” (PAYG) method. In the private sector, the level of provision has been significantly improved by supplementary schemes:

- one for white-collar workers (*cadres*), set up in 1947 and run by the Association générale des institutions de retraite des cadres (AGIRC);
- several for blue-collar workers (*non-cadres*), created between 1962 and 1972, and brought together under an umbrella organisation, the Association des régimes de retraite complémentaires (ARRCO).

With the “demographic time bomb” threatening the PAYG system, ways of supplementing the current approach using other mechanisms, including, potentially, funded schemes, were considered.

In 1990, a task force led by the then Prime Minister, Michel Rocard, considered the question of France’s ageing population and aired the problem of financing the retirement system in a White Paper published in 1991.

The “Thomas” Act on pension funds, named after the member of parliament who tabled the bill, was passed in 1995. However, the necessary enacting decrees were not adopted, so it never came into force.

Pension funds are frequently evoked in the recurring debate over the financing of the retirement system and its recent developments.

France is unique in Europe in that it has almost no funded pension schemes. Only certain professions are entitled to such arrangements; for example, civil servants are covered by the “Préfon” scheme, and the “Madelin” Act created funded schemes for professionals.

In France, the problem of funding the retirement system sparked off a debate on employee savings schemes. This ultimately led to the “Fabius” Act, which was adopted on 7 February 2001 and promulgated on 15 February 2001.

### *2.1.1. Defining pension funds*

It should be borne in mind, however, that employee savings schemes and retirement savings are not the same thing.

Employee savings schemes are closely linked to company performance. That makes them less predictable than retirement savings, which involve regular payments over a long period that are locked in and then paid out not as a lump sum but as annuities.

However, in France, a pension fund is any mechanism that is:

- designed to encourage individuals to save;
- accompanied by tax incentives;
- intended to supplement pensions, which are expected to decline.

Thus, pension funds publicly solicit savings. Their objective is to manage these monies over several decades and then to pay out annuities, which in turn have gained sufficiently in value to safeguard the purchasing power of the annuitants and contributors.

“A pension fund is a defined benefit and/or defined contribution retirement scheme, set up by one or more private or public companies. It acts as a non-bank financial organisation that collects employee and/or employer contributions (inflows), manages them on a funded basis and then pays out benefits, either as a life annuity or as a lump-sum payment (outflows) when a member retires.” (Najat El Mekkaoui de Freitas). Membership of a pension fund guarantees a retirement income for affiliated employees.

Pension funds are independent of their sponsoring company and differ from other financial organisations, especially banks and insurance corporations.

### *2.1.2. Different approaches to financing pension funds*

#### **2.1.2.1. DEFINED BENEFIT**

Under defined benefit (DB) schemes, the pension fund sponsor, i.e. the employer, undertakes to pay retiring members a pension corresponding to a pre-determined percentage of their

wage based on the number of years with the firm (unit benefit). Such funds are often financed by the employer, which means that the employer is the fundholder, not the employees. If employees participate in financing, their contribution is set at a percentage of their wage (flat benefit).

#### 2.1.2.2. DEFINED CONTRIBUTION

Under defined contribution (DC) schemes, both the employee and employer finance the scheme. The contributions determine the level of the commitment made by the pension scheme.

The employer's payments can take the form either of a fixed sum or a percentage of the employee's wage. Payments are sometimes linked to company earnings. The pension, which is paid to each employee into a personal account, is thus equal to the monies saved plus (or minus) the gains (or losses) from investments. The last ten years have seen a relatively sharp rise in the number of DC schemes.

This trend is the result of greater regulatory flexibility, particularly as regards pension portability for employees stopping work or changing jobs. In fact, DC funds generally offer total portability, unlike DB mechanisms, where employees typically have to build up many years of service to avoid losing their pension.

#### 2.1.2.3. HYBRID SCHEMES

A new type of pension fund is emerging: hybrid schemes that combine DC and DB financing. Some 120 French-style pension funds exist, worth a total EUR 15,24 billion (FRF 100 billion). Most were set up by large groups like Usinor, Air Liquide, Péchiney and Saint-Gobain. Some companies, such as Rhône-Poulenc and Accor, have even developed sophisticated long-term savings plans where funds are invested according to a timescale fixed by the employee (e.g. retirement or home purchase).

Other products exist in addition to individual pension schemes, such as long-term company savings schemes for employees, equity savings plans and people's savings plans, which are open to everyone.

#### 2.1.3. *The reserve fund*

The national reserve fund was set up in 1999 to bolster the PAYG schemes and help them cope with the problems of the next 20 years when the post-war baby-boom generation reaches retirement.

Increasing funding is being supplied to the reserve fund from three sources. By 2020, a total EUR 76,22 billion (FRF 500 billion) should be obtained via the overall surpluses built up by the national pension scheme (*Caisse nationale d'assurance-vieillesse*), the old-age solidarity fund (*Fonds de solidarité-vieillesse*), and the solidarity-related social security contributions made by businesses. A portion of the social security levies on capital income should bring in EUR 22,87 billion (FRF 150 billion), and the financial income earned by these funds should come to EUR 50,31 billion (FRF 330 billion). All in all, by 2020, the reserve fund should be supplemented to the tune of around EUR 152,45 billion (FRF 1,000 billion).

A portion of the income from the sale of UMTS licences is also earmarked for the retirement reserve fund.

The fund could be managed either according to a long-term investment strategy, with a view to setting up a long-term fund, or with a nearer-term perspective, to limit increases in the contributions. Investment will be in equities, which offer high yields but are volatile, or in government securities, which are safer, but offer lower returns on investment.

## 2.2. Employee savings schemes

France offers an impressive array of employee savings schemes. It is one of the few countries to have introduced a mandatory profit-sharing mechanism for employees.

Most options on offer elsewhere are also available in France, where they usually come with attractive social security and tax exemptions.

Incentive schemes, profit-sharing schemes and company savings schemes are the three main types of mechanism.

### — *Incentive schemes*

First created in 1959 and modified by the Order of 21 October 1986, incentive schemes are designed to motivate employees by setting specific goals. They must be covered by a three-year company agreement negotiated with and signed by the employees or their representatives. Under certain conditions, notably in terms of duration, the sums earned under incentive schemes are exempt from social security contributions. However, employees may choose to access these sums, which subsequently become taxable.

### — *Profit-sharing schemes*

Profit-sharing requirement became mandatory in 1967 for companies employing 50 or more people, and optional for smaller businesses. Since the aim is to give workers a share in the company's profits, employees' rights are calculated at the close of each financial year and taken to a special account. The calculation, which is performed within the framework of ordinary law, uses the following formula:

$$\frac{1}{2} (\text{after-tax profits in France} - 5\% \text{ of share capital}) \times \frac{\text{wages}}{\text{value - added}}$$

Depending on the company's regulations, sums earned through profit-sharing are locked in for three or five years (although early distribution is provided for in nine cases) and must be invested throughout the period. They are exempt from social security contributions, employees do not pay income tax on them (provided they are tied up for five years) and they can be deducted from the firm's taxable profits.

According to the stipulations of the scheme, employees' profit-sharing rights can give rise to:

1. an allocation of shares in the company
  - this option is of little interest for unlisted companies
  - however, listed companies are entitled to buy back their own shares and then distribute them among employees
2. a claim on the company, which can take the form of bonds or accounts with an agreed maturity
3. investment in the financial markets

Here, employees receive units in a unit trust (*Société d'investissement à capital variable, SICAV*) or shares in an investment fund (*fonds communs de placement, FCP*); alternatively, payments are made in their name into a company savings scheme.

— *Company savings schemes*

All companies are entitled to set up these optional schemes. Firms use them to encourage and help their employees (or former employees who have retired) to build up savings for specific projects or as a supplement to their pension.

Company savings schemes can be introduced on the basis of collective bargaining or at the firm's initiative. Members pay in sums earned from profit-sharing or incentive plans, or contribute directly from their wages or pensions. Total annual payments, excluding those from profit-sharing, may not exceed 25% of the employee's yearly gross wage. The company may opt to top up the amounts invested, by making an "abondement", which is limited to triple the amount contributed by employees and capped at an annual FRF 15,000 per person, or FRF 22,500 if the funds are at least partly invested in the company's own shares.

Company savings schemes are collective savings vehicles that allow employees, assisted by their company, to put together securities portfolios. Funds paid into the scheme may be invested in shares in a SICAV or paid into a company investment fund (*fonds commun de placement d'entreprise, FCPE*), which may be diversified or invested in the company's shares. Various rules are in place to guarantee the liquidity of the funds invested.

Company savings plans have taken off in recent years. In 1997, 8,702 companies operated this kind of scheme, 51% more than in 1993, and 1.35 million employees were members. Funds collected totalled FRF 19.3 billion, with FRF 4.2 billion coming from profit-sharing, FRF 4.1 billion from incentive schemes, FRF 7.3 billion in voluntary payments by employees plus FRF 3.6 billion in company top-ups. The average deposit by investors in 1997 was FRF 14,000. On average, one employee out of every two makes a payment of one kind or another every year. Two-thirds of them receive company top-ups, which average FRF 4,000 and exert a substantial multiplier effect on voluntary payments.

#### Company savings schemes

Creation	Optional. Set up either at the company's initiative or on the basis of collective bargaining.
Eligibility	The scheme must be offered to all employees of the company and may be extended to retired employees or made unavailable to recent employees (< 6 months).
Payments	<ul style="list-style-type: none"> <li>• Employees may choose to make payments (up to of ¼ annual income).</li> <li>• The company pays in funds: <ul style="list-style-type: none"> <li>– under the mandatory profit-sharing scheme;</li> <li>– under the optional incentive scheme;</li> <li>– through voluntary top-ups, up to three times' the employee's payment. A ceiling of EUR 2,300 applies, or EUR 3,450 if funds are used to purchase equities or investment certificates issued by the company.</li> </ul> </li> </ul>
Tax advantages	<p>Capital payments exempt from social security contributions.</p> <p>Reinvested income tax-exempt.</p> <p>Condition: funds must be locked in for five years.</p>
Funds invested in:	<ul style="list-style-type: none"> <li>– securities issued by SICAV or FCP;</li> <li>– securities issued by the company, notably in the case of leveraged management buy-outs;</li> <li>– capital increases reserved for employees (Act of 1973).</li> </ul>

Stock options constitute a fourth type of mechanism often considered to fall outside the category of employee savings due to their generally elitist character and because of the way they are used by companies. First seen in France in 1970, stock options offer employees, especially at management level, preferential conditions under which to subscribe for or buy shares in their company or a company belonging to the same group.

A new system of business founders' share warrants (*bons de souscription de parts de créateurs d'entreprises*) has recently been put in place for certain unlisted companies.

The release of the Balligand-Foucauld report on wage-based savings, submitted to the Prime Minister in January 2000, was behind the surge in employee savings schemes. Further impetus was supplied in July 2000 by the Fabius bill, which set out a three-pronged set of objectives:

- ensure fairer distribution of the benefits of growth;
- expand savings mechanisms to include small and medium-sized enterprises (SMEs);
- encourage precautionary savings (without calling into question the PAYG –Pay as you go– pension system).

A new Employee Savings Act was adopted by the French National Assembly on 7 February 2001 and promulgated on 19 February 2001. The enacting decrees appeared in the *Journal Officiel* of 3 August 2001

This Act mainly aims to:

- improve existing savings mechanisms;
- make it easier for the employees of SMEs to benefit from such plans;
- lengthen the savings horizon;
- increase employee share ownership and give employees more clout.

The new Act provides for the creation of two new mechanisms: the intercompany savings scheme (*plan d'épargne interentreprises*) and the voluntary partnership employee savings scheme (*plan partenarial d'épargne salariale volontaire*).

### 2.2.1. Improving existing mechanisms

*The length of time that employees are required to have worked in the company or group before they can join the savings scheme or participate in profit-sharing and incentive schemes has been cut from six to three months.*

*A employee savings passbook (livret d'épargne salariale) has been created so that people changing jobs can transfer their assets to the scheme at their new place of work.*

*Company savings schemes may be transferred, under the following conditions, if employees change jobs:*

- sums earned under a previous scheme may be reinvested in a new one;
- no more than 25% of the employee's annual wage may be invested in the new scheme;
- periods during which funds have already been blocked are taken into account when transferring to a new account, unless the funds transferred are being used to buy securities as part of a capital increase reserved for employees.

After the lock-in period, the funds paid into the savings plan or earned under profit-sharing arrangements can be deposited in a time savings account (*compte épargne temps*).

*A new type of financial vehicle has been created: a SICAV invested in the company's own securities.*

### 2.2.2. Broadening access to wage-based savings

The tax-free provision for investment has been raised from 25% to 50% of the total amount paid under profit-sharing for all agreements in place when the Act was promulgated and for any agreements concluded in the subsequent two years.

Companies with a workforce of under 100 that have created an incentive scheme and that have set up a company savings scheme at the date on which the Act was published or in the subsequent two years are entitled to build up a tax-free provision for investment. This provision may be equal to 50% of the top-up on the employee's payments from the incentive scheme and is assigned to the savings scheme.

Intercompany savings schemes are intended to make it easier *for SMEs to set up employee savings schemes*.

Intercompany schemes may be implemented at a sector level or for a geographical area; alternatively, they can be set up by a group of companies seeking to create a joint savings vehicle.

They can be set up on the basis of a collective agreement reached within the company's works council or if two-thirds of the employees of each participating company give their approval. Such schemes make it possible to share certain "costs". Employees are free to sign up regardless of whether their employer has joined the scheme.

SMEs are likely to be encouraged to make more use of company savings schemes funded by profit-sharing and incentives. Notably, this type of scheme can now be set up by the authorised representatives (1) of companies employing between 1-100 people. Company managers and authorised representatives are also entitled to become personal members of schemes (they may pay in up to ¼ of their wage) as are sole proprietors (they are allowed to pay in ¼ of their professional income liable for income tax).

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(1) Mandataires sociaux non titulaires d'un contrat de travail, i.e. duly authorised representatives who do not have an employment contract. Company managers, CEOs and managing directors of public limited companies, and board members or managers of limited liability companies may all fall into this category..

### 2.2.3. Extending savings horizons through voluntary partnership employee savings schemes

The voluntary partnership employee savings scheme is a diversified savings vehicle that allows employees to build up precautionary savings or to carry out specific projects, such as financing a property transaction or setting up a pension supplement.

This type of scheme can take one of two forms:

- a minimum ten-year fixed maturity as of the first payment; or
- sliding maturities, with each payment being locked in for ten years.

As an incentive, these new schemes offer added advantages over company savings schemes. The annual ceiling on the top-up is EUR 4,600.

The employer is obliged to pay a fixed contribution of 8.20% on the part of the annual company top-up in excess of EUR 2,300 per employee. This contribution is taken to the national old-age solidarity fund (*fonds de solidarité-vieillesse*).

The rules governing such plans must stipulate that part of the monies contributed may be used to buy units in funds invested in “ethical” companies, i.e. those that help to integrate people in the labour market, employ handicapped people, or enjoy a special legal status (association, co-operative, etc.).

Only businesses already offering their workers a company savings scheme may set up this type of scheme.

### 2.2.4. Increasing employee share ownership and giving employees more clout

If employees are not covered by a savings scheme agreement, the employer is obliged to hold annual talks to consider one or more of the different mechanisms.

The regulations governing the company savings scheme must then be submitted to the Departmental office for labour, employment and vocational training (*Direction Départementale du Travail, de l'Emploi et de la Formation Professionnelle, DDTEFP*).

Once the decision to create a company savings scheme is taken, the works council or staff representatives must be consulted on the proposed regulations at least two weeks before submission to the DDTEFP.

Companies are encouraged to introduce, or step up, employee share ownership to enable employees to benefit from the growth in value of their company and to shift savings towards the production base by promoting equity investment.

Just six million of France's almost 21 million salaried workers hold shares in an FCPE.

### Key measures contained in the bill

	CONDITIONS	IMPROVEMENTS
<b>Profit-sharing</b>	<ul style="list-style-type: none"> <li>companies employing fewer than 50 people.</li> </ul>	<ul style="list-style-type: none"> <li>provision for investment raised from 25% to 50% for agreements signed in the two years following publication of the Act.</li> </ul>
<b>Incentive schemes</b>	<ul style="list-style-type: none"> <li>companies employing fewer than 100 people;</li> <li>incentives must be invested in a savings scheme;</li> <li>company must pay a top-up.</li> </ul>	<ul style="list-style-type: none"> <li>provision for investment equal to 50% of the company top-up.</li> </ul>
<b>Company savings schemes</b>	<ul style="list-style-type: none"> <li>can be set up by authorised representatives of companies employing between 1-100 people.</li> </ul>	<ul style="list-style-type: none"> <li>authorised representatives of the company are eligible to take part in the company scheme, with payments limited to 25% of their wage.</li> </ul>
	CONDITIONS	INNOVATIONS
<b>Intercompany savings schemes</b>	<ul style="list-style-type: none"> <li>set up through collective bargaining;</li> <li>apply to a particular geographical area or sector.</li> </ul>	<ul style="list-style-type: none"> <li>employees of different companies can be members of the same scheme, regardless of whether their employers have signed up.</li> </ul>
<b>Voluntary partnership employee savings scheme</b>	<ul style="list-style-type: none"> <li>set up through collective bargaining;</li> <li>company savings scheme or intercompany savings scheme must already exist.</li> </ul>	<ul style="list-style-type: none"> <li>funds locked in for 10 years;</li> <li>max. company top-up EUR 4,600 compared with EUR 2,300 for company savings schemes. Employer must pay pension contribution of 8.20% on portion of top-up exceeding EUR 2,300;</li> <li>haircut increased from 20% to 30% in case of capital increases reserved for employees.</li> </ul>

Employee share ownership is gaining ground thanks to mechanisms that allow staffmembers to subscribe to IPOs for example, or to participate in privatisations via stock option plans offered by firms listed in the CAC 40, and via company savings schemes. This trend is particularly striking among high tech firms and in leveraged management buy-outs. First introduced to France in 1984, LMBOs are designed to ensure the survival of a company when there is no successor to the outgoing management.

## 3. PENSION FUNDS IN SPAIN

### 3.1. Internal company Pension Funds: regulating legislation

*Law 8/1987* on regulation of Pension Schemes and Funds specifies the nature of Pension Funds and establishes their purpose as being to provide to workers, at the time they start to receive their pensions, a standard of living similar to that which they have enjoyed hitherto. Additional provision one of this law provides that pension commitments assumed by companies shall be covered by insurance contracts, pension schemes or both.

Transitional provision fourteen of *Law 30/1995* of 8 November 1995 on the regulation and supervision of private insurance provides that employers who at the time the law enters into force have pension commitments with their workers or employees that are not covered as required by the aforesaid additional provision one of *Law 8/1987* shall, within three years from such entry into force, comply with the provisions thereof. In practice, this means that *pension funds must be external to non-financial corporations*, being held with a financial institution. This same transitional provision provides exceptionally for a longer period for certain types of company.

Additional provision thirteen of the *Law accompanying the 1999 Budget* extended these periods to 1 January 2001. Subsequently, the *2001 Budget Law* further extended the period to November 2002.

In 1990, transitional provision four of the *General Chart of Accounts* provided that firms with a shortfall between their accrued pension commitments and those insured and covered in

accounting terms up to the year prior to the entry into force of the Law on partial reform and adaptation of commercial law to the European Community Directives relating to companies, must systematically set aside such provisions as are necessary to cover such shortfall within the following periods, starting from the beginning of the first financial year that ends after 30 June 1990:

- a. For provisions corresponding to current pensions as at the beginning of the said financial year, 7 years.
- b. For provisions corresponding to deferred pensions as at the beginning of the said period, 15 years.

These periods have since been extended for certain sectors of activity.

These accounting rules mean, in practice, that most companies with pension commitments for which external pension funds still do not exist shall set aside provisions for this purpose. However, according to Central Balance Sheet Office data, relating to all sectors, i.e. including non-industrial ones, out of somewhat more than 3,500 medium and large reporting firms, only about 270 show these commitments in their accounts, another 169 firms having external funds. There is no information available on how many firms have commitments and do not show them in their accounts.

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ANNEX VII

CONTRIBUTIONS TO SOCIAL SECURITY  
IN FRANCE AND SPAIN

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## 1. INTRODUCTION

The social security system is designed to shield citizens from different “social” risks, such as illness, disability ...) which prevent people from earning a professional income, or which generate specific expenses.

In Spain as in France, the social security system is built around several statutory schemes. However most of the people in each country are covered by the general scheme.

Much of the funding for social security systems comes from levies on employees’ compensation or self-employed workers’ turnover. However in France new financing policies were devised to broaden this base to take all household income into account, while pro-employment policies scaled down the contributions required of low earners.

## 2. THE SOCIAL SECURITY SYSTEM. PAYROLL-RELATED SOCIAL SECURITY CONTRIBUTIONS IN FRANCE

Since 1945, social security coverage has gradually been extended to all sections of the population. The most recent stage in this process was the passing of the Act of 28 July 1999, which introduced a universal sickness coverage mechanism to deliver basic protection to all French residents, together with additional measures for the least well-off.

The way in which the social security system is funded has also evolved since 1945. Although payroll contributions still provide the bulk of the financing for the various social security schemes, there has been a sharp rise in the share contributed by other receipts, including those from taxes, the social security surcharge (*Contribution Sociale Généralisée – CSG*), which was introduced by the Act of 23 July 1993 and is levied on all income arising on work, benefits and assets, the solidarity contribution made by businesses (*Contribution Sociale de Solidarité à la Charge des Entreprises – CSSS*), and the social security debt reimbursement levy (*Contribution au Remboursement de la Dette Sociale – CRDS*) created by the Order of 24 January 1996.

The social security system is built around several statutory schemes:

	Persons covered
General scheme	employees in trade and industry
Scheme for people working in the agricultural sector	employees and the self-employed in the agricultural sector
Special schemes	specific categories of workers, such as civil servants or employees of the national rail authority and power and gas utilities
Independent schemes	self-employed individuals other than those in the agricultural sector (craftsmen, retailers, professionals, etc.)

More than 80% of French people are covered by the general scheme, which is divided into four sections: health insurance and cover for occupational injuries, family allowances, the national pension scheme and collection. Collection offices, run by the organisation URSSAF (*Union de Recouvrement des Cotisations de Sécurité Sociale et d'Allocations Familiales*), help collect the monies used to fund the general social security scheme.

The welfare system is rounded out by additional benefits, welfare assistance, unemployment insurance, etc., provided by the public authorities, the ASSEDICs (*Associations pour l'emploi dans l'industrie et le commerce* – organisations that manage local unemployment insurance funds) and supplementary retirement funds.

Much of the funding for France's social security system comes from levies on employees' compensation or self-employed workers' turnover. New financing policies were devised to broaden this base to take all household income into account, while pro-employment policies scaled down the contributions required of low earners.

The receipts of the social security schemes in 1999 came mainly from the following categories:

- “effective contributions”, which account for 57% of all receipts and correspond to the contributions made by employees and employers to social security funds.
- “notional contributions”, which account for 8.3% of all receipts and reflect monies paid by employers (such as SNCF, the French railway authority, RATP, the Paris transport authority and EDF, the national power utility) into the schemes that they run. Employers are required to ensure that their scheme is in sound financial health.
- “public contributions”, which account for 3% of all receipts and correspond to direct payments by the State:
  - additional subsidies to ensure that certain special schemes are properly funded;
  - statutory government contributions;
  - repayment of benefits or allowances paid out by the schemes on the government's behalf.

“Earmarked taxes and levies”, which account for 18.8% of receipts, comprise various fiscal levies, contributions and taxes assigned to social security funding. The main ones are:

- the CSG surcharge levied on all household income. The contribution arising on labour incomes is paid exclusively by employees and related categories. It is withheld by the employer and paid to the URSSAF collection office. It is used to fund health insurance, family benefits and the old-age solidarity fund.
- the CSSS solidarity contributions made by businesses.

However, this item does not include the CRDS levy allocated to the Social Security Debt Redemption Fund (*Caisse d'amortissement de la dette sociale* – CADES). The CADES fund is considered to be a financial institution, not a social security fund.

### General provisions

<b>Base for contributions</b>	<p>Elements used to calculate the base for social security contributions.</p> <p>The base for social security contributions includes the employee's basic wage plus any bonuses (payments made on top of the individual's basic wage), with the exception of bonuses that are expressly exempted under legal or regulatory provisions, or paid as a refund for job-related expenses. Bonuses are also subject to the CSG surcharge and the CRDS levy, after a flat-rate 5% allowance for job-related expenses.</p> <p>The social security ceiling is used as the base for certain contributions linked to the national pension scheme and housing benefits.</p>
<b>Minimum base for contributions</b>	The minimum base used to calculate contributions is fixed according to the French minimum wage, to which are added any benefits, bonuses or increases arising from legal or regulatory provisions.

### Summary of bonuses and incentives (1)

Type of bonus	Base for social security contributions	Base for CSG surcharge and CRDS levy
<b>Incentive</b> : Extra month's salary, end-of-year bonus, holiday bonus, etc. (2)	Included	included (5% allowance)
<b>Seniority bonus</b>	Included	included (5% allowance)
<b>Attendance bonus</b>	included	included (5% allowance)
<b>Productivity bonus</b>	included	included (5% allowance)
<b>Bonus related to working conditions</b> (3)	included	included (5% allowance)
<b>Expatriation bonus</b>	included	included (5% allowance)
<b>Job-related expenses</b> : flat-rate allowances and proven expenses	excluded under certain conditions	excluded under certain conditions although there is an additional allowance
<b>Works council bonus</b>	included (4)	included (5% allowance)
<b>Employer's contributions</b> to supplementary retirement and provident schemes	contributions not exceeding 85% of the social security ceiling are excluded (19% for provident schemes)	
<b>Profit-sharing and incentive plans</b>	excluded	included (5% allowance)

<b>Social security ceiling</b>	The social security ceiling takes account of all compensation paid in the course of the year. The table below shows reference wages with regard to the social security ceiling for 1999-2001:				
			1999	2000	2001
	Wage received per:	Month	14,470 (2 206€)	14,700 (2 241€)	14,950 (2 279€)
		Year	173,640	176,400 (26,892 €)	179,400 (27,349 €)
		Month			
		Bracket A	≤ 14,470 (2 206€)	≤ 14,700 (2 241€)	≤ 14,950 (2 279€)
		Bracket B			between 14,950 (2 279€) and 59,800 (9 117€)
		Bracket C			59,800 (9 117€) to 119,600 (18 233€)

(1) Bonuses are defined as payments made to employees on top of their basic wage in accordance with legal or contractual provisions at a company or individual level. Bonuses are included in the base used to calculate social security contributions unless they are expressly exempted under legal or regulatory provisions, or paid as a refund for job-related expenses. Bonuses are also subject to the CSG surcharge and the CRDS levy, after a 5% flat-rate allowance for job-related expenses.

(2) Under certain conditions, stock options are subject to social-security, CSG surcharge and CRDS levy contributions.

(3) e.g. dangerous, cold or dirty work, high output requirements, night shifts or work on Sundays and holidays.

(4) Excepting statutory exemptions and allowances by the Central Agency for Social Security Funds (*Agence Centrale des Organismes de Sécurité Sociale – ACOSS*).

**PAYROLL-RELATED SOCIAL SECURITY CONTRIBUTIONS (1)**  
**Rates applicable at 01/01/1999, 01/01/2000 and 01/01/2001**

Type	Base	Employer's contribution, %	Employee's contribution, %
<b>Social security</b>			
Health insurance	Total wage	12.80	0.75
National pension scheme	Total wage	1.60	-
	Social security ceiling	8.20	6.55
Widow's insurance	Total wage	-	0.10
Family allowances	Total wage	5.40	-
Occupational injuries	Total wage	-	-
Housing benefits	Total wage	0.40	-
	Social security ceiling	0.10	-
<b>CSG</b>			
CSG non deductible	95% of gross CSG	-	2.40
CSG deductible	95% of gross CSG	-	5.10
<b>CRDS</b>	95% of gross CRDS	-	0.50
<b>Unemployment insurance and ASF</b>			
	<b>1999:</b>		
	Bracket A	5.13	3.01
	Bracket B	5.26	3.60
	<b>2000 and 2001</b>		
	Bracket A (AC)	3.70	2.10
	Bracket A (ASF)	1.16	0.80
	Bracket B (AC)	3.70	2.60
	Bracket B (ASF)	1.29	0.89
<b>AGS (FNGS)</b>	Brackets A and B at 1/1/1999	0.25	-
	Brackets A and B at 1/1/2000	0.20	-
	Brackets A and B at 1/1/2001	0.10	-
<b>Supplementary retirement schemes</b>			
general employees	<b>rates at 1/1/1999</b> Brackets 1 and 2	4.5	3
upper level employees	Bracket A	4.5	3
	Bracket B } Bracket C }	12.5	7.5
	Brackets A, B and C (CET)	0.13	0.08
	<b>rates since 1/1/2000</b>		
general employees	Bracket 1	4.5	3
	Bracket 2 (general)	7.5	5
	Bracket 2 "New Companies"	12	8
upper level employees	Bracket A	4.5	3
	Bracket B } Bracket C }	12.5	7.5
	Brackets A, B and C (CET)	0.17	0.11
	<b>rates at 1/1/2001</b>		
	Brackets A, B and C (CET)	0.22	-
<b>Mandatory supplementary provident contributions</b>	Bracket A	1.50	-
<b>APEC</b>	Bracket B	0.036	0.024
<b>Taxes and profit sharing</b>			
Construction	Total wages paid	0.45	-
Apprenticeship	Total wages paid	0.50	-
Vocational training	Wages paid	1.50	-

(1) CSG: Social security surcharge.

CRDS: Social security debt reimbursement levy.

AC: Unemployment insurance.

ASF: Financial Structure Association (Association pour la structure financière). The authorised representatives of companies contributing to the Association des régimes de retraite complémentaires (ARRCO) and of the Association générale des institutions de retraite des cadres (AGIRC), the organisations running the supplementary retirement schemes for general and upper level employees respectively, have had to contribute to the ASF since 1 January 1996.

AGS: Wage guarantee mechanism.

FNGS: National fund guaranteeing the payment of wages.

CET: Exceptional and temporary payment required by the AGIRC since 1 January 1997.

APEC: Association for the employment of upper level employees. In addition to paying the APEC contribution, the employee and employer are jointly liable for an additional flat-rate contribution, which came to FRF 105.90 (16.14 •) in 2000, and FRF 107.70 (EUR 16.42) in 2001.

## 2.1. Occupational injuries

The employer pays all contributions relative to occupational injuries and illness. Since 1 January 1991, such contributions have been calculated on the basis of all wages paid. A flat-rate contribution is applicable in certain professions. The rate stands at around 1% to 2% of the wage bill.

## 2.2. Contribution to employees' transport expenses

Certain localities and large conurbations require companies with a workforce of more than nine people to contribute to their employees' public transport expenses. This payment is calculated on the basis of the entire payroll. With the exception of the Paris region, this contribution may not exceed 1.75% in large localities that have carried out major infrastructure work. Elsewhere, it varies between 0.55% and 1% depending on the size of the local population.

## 2.3. Social security surcharge (CSG)

This surcharge is paid by employees and related categories exclusively. It is withheld by the employer and paid to the URSSAF collection office.

The CSG surcharge is payable by all employees domiciled in France for the purposes of income tax (regardless of their social security situation).

### 2.3.1. Base

The base for the CSG surcharge is now the same as that of the CRDS levy in terms of work-related income. It applies to compensation paid since 1 February 1996.

### 2.3.2. Exempted income

The following are exempt: compensation paid to apprentices, payment in kind made to people not paid in cash, transport expenses paid by employers in the Paris region, employers' contributions to luncheon vouchers, management fees paid by employers in respect of company savings schemes.

## 2.4. Social security debt reimbursement levy (CRDS)

The CRDS levy is paid by employees and applies to compensation paid since 1 February 1996. It is withheld by the employer and paid over to social security collection offices. It is not deductible from taxable income and therefore must be integrated back into employees' taxable wages.

### 2.4.1. Base

All work-related income previously subject to social security contributions and to the former CSG surcharge is now subject to the CRDS levy, as are the following, which have been subject to the CSG surcharge since 1 January 1997:

- employers' contributions to funding for supplementary provident and retirement benefits;
- the portion of severance payments or of monies paid on breach of an employment contract (to compensate for losses resulting from the breach) in excess of the amount set down in the collective agreement for that sector;
- all monies paid when an employment contract is modified;
- additional allowances paid during parental childcare leave or periods of part-time work;
- daily social security allowances paid in the case of sickness, maternity and occupational injuries or illness.

One notable difference between the CSG base and the base used to calculate social security contributions is that the former also includes monies paid in respect of profit-sharing and incentive plans.

#### 2.4.2. Allowance

As for the CSG surcharge, the gross amount paid by an employer according to the terms of an employment contract is subject to the CRDS levy, after deduction of a 5% allowance for job-related expenses. Additional allowances for job-related expenses do not apply.

## 2.5. Unemployment insurance

In 1999, 2000 and 2001, the maximum monthly compensation subject to unemployment insurance contributions was as follows:

- 1999: FRF 57,880
- 2000: FRF 58,800
- 2001: FRF 59,800

#### Brackets

	1999	Part of wage 2000	2001
Bracket A	≤ 14,470 (2 206 €)	≤ 14,700 (2 241 €)	≤ 14,950 (2 279 €)
Bracket B	from 14,470 (2 206 €) to 57,880 (8 824 €)	from 14,700 (2 241 €) to 58,800 (8 964 €)	from 14,950 (2 279 €) to 59,800 (9 116 €)
Bracket C	from 57,880 (8 824 €) to 115,760	from 58,800 (8 964 €) to 117,600 (17 928 €)	from 59,800 (9 116 €) to 119,600 (18 223 €)

## 2.6. Wage guarantee mechanism (AGS)

**Contribution:** paid solely by the employer and set at 0.20% of wages up to four times the social security ceiling, i.e. (per month):

- 1999: FRF 57,880
- 2000: FRF 58,800
- 2001: FRF 59,800

The *wage guarantee mechanism*, which is effective in the case of a company's court-ordered reorganisation or liquidation, is limited to:

- thirteen times the monthly ceiling used to calculate contributions to the unemployment insurance scheme where employees' claims arise from legal or regulatory provisions or from the terms of a collective agreement that specify the amount, and that are included in the terms of an employment contract signed more than six months prior to the decision announcing the reorganisation or liquidation;
- four times the ceiling used to calculate contributions to the unemployment insurance scheme in other cases.

## 2.7. SUPPLEMENTARY RETIREMENT SCHEMES

### 2.7.1. Scheme for upper level employees (Cadres)

In 1999, 2000 and 2001, the maximum monthly compensation on which contributions had to be paid was as follows:

- 1999: FRF 115,760
- 2000: FRF 117,600
- 2001: FRF 119,600 (EUR 18,233)

Contributions are calculated on the basis of gross compensation, up to the following ceilings:

(in FRF)

Bracket	Monthly limits			Maximum monthly base		
	1999	2000	2001	1999	2000	2001
Bracket A ARRCO	up to 14,470 (2 206 €)	up to 14,700 (2 241 €)	up to 14,950 (2 279 €)	14,470 (2 206 €)	14,700 (2 241 €)	14,950 (2 279 €)
Bracket B AGIRC	from 14,470 (2 206 €) to 57,880 (8 824 €)	from 14,700 (2 241 €) to 58,800 (8 964 €)	from 14,950 (2 279 €) to 59,800 (9 116 €)	43,410 (6 618 €)	44,100 (6 723 €)	44,850 (6 837 €)
Bracket C AGIRC	from 57,880 (8 824 €) to 115,760 (17 648 €)	from 58,800 (8 964 €) to 117,600 (17 928 €)	from 59,800 (9 116 €) to 119,600 (18 233 €)	57,880 (8 824 €)	58,800 (8 964 €)	59,800 (9 116 €)

#### 2.7.1.1. CONTRIBUTION RATES

Bracket A contributions go to ARRCO, with the breakdown between employer and employee being in principle 60/40.

Bracket B contributions go to AGIRC. The rates for brackets B and C are as follows: 12.50% for the employer and 7.5% for the employee.

### 2.7.1.2. MINIMUM POINTS MECHANISM

Participants in the retirement scheme for upper level employees accumulate “points” during their working life.

A minimum points mechanism was introduced on 1 January 1989. It applies to all members of the retirement scheme for upper level employees even if their compensation is below or only just above the social security ceiling.

### 2.7.2. ARRCO full contribution scheme for general employees

In 1999, 2000 and 2001, the maximum monthly compensation on which contributions had to be paid was as follows:

- 1999: FRF 43,410
- 2000: FRF 44,100
- 2001: FRF 44,850

Contributions are calculated on the basis of gross compensation, up to the following ceilings:

	Monthly limits (in FRF)			Maximum monthly base (in FRF)		
	1999	2000	2001	1999	2000	2001
Bracket 1	up to 14,470 (2 206 €)	up to 14,700 (2 241 €)	up to 14,950 (2 279 €)	14,470 (2 206 €)	14,700 (2 241 €)	14,950 (2 279 €)
Bracket 2	from 14,470 to 43,410	from 14,700 to 44,100	from 14,950 to 44,850	28,940 (4 412 €)	29,400 (4 482 €)	29,800 (4 543 €)

#### 2.7.2.1. CONTRIBUTION RATES

For bracket 1, the effective minimum contribution rate is 7.5% (usually 4.5% for the employer and 3% for the employee). For bracket 2, the rate rises to 12.50% (7.5% for the employer and 5% for the employee).

## 3. REGULATIONS GOVERNING SOCIAL SECURITY CONTRIBUTIONS IN SPAIN

### 3.1. Contribution schemes

There are five types of schemes:

1. General contribution scheme.
2. Agricultural workers.
3. Self-employed.
4. Domestic servants.
5. Sea workers.

### 3.2. Contingencies

The types of contingencies for which contributions must be paid are as follows:

1. General contingencies.
2. Contingencies relating to industrial accidents and illnesses (IMS and IT).
3. Other:
  - Unemployment
  - FOGASA (Wage Guarantee Fund)

This is an independent entity attached to the Spanish Ministry of Labour and Social Affairs whose aim is to pay unpaid wages recognised as such pursuant to administrative rulings in favour of workers, along with severance payments due to insolvency, suspension of payment to creditors, business failure or bankruptcy.

- Vocational training

The following summary table sets out the items to be included in the contribution base, the related maximum and minimum bases and the rates to be applied to each type of contingency in the General Contribution Scheme.

## 3.3. Main characteristics to contributions to Social Security in Spain

	GENERAL CONTINGENCIES	CONTINGENCIES RELATING TO INDUSTRIAL ACCIDENTS AND ILLNESSES (IMS AND IT)																																								
<b>CONTRIBUTION BASE</b>	<p>The total compensation that worker is entitled to monthly, or that which they actually receive (if higher) on account of work on a dependent employment basis.</p> <p>Not included in the contribution base are:</p> <ol style="list-style-type: none"> <li>1) Travel expense allowances.</li> <li>2) Indemnity payments for death, dismissal or similar.</li> <li>3) Proceeds in kind.</li> <li>4) Marital allowance.</li> <li>5) Social Security benefits.</li> <li>6) Overtime.</li> </ol>	As for general contingencies with the exception of overtime, which is part of the contribution base for this type of contingency.																																								
<b>MAXIMUM AND MINIMUM CONTRIBUTION BASES</b>	<p>They are established for each professional category and in no case exceed the following monthly limits:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>2001</u></th> <th style="text-align: center;"><u>2000</u></th> <th style="text-align: center;"><u>1999</u></th> </tr> </thead> <tbody> <tr> <td>Maximum</td> <td style="text-align: right;">EUR 2,500</td> <td style="text-align: right;">EUR 2,450</td> <td style="text-align: right;">EUR 2,403</td> </tr> <tr> <td></td> <td style="text-align: right;">ESP 415,950</td> <td style="text-align: right;">ESP 407,790</td> <td style="text-align: right;">ESP 399,780</td> </tr> <tr> <td>Minimum</td> <td style="text-align: right;">EUR 505</td> <td style="text-align: right;">EUR 495</td> <td style="text-align: right;">EUR 485</td> </tr> <tr> <td></td> <td style="text-align: right;">ESP 84,150</td> <td style="text-align: right;">ESP 82,470</td> <td style="text-align: right;">ESP 80,820</td> </tr> </tbody> </table> <p>In the event of multiple employment, the maximum and minimum limits will be distributed among all the companies in proportion to the compensation paid to the worker in each of them.</p>		<u>2001</u>	<u>2000</u>	<u>1999</u>	Maximum	EUR 2,500	EUR 2,450	EUR 2,403		ESP 415,950	ESP 407,790	ESP 399,780	Minimum	EUR 505	EUR 495	EUR 485		ESP 84,150	ESP 82,470	ESP 80,820	<p>Irrespective of professional category, the following monthly limits (in pesetas) shall not be exceeded:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>2001</u></th> <th style="text-align: center;"><u>2000</u></th> <th style="text-align: center;"><u>1999</u></th> </tr> </thead> <tbody> <tr> <td>Maximum</td> <td style="text-align: right;">EUR 2,500</td> <td style="text-align: right;">EUR 2,450</td> <td style="text-align: right;">EUR 2,403</td> </tr> <tr> <td></td> <td style="text-align: right;">ESP 415,950</td> <td style="text-align: right;">ESP 407,790</td> <td style="text-align: right;">ESP 399,780</td> </tr> <tr> <td>Minimum</td> <td style="text-align: right;">EUR 505</td> <td style="text-align: right;">EUR 495</td> <td style="text-align: right;">EUR 485</td> </tr> <tr> <td></td> <td style="text-align: right;">ESP 84,150</td> <td style="text-align: right;">ESP 82,470</td> <td style="text-align: right;">ESP 80,820</td> </tr> </tbody> </table> <p>In the event of multiple employment, the maximum and minimum limits will be distributed among all the companies in proportion to the compensation paid to the worker in each of them.</p>		<u>2001</u>	<u>2000</u>	<u>1999</u>	Maximum	EUR 2,500	EUR 2,450	EUR 2,403		ESP 415,950	ESP 407,790	ESP 399,780	Minimum	EUR 505	EUR 495	EUR 485		ESP 84,150	ESP 82,470	ESP 80,820
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<b>CONTRIBUTION RATES</b>	<p>28.3% of the contribution base, of which 23.6% relates to the company and 4.7% to the worker.</p> <p>In temporary contracts lasting less than 7 days, the employer's portion rises by 36% to 32.09%</p> <p>The compensation for overtime is subject to an additional contribution that is not eligible for determining the regulatory base for benefits.</p> <p>Contribution rates for overtime:</p> <ol style="list-style-type: none"> <li>a) Prompted by force majeure: 14%, of which 12% relates to the company and 2% to the employee.</li> <li>b) Rest of overtime: 28.3%, of which 23.6% relates to the employer and 4.7% to the employee.</li> </ol>	<p>Set on the basis of the danger of the work performed.</p> <p>There is an exhaustive list for each type of job. (RD 2930/79 of 29 December).</p> <p>This type of contingency is charged exclusively to the company.</p>																																								

	UNEMPLOYMENT	FOGASA (WAGE GUARANTEE FUND)	VOCATIONAL TRAINING																					
<b>CONTRIBUTION BASE</b>	The same as for general contingencies with the exception of overtime, which for this type of contingency are part of the contribution base.																							
<b>MAXIMUM AND MINIMUM CONTRIBUTION BASES</b>	<p>Irrespective of professional category, the following monthly limits (in pesetas) shall not be exceeded:</p> <table> <thead> <tr> <th></th> <th><u>2001</u></th> <th><u>2000</u></th> <th><u>1999</u></th> </tr> </thead> <tbody> <tr> <td>Maximum EUR</td> <td>2,500</td> <td>2,450</td> <td>2,403</td> </tr> <tr> <td>ESP</td> <td>415,950</td> <td>407,790</td> <td>399,780</td> </tr> <tr> <td>Minimum EUR</td> <td>505</td> <td>495</td> <td>485</td> </tr> <tr> <td>ESP</td> <td>84,150</td> <td>82,470</td> <td>80,820</td> </tr> </tbody> </table> <p>In the event of multiple employment, the maximum and minimum limits will be distributed among all the companies in proportion to the compensation paid to the worker in each of them.</p>				<u>2001</u>	<u>2000</u>	<u>1999</u>	Maximum EUR	2,500	2,450	2,403	ESP	415,950	407,790	399,780	Minimum EUR	505	495	485	ESP	84,150	82,470	80,820	
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<b>CONTRIBUTION RATES</b>	<p>a) Permanent contracts and apprenticeship, stand-in and substitution contracts except for disabled employees, whether full- or part-time.</p> <table> <thead> <tr> <th></th> <th><u>2001</u></th> <th><u>2000</u></th> <th><u>1999</u></th> </tr> </thead> <tbody> <tr> <td>Payable by employer</td> <td>6%</td> <td>6%</td> <td>6.2%</td> </tr> <tr> <td>Payable by employee</td> <td>1.55%</td> <td>1.55%</td> <td>1.6%</td> </tr> </tbody> </table> <p>b) Fixed-term contract</p> <table> <thead> <tr> <th></th> <th><u>Full-time</u></th> <th><u>Part-time</u></th> </tr> </thead> <tbody> <tr> <td>Payable by employer</td> <td>6.7%</td> <td>7.7%</td> </tr> <tr> <td>Payable by employee</td> <td>1.6%</td> <td>1.6%</td> </tr> </tbody> </table> <p>The rates for fixed-term contracts have not changed in the last 3 years.</p>		<u>2001</u>	<u>2000</u>	<u>1999</u>	Payable by employer	6%	6%	6.2%	Payable by employee	1.55%	1.55%	1.6%		<u>Full-time</u>	<u>Part-time</u>	Payable by employer	6.7%	7.7%	Payable by employee	1.6%	1.6%	<p>The contribution rate is 0.4% and payable exclusively by the employer.</p>	<p>The contribution rate is 0.7%, of which 0.6% is payable by the employer and 0.1% by the employee.</p>
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ANNEX VIII

TAXES LEVIED ON COMPANIES  
IN FRANCE AND SPAIN

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## **I. INTRODUCTION**

Business activity and the surpluses it generates, are taxed by the State and local tax authorities. Thus, whether taxing the corporation directly (direct taxes) or indirectly (actions by the corporation at different stages of its production chain or in following procedures necessary for it to operate), a wide array of taxes surrounds the life of the corporation.

This annex briefly draws together the set of taxes currently levied on French and Spanish corporations and the main characteristics of each tax, highlighting their most significant aspects. They are presented in a table that allows both an overview of the aspects characterising the tax and a ready comparison of taxes in terms of the characteristics analyzed.

## 2. TAXES LEVIED ON COMPANIES IN FRANCE

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>1 – Corporate income tax (<i>Impôt sur les sociétés</i>).</b>	Direct state tax on company income.	Article 206 of the French tax code identifies 11 categories liable for the corporate income tax. They mainly comprise companies whose legal status requires that they pay the tax, i.e. companies with share capital, such as public limited companies ( <i>sociétés anonymes</i> ), limited stock partnerships ( <i>sociétés en commandites par action</i> ) as well as limited liability companies ( <i>sociétés à responsabilité limitée</i> ) not opting for the arrangements in place for partnerships. Some co-operative companies are also liable. Other categories include non-trading companies ( <i>sociétés civiles</i> ) engaged in commercial activities and banks enjoying special status, such as Crédit Agricole and Crédit Mutuel. Furthermore, certain legal entities that are usually exempt (associations and public institutions) are liable in respect of real estate income and part of their investment income.	Income earned by French or foreign companies operated in France.	In 2000, the corporate income tax rate was 33.3%, plus an additional contribution of 10% voted in 1994. Companies whose corporate income tax bill exceeds FRF 5 million (0,76 millions d'euros) have to pay a 1.1% social contribution on profits into the fund set up to finance the reform of employers' social security contributions. The tax rate for these companies thus works out at 37.76% (it was 33.3% in 1995, 36.6% in 1996 and 41.67% in 1998). A reduced 19% rate is levied on part of the profits of companies reporting turnover of less than FRF 50 million francs (7,62 millions d'euros). A rate of 26% is levied on the real estate income of non-profit organisations. Long-term capital gains are deducted from net profit and taxed separately at a reduced rate of 19%. Taking into account various additional contributions, the tax rate for long-term capital gains came to an effective 23.75% in 1998.	The state, local authorities and public administrations do not pay corporate income tax. Dividends received by parent companies from subsidiaries are not liable. Certain research and training expenses and job creations enjoy tax relief. The European Commission is informed of such facilities. Temporary exemptions are granted under specific conditions to new businesses and companies setting up in declining industrial zones where business development has to be promoted through tax incentives. Profits earned by companies taking over failing businesses are temporarily exempt from the tax. The additional 10% contribution introduced in 1995 will be phased out over three years. It has been cut to 6% for financial years and assessment periods ending on or after 1 January 2001 and to 3% for financial years ending in 2002.
<b>2 – Income tax applied to small and medium sized enterprises (SMEs) (<i>Imposition des PME à l'impôt sur le revenu</i>).</b>	Direct state tax levied on income. Since 1999, there have been three different tax regimes for industrial and commercial profits ( <i>bénéfices industriels et commerciaux</i> , BIC). See Table (2), p. 74.	Most SMEs have to pay a BIC tax. According to the provisions of Article 34 of the tax code, this tax applies to income earned by natural persons from an industrial or craft enterprise.	Industrial and commercial profits (BIC). Income tax applies not just to income generated by a salaried activity or wealth management, but also to the earnings of partnerships and certain professional activities. Three main types of income are covered: BIC, agricultural profits and non-commercial profits ( <i>bénéfices non-commerciaux</i> , BNC). The	Same as income tax. The net taxable income of a fiscal household is divided by a given number of shares allocated according to the situation and dependants of the taxpayer's family (Art. 139 of the tax code on application of the family coefficient). The progressive income tax schedule, ranging from 0% to 54%, is applied to the taxable income per share thus obtained.	The tax reduction from the family coefficient rule is limited to a set amount for each share.

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
			rules for assessing the tax base are identical to those used for corporate income tax. However, the territoriality principle of corporate tax does not apply to the profits of companies liable for income tax.		
<b>3 – Minimum annual tax (<i>Imposition forfaitaire annuelle</i>, IFA).</b>		All companies liable for corporate income tax reporting turnover of more than FRF 500,000 (76 224,61 €)..	Turnover.	Varies from FRF 5,000 (762,25 €) to FRF 200,000 (30 489,80 €) depending on turnover.	The IFA is deducted from the amount of corporate income tax due.

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>4 – Payroll tax (<i>Taxe sur les salaires</i>).</b>	Wage-based.	The payroll tax is paid by all employers based in France and its overseas territories that are not liable for VAT on at least 90% of their previous year's turnover.	Total gross wages paid plus perks.	Progressive annual schedule per tranche: <ul style="list-style-type: none"> <li>- 4.25% on the first FRF 41,230 (6 285,47 €) of individual wages;</li> <li>- 8.50% on the portion between FRF 41,230 (6 285,47 €) and FRF 82,390 (12 560,27 €);</li> <li>- 13.6% on the portion above FRF 82,390 (12 560,27 €).</li> </ul>	The payroll tax can be deducted from the base of the income tax or corporate income tax. The tax base is reduced for employers who are partly liable for VAT. Employers are exempt if the amount due is less than FRF 4,500 (686,02 €); they are entitled to a rebate if the amount due is between FRF 4,500 (686,02 €) and FRF 9,000 (1 372,04 €). The other taxes levied on the basis of gross wages are: <ul style="list-style-type: none"> <li>- the apprenticeship tax;</li> <li>- employers' annual contributions to ongoing vocational training;</li> <li>- employers' contributions to housing construction.</li> </ul>
<b>5 – Apprenticeship tax (<i>Taxe d'apprentissage</i>).</b>	Employers' contributions to financing vocational training programmes for apprentices.	<ul style="list-style-type: none"> <li>- natural persons, companies subject to the partnerships tax regime, and economic interest groupings engaged in a commercial, industrial, craft or like activity;</li> <li>- companies and other legal entities liable for corporate income tax;</li> <li>- co-operative companies engaged in the production, processing, storage and sale of agricultural products.</li> </ul>	The base for calculating the apprenticeship tax is the same as the one used for social security contributions.	0.5%.	The apprenticeship tax is deductible from the income tax base or the corporate income tax base. The following are exempt: <ul style="list-style-type: none"> <li>- small enterprises employing one or more apprentices with legal apprenticeship contracts;</li> <li>- payments towards actual apprenticeship, although, in order to qualify, the employer is obliged to allocate 40% (50% in France's overseas territories), of the tax due, as well as the other expenditure earmarked for vocational training programmes for apprentices.</li> </ul>

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>6 – VAT.</b>	Indirect tax. VAT is a general tax on consumption that applies to deliveries of goods and services in France. Imports and like operations as well as intra-Community acquisitions are in principle taxed according to the general guidelines set down by domestic law.	VAT is levied on deliveries of goods and services: - arising from economic activities; - carried out in return for valuable consideration; - by liable persons, i.e. persons independently conducting activities that fall within the scope of VAT.	All monies, goods or services received or to be received by the seller or service provider from the buyer, client or third party in return for the delivery of goods or provision of services, including subsidies directly linked to the prices of these transactions.	The standard VAT rate has been 19.6% since April 2000. A reduced rate of 5.5% is applicable to food products and transport, <i>inter alia</i> (p. 79). An extra-low rate of 2.1% is applied to medicines whose cost is refunded by social security, as well as to newspapers and periodicals. A special reduced rate applies in France's overseas territories.	VAT is calculated in two stages: the person liable for the VAT must first calculate the VAT payable on his income (known as gross or invoiced VAT); next, he deducts the VAT invoiced to him (deduction system). The difference is the amount owed in VAT, unless the difference is negative, in which case a VAT credit is issued.
<b>7 – Indirect contributions and associated regulations (Excises).</b>	Tax on expenditure. Excises are levied by the General Directorate of Customs and Excise when the product is made available for consumption.		Excises are indirect taxes levied on the circulation or sale of certain products, notably tobacco, alcohol, and oil and oil-related products subject to the domestic tax on oil products ( <i>taxe intérieure sur les produits pétroliers</i> , TIPP). The TIPP is an indirect tax specific to a set of oil and oil-related products. It is assessed on the basis of the physical characteristics of the products taxed and is calculated according to tariffs set down in customs legislation.	The Directive of 25 February 1992 and the 4 Directives of 19 October 1992 harmonised tax mix rules for mineral oils, alcoholic beverages and tobacco and fixed minimum rates of taxation.	

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>8 – Registration duties (Droits d'enregistrement). Registration is a formal process whereby a public official examines a document and collects the duties required by law.</b>	A tax on assets. Usually received by the state. However, receipts from duties on the sale of buildings go to the local authorities ( <i>communes, départements and régions</i> ).	The base is the market value (in this case, <i>valeur vénale</i> ) of the goods on the registration or transfer date, i.e. the price at which the good in question could be bought or sold at market rates.	Companies pay different registration duties depending on whether they are: - a new company; - a going concern; - being dissolved.		
<b>9 – General tax on polluting activities (Taxe générale sur les activités polluantes)</b>	Introduced in the 1999 Budget, this is the first component of a "green" taxation system in France.	Chargeable from 1 January, it is payable on the full year by any natural person or legal entity running the business at that date.	The tax is partly based on the operations of specified installations (see Act 76-663 of 19 July 1976). Tax on polluting activities. The base was extended to water-polluting activities in 2000. Also extended to energy inputs, a key part of France's strategy to combat the greenhouse effect.	The departments in charge of inspecting the specified installations set the amount of the base according to a schedule determined by type of waste or pollution.	

## DIRECT LOCAL TAXES

The four main taxes, sometimes called the "*quatre vieilles*" (the four old ladies), are the descendants of four state taxes created during the French Revolution: the tax on commercial activities (*patente sur les activités commerciales*), forerunner of the business licence tax (*taxe professionnelle*); the residential tax on movable property (*contribution mobilière sur les habitations*), which developed into the residence tax (*taxe d'habitation*); and the taxes levied on buildings and farmland (*contributions foncières sur les bâtiments et terrains agricoles*), which became the tax on developed real estate and the tax on undeveloped real estate (*taxes foncières sur les propriétés bâties et non bâties*). The fiscal reform of 1914-1917 gave local government powers over these taxes, which owe their current form to the quasi-constitutional law (*ordonnance organique*) of 7 January 1959. Not until the Act of 29 July 1975 was passed did the business licence tax replace the *patente*.

The Act of 10 January 1980 authorised the smallest local government units, *communes*, to set rates freely. Each tier of local government (*région, département* and *commune*) decides on a rate for each of these taxes, although they are not allowed to exceed thresholds set by the state. The state keeps a roll of taxpayers and is in charge of tax collection. It compensates for tax relief granted by law to certain taxpayers, and takes on the outstanding debt of taxpayers that fail to pay.

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>1 – Business licence tax (<i>Taxe professionnelle</i>).</b>		The business licence tax is a general tax on economic activities. It is payable each year by natural persons and legal entities that regularly engage in a non-salaried business activity that is not exempt from the tax.	Until 1988, the base for the business licence tax comprised two parts: - 18% of total wages paid in the previous year; - and the rental value of fixed assets used by the taxpayer in the course of its business (a 16% general allowance is deducted).  The 1999 Budget introduced a major reform that will lead to a progressive phase-out of the wage component from the tax base between 1999 and 2002.		Since 1995, a ceiling based on the firm's value-added has been applied to the contribution paid under the business licence tax.
<b>2 – Tax on developed real estate (<i>Taxe foncière sur les propriétés bâties</i>).</b>		This tax is levied annually on developed real estate in France.	The tax is payable by the owner of the property at 1 January of the year of assessment. It is based on the rental value of the real estate as defined in the official land records ( <i>valeur locative cadastrale</i> ). The tax base is made up of the land records revenue value ( <i>revenu cadastral</i> ), which is equal to 50% of the land records rental value. Taxable properties comprise all real constructions with permanent attachment to the soil.	Rates set by the local government units receiving the tax payments.	State and local- government developed real estate is exempt. There is an optional two-year exemption for new companies setting up in land development zones. A five-year exemption is accorded to buildings for business use situated in customs -free urban areas.

Tax	Type	Persons or entities liable	Tax base	Rate	Main deductions, rebates and exemptions
<b>3 – Tax on undeveloped real estate ( <i>Taxe foncière sur les propriétés non bâties</i> ).</b>		This tax is levied annually on undeveloped real estate of all types in France (with the exception of those that benefit from a permanent exemption, such as public land, or temporary exemptions). The tax is payable by the owner of the property at 1 January of the year of assessment.	The land records revenue value, which is used as the tax base, is fixed at 80% of the official land records rental value, according to updated official assessments.	Rates set by local government units receiving the tax payments	Exemptions are granted in the first years of operation for land used for low-profit activities (e.g. walnut tree growing). Some young farmers are accorded a 50% reduction.
<b>4 – Residence tax ( <i>Taxe d'habitation</i> ).</b>	Tax due on: - premises used for residence; - furnished premises occupied by private companies, associations or bodies not liable for the business licence tax; - furnished non-industrial, non-commercial premises occupied by public authorities.	The residence tax is payable by natural persons or legal entities who own, rent or use taxable premises in their capacity as owner, tenant or any other capacity (rent-free occupation, for example).	The base for the residence tax is the official land records rental value of the premises (in principle the same as that used to assess the real estate taxes).	Rates set by local authorities.	Affects few businesses because they have to pay the business licence tax and so are exempt from the residence tax.

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### 3. TAXES LEVIED ON COMPANIES IN SPAIN

Initially, all the taxes levied on corporations are schematically enumerated, separating them first into direct and indirect and, thereunder, classifying those that are State-wide and those of a regional nature. Finally, there is a brief outline of the special treatment accorded to certain territories, consisting fundamentally of the application of more advantageous rates or additional rebates and deductions than those in the rest of Spanish territory.

The following section of the annex analyses the most salient characteristics of the main taxes levied on Spanish corporations. They are presented in a table that allows both an overview of the aspects characterising the tax and a ready comparison of taxes in terms of the characteristics analyzed.

**TAXES IN SPAIN (OUTLINE)**• **DIRECT****1. State/ Regional (Autonomous) Communities (1)**

- Personal income tax
- Wealth tax
- *Estate duties*
- Corporate income tax.

**2. Local**

- Property tax.
- Local business tax.
- Tax on mechanical traction vehicles.

• **INDIRECT****1. State**

- Stamp duty and legal documents tax.
- Value added tax.
- *Excise duties*:
  - On alcohol and alcoholic beverages
  - On hydrocarbons.
  - On tobacco products.
  - Special duty on electricity.
  - On specific means of transport.
  - On insurance premia
- Customs duties

**2. Local**

- Tax on buildings, installations and works
- Tax on increase in urban land value.

**3. Territorial tax regimes.**

- Basque Country
- Navarre
- Ceuta and Melilla.
- Canary Islands.

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(1) Regional (Autonomous) Communities are included owing to the transfer of personal income tax assigned to them.

### 3.1. Taxes levied on Spanish Corporations

TAX	NATURE	TAXABLE EVENT	TAX BASE	RATE	MAIN ALLOWANCES, REBATES AND EXEMPTIONS
Corporate Income Tax (Law 43/1995, and RD 537/97)	A direct, personal, composite and proportional tax on the income obtained by legal entities and other bodies without independent legal status to which the law attributes Spanish resident taxpayer status. Complementary to personal income tax.	Constituted by the obtaining of income by the taxpayer in the taxable period, irrespective of where it may have arisen (worldwide scope), and whatsoever the source or origin thereof, provided that it is the result of corporate activity.	The amount of income obtained in the tax period, reduced by the offsetting of negative tax bases for fiscal years ended in the previous ten years. Calculated on the basis of book results, adjusted via the application of the provisions stipulated in the law by means of non-accounting adjustments when differences between accounting and fiscal criteria arise.	Standard rate of 35%, though there are special rates, including most notably: <ul style="list-style-type: none"> <li>SMEs (from 1997) and for that portion of the tax base between ESP 0 and 15 million.....30%</li> <li>Unions, federations and confederations of co-operatives ..... 25%</li> <li>Fiscally protected co-operatives .....20%</li> <li>Hydrocarbon research and development institutions .....40%</li> </ul>	Allowances to avoid double taxation of dividends and international double taxation. <ul style="list-style-type: none"> <li>Allowances to encourage certain activities (export, research, technological innovation)</li> <li>Rebates relating to profits obtained in certain areas or on certain activities.</li> </ul>
Local property tax (Law 39/88 and Law 29/94).	A direct, real, objective and periodic tax levied on title to property located in each municipality.	Taxes ownership of title to property, to beneficial right or to surface area of both rural and urban property.	The officially assessed property value (which may not exceed its market value).	There are minimum rates that depend on the nature of the property: 0.4% when urban property is involved and 0.3% for rural property. These rates may be raised or lowered by municipal authorities.	Permanent exemptions of a personal (Red Cross), objective (inland ways other than toll motorways) and mixed nature. Rebates depending on the location of the property in certain areas (Ceuta and Melilla) and on its use in certain activities.
Local business tax (Law 39/88 and Law 6/91).	A direct, real, objective and regular tax on the performance of business, professional or artistic activities in national territory.	The material factor of the taxable event for this tax is the mere performance of business, professional or artistic activities.	The tax is determined on the basis of the application of rates, and there is no tax base as such. The tax comprises, on one hand, a municipal quota and, on the other, provincial and national quotas.  Calculating the municipal portion involves a complex process in which the business licence charge is established and then added to the "location" quota, based on surface area. The resulting figure is multiplied by the population coefficient and the status index to give the municipal tax. Where appropriate, provincial surcharges may be added to this to give the final tax amount payable.  Along with municipal charges are provincial and national taxes. The process is similar, and a distinction must also be drawn in this case between the business licence charge and the "location" charge.	There are several exemptions: <ul style="list-style-type: none"> <li>personal (in favour of Public Territorial Entities and their Autonomous Agencies, Social Security Management Entities, the Spanish Red Cross, ...).</li> <li>mixed (for public research and educational agencies, and associations and foundations for the physically, mentally and sensorially handicapped).</li> </ul>	

TAX	NATURE	TAXABLE EVENT	TAX BASE	RATE	MAIN ALLOWANCES, REBATES AND EXEMPTIONS
Tax on mechanical traction vehicles (Law 39/88)	A direct, real, objective and regular tax on the ownership of mechanical traction vehicles.	Defined as the ownership of mechanical traction vehicles apt for driving on public thoroughfares.	Calculated on the basis of various parameters such as fiscal power, number of seats or vehicle payload.	Local tax legislation sets minimum charges for each group (cars; buses; lorries; tractors; tow vehicles; and motorcycles), which can be increased by local councils.	Exemptions may be personal (for diplomatic delegation vehicles), objective (licensed public transport buses) and mixed (general government vehicles assigned to national defence duties, Red Cross ambulances). There will be a proportional rebate on the tax if the tax period is less than one calendar year. Rebates for promoting the use of environment-friendly engines and fuels. Rebates for vintage vehicles.
Tax on capital transfers for valuable consideration (RDLg 1/93 and RD 828/1995).	An indirect, real, objective tax with immediate effect.	It taxes "inter-vivos" capital transfers for valuable consideration.	The tax base will be the real value of the assets or rights subject to transfer, or the real value of the right established or assigned.	The following rates are applicable: - On the transfer of property or the establishing and assignment of the real rights inherent to such property: 6% - On the transfer of property and on the establishing of real rights thereon: 4%. - On the establishing of real rights of guarantee, pensions, bonds and the assignment of loans of whatsoever nature: 1%.	Personal exemptions for public entities and charitable, cultural, academic or scientific institutions. There are also certain cases where objective exemptions apply (see art. 45 of RDLg 1/93).
Tax on corporate operations (RDLg 1/93 and RD 828/1995).	An indirect, real, objective tax with immediate effect.	The carrying out of certain corporate operations that bear on the company's capital stock (capital increases and decreases, winding up...).	For incorporation and capital increases, in the case of companies that limit liability, the tax base will be the nominal amount at which the capital is set. In the case of other companies, the tax base is set at the net value of the funds contributed. In shareholder contributions to replenish losses, the tax base will be the net value of the contribution. In company spin-offs and mergers, regard will be had to the capital-stock figure of the new entity created or the increase in the capital of the absorbing entity. In capital reductions and windings-ups, the tax base will be the value	The tax payable is the result of applying the standard rate of 1% to the tax base.	Personal exemptions for public entities and charitable, cultural, academic or scientific institutions. Some objective exemptions are also available (see art. 45 of RDLg 1/93).

TAX	NATURE	TAXABLE EVENT	TAX BASE	RATE	MAIN ALLOWANCES, REBATES AND EXEMPTIONS
			of the assets and rights made over to the shareholders.		
Stamp tax (RDLg 1/93 and RD 828/1995).	An indirect, real, objective tax with immediate effect.	Taxes the documentation of certain acts, general notarial documentation, the administrative documentation of certain acts and the use of certain mercantile documentary instruments.	<p><u>Notarial documents</u> The tax base will be the value reported, except in protest records, where it will be one-third of the value.</p> <p><u>Commercial documents</u> A distinction is drawn between certificates of deposit, bills of exchange, documents acting as drafts and other documents. The amount of the tax base will be the nominal amount or the amount drawn.</p> <p><u>Administrative documents</u> There is a rule only for provisional notices, since in the restoring and transfer of nobility titles a fixed quota is the case. The tax base will be the value of the right that is guaranteed, published or established.</p>	<p><u>Notarial documents</u> There is a set amount (50 pesetas per document, or 25 pesetas per sheet), plus a variable component that Regional Governments may approve.</p> <p><u>Commercial documents</u> A progressive scale is applied either to stamped bills or to documentary stamps. Other documents are taxed at 3 per mill or fractionally.</p> <p><u>Administrative documents</u> 0.5% on provisional notices.</p>	Personal exemptions for public entities of a charitable, cultural, academic or scientific nature. There are also some objective exemptions (see art. 45 of RDLg 1/93).
Value Added Tax (Law 37/92 and RD 1624/92)	VAT is an indirect tax on consumption, which is levied on the delivery of goods and provision of services by entrepreneurs and fee-earning professionals, and on intra-Community purchases and goods imports.	Taxes the delivery of goods and the provision of services by entrepreneurs or professionals for a consideration, habitually or occasionally, in the pursuit of business or professional activity, and intra-Community purchases or goods imports. Those engaging only in exempt transactions are not subject to tax.	Comprises the total amount of the consideration for the transactions subject to tax (including interest for late payment, until delivery of the good). There are special regimes (simplified; agriculture, livestock breeding and fisheries; second-hand goods and works of art; travel agencies; operations involving gold investment; equivalent surcharge) that align the tax to the particular activity or situation observed.	There are three types of rate: <b>Standard:</b> Of a residual nature, as it is applied to all transactions subject to VAT to which none of the specific rates stipulated in the legislation correspond. It is set at 16%. <b>Reduced:</b> 7%. <b>Extra-reduced:</b> 4% on the consumption of certain staple goods.  In the Canary Islands a similar tax (the IGIC) is levied, but with lower rates (standard: 4.5%, reduced: 2%, high: 13%)	Full exemption for exports and deliveries of goods to another Community country. Limited exemptions for certain activities and instances (Sixth Directive). VAT borne shall be deductible if it has been incurred within the country and if the goods or services acquired are in transactions that are subject to and not exempt from the tax (particular case: pro rata rule).

TAX	NATURE	TAXABLE EVENT	TAX BASE	RATE	MAIN ALLOWANCES, REBATES AND EXEMPTIONS
Excise duties (Law 38/1992 and RD 1165/1995)	Indirect, real, objective and single-stage taxes that accrue immediately.	<p>This is a set of taxes made up of:</p> <ul style="list-style-type: none"> <li>- Duties on alcohol and alcoholic beverages.</li> <li>- Tax on hydrocarbons.</li> <li>- Tax on tobacco products.</li> <li>- Special tax on electricity.</li> <li>- Special tax on specific means of transport.</li> </ul> <p>The manufacture and import of products subject to these taxes within Community territory. The taxes are aimed at influencing the consumption of certain goods.</p>	<p>Application varies according to the specific tax involved.</p> <ul style="list-style-type: none"> <li>- The levy on beer taxes this drink with rates that increase commensurately with strength and in terms of hectolitres.</li> <li>- In the levy on alcohol and alcoholic beverages, the tax base is the amount of pure alcohol in each product, and it is taxed at a specific rate per hectolitre of alcohol.</li> <li>- The tax on hydrocarbons is levied via specific rates on bases measured in units of volume or energy.</li> <li>- Specific rates are combined in the case of the levy on tobacco products on the basis of units with rates according to the value of the different products.</li> <li>- In the tax on electricity, the tax base is the result of multiplying the amount supplied for a consideration by 1.05113. The tax rate is 4.864%.</li> <li>- In the tax on specific means of transport, the tax base comprises, in the case of new vehicles, the same as that relating to VAT, and in the case of second-hand vehicles, the market value. The rates are 7% or 12%, according to vehicle category.</li> </ul>		<p>There are exemptions on manufacturing taxes for products purchased as part of consular or diplomatic relations or by international agencies.</p> <p>Notably, for alcohol, there are exemptions for:</p> <ul style="list-style-type: none"> <li>- the harvester regime.</li> <li>- cases where the alcohol is not intended for the uses taxed (denaturalised, health, etc.).</li> </ul> <p>In the tax on specific means of transport, exemptions are envisaged on the basis of the use of the vehicle. Such exemptions require government acknowledgment.</p>

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## BIBLIOGRAPHY

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## CHAPTER I

Banco de España [2001]: “Cuentas Financieras de la Economía Española [1995-2000].

Banco de France [2001]: “The National Financial Accounts”, website.

Crépon B. and Desplatz R., [2001], “Une nouvelle évaluation des effets des allégements de charges sociales sur les bas salaires”, *Économie et Statistiques* n° 348.

DG ECFIN Commission of the European Communities: “Annual Macroeconomic Data Base”.

IMF [2001]: “International Financial Statistics”.

OECD [2001]: “Economic Outlook”.

OECD [2001]: “National Accounts of OECD Countries”.

OECD: “Analytical Data Base”.

OECD: “Annual National Accounts”.

OECD [2001]: “Education at a Glance”.

OECD [2001]: “Science, Technology and Industry Scoreboard”.

## CHAPTER II

Banco de España [2001]: Suplemento metodológico de la monografía de la Central de Balances “Resultados anuales de las empresas no financieras 2000”.

Banque de France [2000]: “Méthode d'analyse financière de la Centrale de bilans de la Banque de France”.

ICAC [1990]: “Plan General de Contabilidad Español. Normas de valoración”.

INE [1999]: “El Directorio Central de Empresas [DIRCE]. Resultados Estadísticos 1998. Tomo I. Datos de empresas”.

## CHAPTER III

Banco de España: [1999 and 2000]: “Annual Report”.

Banco de España: [1999 and 2000]: “Resultados trimestrales de las empresas no financieras”. Boletín Económico BE.

Banque de France: “La situation des entreprises industrielles”, étude annuelle [période 1991-1999].

Banque de France: “Les délais de paiement”, étude annuelle [période 1991-1999].

Banque de France–Deutsche Bundesbank [1999]: “Modes de financement des entreprises allemandes et françaises”.

Desbrières P. and Poincelot E., [1999]: “Gestion de trésorerie”, *Éditions Management Société*.

ECCB [1999]: “Corporate finance in Europe from 1986 to 1996”.

Kremp E. and Sevestre P., [2000]: “L'appartenance à un groupe facilite le financement des entreprises”, *Économie et statistiques* n° 336.

Richard J., Becom Simons and associés, Secafi Alpha and associés [2000]: “Analyse financière et gestion des groupes”, *Économica*.

- Sylvain A. [2001]: "La durée d'utilisation des équipements: principaux résultats 1989-2000", *Bulletin de la Banque de France*, n° 94, octobre 2001.
- Vergeau E. and Chabanas N., [1997]: "Le nombre de groupes d'entreprises a explosé en 15 ans", *INSEE Première* n° 553, novembre.

#### CHAPTER IV

- Alonso-Borrego, C. [1994]: "Estimating dynamic investment models with financial constraints", CEMFI, Working Paper n° 9418.
- Arellano M. and Bond S. [1991]: "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations", *Review of Economic Studies*, 58, 277-297.
- Arellano M. and Bover O. [1995]: "Another Look at the Instrumental Variables Estimation of Error Component Models", *Journal of Econometrics*, 68, 29-52.
- Bernanke, B. and Gertler, M. [1989]: "Agency costs, net worth and business fluctuations", *American Economic Review*, 79, 901-922.
- Bernanke, B., Gertler, M. and Gilchrist, S. [1999]: "The Financial Accelerator in a Quantitative Business Cycle Framework", in J. B. Taylor, ed., *Handbook of Macroeconomics*, vol. 1c, New York: Elsevier Science Ltd., 1341-1393.
- Blundell, R., Bond, S. and Meghir, C. [1996]: "Econometrics Models of Company Investment", in L. Matyas and P. Sevestre, eds., *The Econometrics of Panel Data*, Kluwer Academics Publisher, Dordrecht, 685-710.
- Bond S. and Meghir C. [1994]: "Dynamic investment models and the firm's financial policy", *Review of Economic Studies*, 61[2], 197-222.
- Bond S., Elston J., Mairesse J. and Mulkay, B. [1997]: "Financial Factors and Investment in Belgium, France, Germany and the U.K: a Comparison Using Company Panel Data", *National Bureau of Economic Research, Working Paper* n° 5900.
- Bond, S., Harhoff, D. and van Reenen, J. [1999]: "Investment, R&D and financial constraints in Britain and Germany", IFS Working Paper No. 99/5.
- Bond, S. and Van Reenen, J. [2002]: "Microeconomic Models of Investment and Employment", Institute for Fiscal Studies, mimeo., [http://www.ifs.org.uk/staff/steve\\_b.shtml](http://www.ifs.org.uk/staff/steve_b.shtml)
- Butzen, P., Fuss, C. and Vermeulen, P. [2001]: "The credit channel in Belgium: an investigation with micro-level firm data", ECB Working Paper No. 107.
- Calomiris, C. and Hubbard, G. [1990]: "Firm heterogeneity, internal finance and credit rationing", *Economic Journal*, 100, 90-104.
- Caminal, R. [1995]: "El papel de las restricciones de crédito y las políticas públicas en la financiación de la pequeña y mediana empresa", *Papeles de Economía Española*, 65, 224-234.
- Chatelain, J.B. and Tiomo, A. [2001]: "Investment, the cost of capital and monetary policy in the nineties in France: a panel data investigation", ECB Working Paper No.106.
- Chatelain, J.B., Generale, A., Hernando, I., von Kalckreuth, U. and Vermeulen, P. [2001]: "Firm investment and monetary transmission in the euro area", ECB Working Paper No.112.
- Chirinko R.S. [1993]: "Business Fixed Investment Spending: A Critical Survey of Modeling Strategies, Empirical Results, and Policy Implications", *Journal of Economic Literature*, 1875-1911.
- Deutsche Bundesbank [2001]: *Investment Today for the World of Tomorrow: Studies on the Investment Process in Europe*, Berlin, Springer-Verlag.
- Devereux, M. and Schiantarelli, F. [1990]: "Investment, financial factors and cash-flow evidence from U.K. panel data", en R.G. Hubbard [ed.], *Asymmetric information, corporate finance and investment*, University of Chicago Press.
- ECCB [2000]: "Corporate Finance in Europe from 1986 to 1996", European Committee of Central Balance Sheet Offices, Own Funds Working Group.
- Estrada A. and Vallés J. [1998]: "Investment and Financial Costs: Spanish Evidence with Panel Data", *Investigaciones Económicas*, 22, 337-359.
- Fazzari, S. and Athey, M. [1987]: "Asymmetric information, financing constraints and investment", *Review of Economics and Statistics*, 69, 481-487.
- Fazzari S.M., Hubbard R.G. and Petersen B.C. [1988]: "Financing Constraint and Corporate Investment", *Brookings Papers on Economic Activity*, 141-195.

- Fazzari, S. and Petersen, B. [1993]: "Working capital and fixed investment: new evidence on financing constraints", *RAND Journal of Economics*, 24, 328-342.
- Gaiotti, E. and Generale, A. [2001]: "Does monetary policy have asymmetric effects? A look at the investment decisions of Italian firms", ECB Working Paper No.110.
- Gertler, M. [1988]: "Financial structure and aggregate economic activity", *Journal of Money, Credit and Banking*, 20, 559-588.
- Gilchrist, S. and Himmelberg, C. [1995]: "Evidence on the role of cash-flow for investment", *Journal of Monetary Economics*, 36, 541-572.
- Gilchrist, S. and Himmelberg, C. [1998]: "Investment, Fundamentals and Finance", NBER Working Paper no. 6652.
- Giner, E. and Salas, V. [1997]: "Sensibilidad de la inversión a las variables financieras: la hipótesis de sobreinversión?", *Revista Española de Economía*, 14, 215-227.
- Greenwald, B. and Stiglitz, J. [1993]: "Financial market imperfections and business cycles", *Quarterly Journal of Economics*, 108, 77-114.
- Hall, B., Mairesse, J. and Mulkey, B. [1999]: "Firm-level investment in France and the United States: an exploration of what we have learned in twenty years", *Annales d'Economie et de Statistique*, 55-56.
- Hoshi, T., Kashyap, A. and Scharfstein, D. [1989]: Corporate structure, liquidity and investment: evidence from Japanese industrial group, Federal Reserve Board, Working Paper 82.
- Hsiao [1986]: *The analysis of panel data*. Cambridge: Cambridge University Press.
- Hubbard R.G. [1998]: "Capital Market Imperfections and Investment", *Journal of Economic Literature*, 193-225.
- Kalckreuth, U. von [2001]: "Monetary transmission in Germany: new perspectives on financial constraints and investment spending", ECB Working Paper No.109.
- Kaplan, S. and Zingales, L. [1995]: "Do financing constraints explain why investment is correlated with cash-flow?", NBER, Working Paper 5267.
- Laeven, L. [2001]: "Financial Liberalization and Financing Constraints: Evidence from Panel Data on Emerging Economies", World Bank, mimeo.
- Love, I. [2001]: "Financial Development and Financing Constraints: International Evidence from the Structural Investment Model", World Bank, mimeo.
- Lünnemann, P. and Mathä, T. [2001]: "Monetary transmission: empirical evidence from Luxembourg firm level data", ECB Working Paper No.111.
- Mato, G. [1989]: "Inversión, coste del capital y estructura financiera: un estudio empírico", *Moneda y Crédito*, 188, 177-201.
- Schaller, H. [1993]: "Asymmetric information, liquidity constraints and Canadian investment", *Canadian Journal of Economics*, 26, 552-574.
- Schiantarelli F. [1996]: "Financial Constraints and Investment: Methodological Issues and International Evidence", *Oxford Review of Economic Policy*, 12[2]. 70-89.
- Stiglitz, J. and Weiss, A. [1981]: "Credit rationing in markets with imperfect information", *American Economic Review*, 71, 393-410.
- Valderrama, M. [2001]: "Credit channel and investment behaviour in Austria: A microeconomic approach", ECB Working Paper No.108.
- Whited T.M. [1992]: "Debt, Liquidity Constraints and Corporate Investment: Evidence from Panel Data", *Journal of Finance*, 47[4]. 1425-1460.

## ANNEX I

OECD: "Analytical Database".

DG ECFIN Commission of the European Communities: "Annual Macroeconomic Data Base".

OECD [2001]: Education at a glance.

## ANNEX II

Bentolila S., and Jimeno J.F. [2001]: "Una propuesta de reforma del marco legal de la negociación colectiva en España".

Centro de Estudios Financieros [1999]: "Manual de Novedades laborales 1999".

Futuribles analyse et prospection No.237 [December 1998]: "La réduction du temps de travail".

- Labour legislation in Spain: "In-house drawing".
- OFCE [January 2000]: "Économie française en 2000 – Repères – La découverte".
- Pisani-Ferry, J. [2000]: "Conseil et analyse économique – Plein emploi rapport".
- Problèmes économiques [24 February 1999], No.2605
- Ministerio de Trabajo y Asuntos Sociales [2001]: "Guía laboral y de asuntos sociales".
- Ministerio de Trabajo y Asuntos Sociales [2002]: "Guía laboral y de asuntos sociales".
- Revue Fiduciaire RF 866 [July - August 1999]: "L'entreprise et les salariés".
- Revue Fiduciaire RF 879 [July - August 2000]: "Contrat de travail, le guide de l'employeur".
- Revue Fiduciaire RF 891 [July - August 2001]: "Mémento social, l'entreprise et les salariés".
- Rubio de Medina, M.D. [2000] "El despido colectivo".
- Thornsten, S. [July 1998]: "Quel avenir pour les politiques de négociations collectives", WSI Mitteilungen, No.7.

### ANNEX III

- ICAC [1990]: "Plan General de Contabilidad Español. Normas particulares sobre el inmovilizado inmaterial".

### ANNEX IV

- Banco de España [1999 and 2000]: "Annual report".
- Banco de España [1999]: "Los mercados e intermediarios financieros españoles". Boletín Económico BE
- Banco de España: "Regulación Financiera, first quarter 1992, fourth quarter of 1998 and 1999". Boletín Económico.
- Banque de France [November 1999]: "Les titres de créances négociables". Note d'information n° 117.
- Blanco R. and García-Vaquero V. [2000]: "Los nuevos mercados bursátiles: un instrumento para financiar la nueva economía". Boletín Económico BE.
- Central de Anotaciones del Banco de España. "Memoria año 2000".
- Choinel, A. and Rouyer, G. [September 1999]: "Le marché financier, structures et acteurs, Banque éditeur". Collection banque, CFPB.
- Commission Bancaire [1999]: "Annual Report"
- Credit Institutions and Investment Firms Committee [1999]: "Introduction to the 1999 Annual Report".
- National Credit and Securities Council [1998]: "Annual Report".
- Parejo J.A., Cuervo A., Calvo A. and Rodríguez Sáiz L. [1999]: "Manual del Sistema Financiero Español". Editorial Ariel, Ariel Economía.
- Plihon, D. [October 1998]: "Les banques, nouveaux enjeux, nouvelles stratégies". La documentation française.
- Quirós G. [1998]: "Mercado español de deuda pública" [Tomo I y II]. Documento Serie Azul, Servicio de Estudios BE.
- Ribas E., Montllor J. and M.A Tarrazón [1998]: "La empresa en el sistema financiero español". Editorial Mc Graw Hill.
- Servicio de Compensación y Liquidación de Valores [SCLV]. Memoria 2000.
- Soley J. [2000]: "El Sistema Financiero y su encuentro con la empresa". Editorial Deusto.

### ANNEX V

- Sánchez Calero, F. [2000]: "Instituciones de Derecho Mercantil", McGraw - Hill, Madrid.

### ANNEX VI

- Acomet, T., Grange, J. and Leclercq, G [Novembre 2000]: "Plaidoyer pour l'épargne retraite". *Banque Magazine* n° 619.
- Balligand, J.P., Foucauld, J.B. [January 2000]: "L'Épargne salariale au cœur du contrat social". Rapport au Premier ministre, Ministère de l'Économie, des Finances et de l'Industrie.
- Banque Magazine n° 613 [April 2000]: "Dossier d'épargne salariale".
- Choinel, A. and Rouyer, G. [September 1999]: "Le Marché financier: structures et acteurs". 7<sup>e</sup> édition Banque éditeur, collection Banque ITB.

- Delabrousse, L. [March 2001] [AFG – ASFFI]: “Une nouvelle loi sur l'épargne salariale en France”. *La lettre de l'OEE*, Observatoire de l'épargne européenne n° 5.
- Épargne et Finance n° 2 [July 2000]: “La relance de l'épargne salariale”.
- Épargne Expansion: “Épargne salariale”.
- Feuillet rapide fiscal social Francis Lefebvre FR 3500 [August 2000]: “Projet de réforme de l'épargne salariale”.
- Livre blanc sur les retraites [May 1991]: “Préface de Michel ROCARD, Premier Ministre, La documentation française”.
- Legifrance [2001]: “Loi n° 2001-152 du 19 février 2001 sur l'épargne salariale”. *Journal officiel – JO* numéro 43 du 20 février 2001, page 2774.
- Loi Fabius: “Un nouveau souffle pour l'épargne salariale ?”. Agefi – Gestion de patrimoine.
- Massé, F. [March 2000]: “Fonds de pension”. Fiche CNCT.
- Option Finance n° 616 [November 2000]: “Un projet de loi pour séduire les PME”.
- Rapport CHARPIN [plan]
- Rapport TEULADE [CES]
- Rapport DAVANNES [CAE]

## ANNEX VII

- Ministerio de Trabajo y Asuntos Sociales. Secretaría de Estado de la Seguridad Social [1999]: “Manual práctico de cotización”.
- Ministerio de Trabajo y Asuntos Sociales [2001]: “Guía de trabajo y Asuntos Sociales”.
- Revue fiduciaire RF 860 [February 1999]: “Le Mémento 1999 de l'entreprise”.
- Revue fiduciaire RF 873 [March 2000]: “Le Mémento 2000 de l'entreprise”.
- Revue fiduciaire RF 877 [April 2000]: “Les cotisations sociales de l'entreprise”.
- Revue fiduciaire RF 885 [February 2001]: “Mémento de l'entreprise. Taux, seuils, cotisations et délais pour 2001”.
- Revue fiduciaire RF 891 [July-August 2001]: “Mémento social, l'entreprise et les salariés”.

## ANNEX VIII

- Albi Ibáñez, E. [2001]: “Sistema Fiscal Español”. Editorial Ariel, Barcelona.
- Borrego Cuesta A. [1999]: “La fiscalidad de las empresas españolas”. Papeles de Economía Española.
- Martín Oviedo, J.M. [1997]: “Fiscalidad de las empresas”. Editorial Civitas, Madrid.