THE LONG-TERM FINANCING DECISION PROCESS: A COMPARATIVE STUDY OF THE VIEWS AND PRACTICES OF CFOS

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ABSTRACT

This paper reports the findings of a survey conducted in 2005 to study the practices related to the financing decisions of the Chief Financial Officers (CFOs) of the largest firms that operate in Portugal. The results of research confirm similar practices with European and American CFOs, as well as significant differences in the most important determinants of debt decisions. The results show the predominance of the pecking-order theory over the trade-off theory and the importance of banking sector variables as the main determinants of financing decision. The results also reveal the use of a systematic process of the evaluation of funding sources based on financial models and the current practice of risk hedging. On the other hand, the results also confirm the lack of interest in obtaining equity capital from going public and difficulties in the fulfilment of the admission requirements to the stock exchange by Portuguese firms.

***Keywords**: Financing process, Financing decisions evaluation, Hedging, Go public.*

1. INTRODUCTION

It is widely recognized by scholars and policymakers that financial markets play a key role in economic development throughout the world. In Europe, the increasing attention dedicated to their role in the economy is clearly illustrated in the final report of the Committtee of Wise Men where significant gains from this market were identified (European Commission, 2001). This report pointed to important benefits for small, medium and large firms that will be able to tap deep, liquid, innovative capital for the financing they require to expand their businesses. Market integration should be able to promote competition and will drive down the cost of capital for financing the development of firms.

Thus, in recent years, there has been a substantial increment in the number of empirical studies on the beneficial role that financial development plays in the growth of firms and on the determinants of financing decision; see *inter alia* Graham and Harvey (2001), Bancel and Mittoo (2004) and Brounen et al. (2006). Similar to these authors, the main aim in this paper is to investigate the determinants of capital structure decisions of CFOs. The purpose of this article is to study the process of the long-term financing decisions of the largest non-financial firms operating in Portugal and to analyse the adherence of CFOs' decision-making practices to the theoretical models of capital structure. However, our approach differs from theirs because it includes the analysis of the process of making financing decisions, from the choice of model used to support the decision, through the selection and evaluation of the funding sources and hedging financial risk to the study of to what extent the managers' preferences adhere to the current theories currently under discussion about the predicament related to capital structure. The realisation of this objective requires the answers to the following questions: What are the models used in evaluating financing decisions? Are determinants of debt decision similar to those identified in the largest economies of Europe and the United States? What are the practices relating to risk hedging associated with financing decisions? Is there a demand for equity capital through the issuance of new common stocks in the stock market among the largest Portuguese firms? And finally, are the barriers to going public determinant factors of the financing decision?

The answers to the questions presented are intended to contribute towards understanding the process of financing decision-making, taking into consideration, as well as the choice of criteria for the decision, the subsequent stages, in particular the selection of sources with regard to the origin, the type and the evaluation of the decision. Secondly, this research contributes to the literature through an analysis of the

practices relating to risk hedging associated with the financing strategies employed by firms. Finally, it seeks to identify the reasons why, in smaller markets with a weak degree of development, firms have traditionally been unwilling to go public to finance their investments. The objective is to investigate whether the similarity in the viewpoints relating to the determinants for recourse to external financing found among the firm managers of the four largest economies in Europe and the United States, identified by Brounen et al. (2006), Bancel and Mitto (2004) and Graham and Harvey (2001) may also be true for the managers of small, peripheral economies like Portugal, where the market power of the banking sector is greater.

Initial Public Offering (IPO) provides firms with the financing that they need to grow rapidly and at a lower cost. In addition, the development of the Portuguese stock market has been slow because of the important role of the banking sector and for reasons of tradition and environment in relation to the financing decision of the firms. The supply of equity capital in Portugal is limited by the structure of corporate governance that is centred upon family ownership. Also, the need to finance a large public deficit and government tax incentives for treasury obligations compete to attract savings and make the success of IPO difficult. This situation determines that the Portuguese corporate sector has traditionally been more dependent on bank loans than its EU counterparts. Within Europe, Portuguese public and private equity markets have been one of the smallest. In 2000, the market capitalization was 62% of the GDP, while in EU-11 it was 85% (European Commission, 2001).

The revising of the various predominant theories allows the problem to be considered at the level of the controversy between two perspectives on debt, defined by Myers (1984) as hypotheses. The first states that CFOs make financing decisions to attain an optimal capital structure by trading off the costs of financial distress and agency against debt tax shields (trade-off theory).The second hypothesis is represented by the work of researchers who believe that decisions are not aimed at achieving a target capital structure but simply at a financial pecking order, where retaining earnings is preferable to external financing and, when external financing is necessary, the issue of debt is preferable to the issue of new common stocks (pecking-order theory).

Kamath (1997) summarises the development of the literature on capital structure in two phases, from the publication of Modigliani and Miller (MM) in 1958. The severe criticisms of this study launched the basis for the construction of several theoretical models for the explanation of financing decisions and the determinants of capital structure. The second phase, which Kamath (1997) defined as a validation of the postulated theories, produced contradictory results, a situation which provoked wide discussion and significant controversy in the international literature about the determinants of capital structure. We contribute to this debate by conducting a survey in order to aid understanding of the linkage between theory, empirical evidence and the practice of managers.

Thus, it is accepted that this study has theoretical and empirical relevance, in relation to determining the factors involved in the process of decision making, and also as the point of departure for other, complementary approaches.

Apart from this introduction, the rest of the paper is organized as follows. The next section explains the methodology for gathering the data and describes the sample of firms used in the study. The third section presents and analyses the results, which are compared with those of previous studies. The final section includes a brief, critical summary and the principle conclusions.

2. METHODOLOGY

This section describes the questionnaire, the method of collecting the data and it also tests how representative the sample is. In the second part, descriptive statistics of the sample of firms are presented and these are compared with those of samples from previous studies carried out in the United States and in Europe.

2.1. The Survey and Sampling Procedures

The method of research chosen to meet the objectives defined by the present study is direct contact by means of conducting a questionnaire in firms.
The target population of this research was the largest non-financial firms operating in Portugal in the year 2003, included in the publication "*Público 500 – As Maiores Empresas não Financeiras de Portugal*", excluding those no longer in existence due to mergers, and adding all the non-financial firms listed on the stock exchange. The final sample consisted of 425 firms.

To realise the objectives of this study, a questionnaire was used that includes questions taken from the work of Graham and Harvey (2001) and Kamath (1997), to which were added questions to investigate why firms go public and also questions relating to the practices of the hedging of financial risks.

The accepted hypothesis is that the globalisation of capital markets is a reality and, because of this, firms resort to financing in foreign currency. The studies of Bancel and Mittoo (2004) and Graham and Harvey (2001) confirm the hypothesis that a large percentage of European and U. S. firms of their samples have issued debt in foreign markets. Another perspective, which is assumed here, resulting from the studies of Stulz (1996), Ross (1997), Leland (1998) and Graham and Rogers (2002), is that the firms hedge risk in order to increase their ability to borrow money, the interest of the question being centred on knowing what the financial products used in the hedging were.

In addition, we want to know why few Portuguese firms are going public. Carpenter and Rondi (2006) described some of the main barriers for small to medium-sized Italian firms going public that are similar in Portugal, like: institutional environment, the costs of going public, the stringent requirements for listing and the requirement to disclose sensitive information. This study focuses on the three last factors, in order to investigate the determinant for going or not going public on the part of the largest Portuguese firms.

The two deliveries of the questionnaires all of which were addressed by mail to the manager responsible for financing decisions (CFO or CEO) occurred in the year 2005. The first was sent on 1 July 2005, presenting the study and soliciting the collaboration and the undertaking of the recipient to reply to the questionnaire. The second was sent on 22 October 2005, in order to persevere with the firms that had not responded to the first delivery, resulting in replies from 70 more firms. Thus, the total number of respondents was 190 firms, which corresponds to a response rate of 44.71% (Table 2.1). This rate was far higher than that reached by Graham and Harvey (2001) with 9%, Bancel and Mittoo (2004) with 12% and Brounen et al. (2006) with 5%. The explanation for this may be found in the effort taken with the trialling phase of the questionnaire, during which the contribution of CFOs was put to good use, in order to improve on the quality of the questions. The fact that the questionnaire was smaller and consequently contained fewer evaluation questions of relative importance may also have contributed to the higher response ratio that was achieved. The trial period also allowed the calculation of the maximum time needed to answer the questionnaire, which was estimated at around 15 minutes.

TABLE 2.1 – Response Rate by Type of Firm

Type of Society	Questioned		Answered		Response Rate
	Nº	%	Nº	%	%
Public limited firms:					
Private firms	262	61.65	120	63.16	45.80
Public traded	48	11.29	27	14.21	56.25
	310	72.94	147	77.37	47.42
Limited partnership	103	24.24	41	21.58	39.81
Cooperatives	10	2.35	2	1.05	20.00
State-owned firms	2	0.47	0	0.00	00.00
TOTAL	**425**	**100.00**	**190**	**100.00**	**44.71**

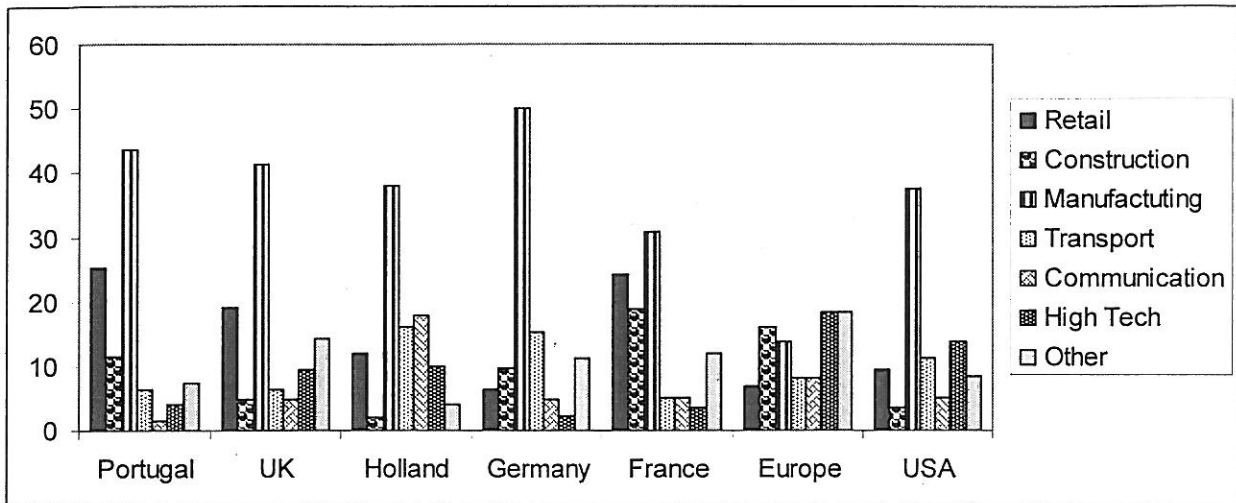
With the objective of verifying how representative the sample was, the chi-square test of significance was used to infer the results of the random sample in relation to the universal. To support the test, the sample

and the population were structured in a legal form, it being observed that there existed no a priori significant differences between the proportions of the sample and the proportions of the population. Thus, for $\alpha = 0.05$, a significance of 0.111 (superior to 0.05) was obtained, from which we may conclude that no significant differences exist between the proportions of the sample and those of the population. Faced with these results, the sample is considered to be representative of the population.

2.2. Statistics and Data of Respondents

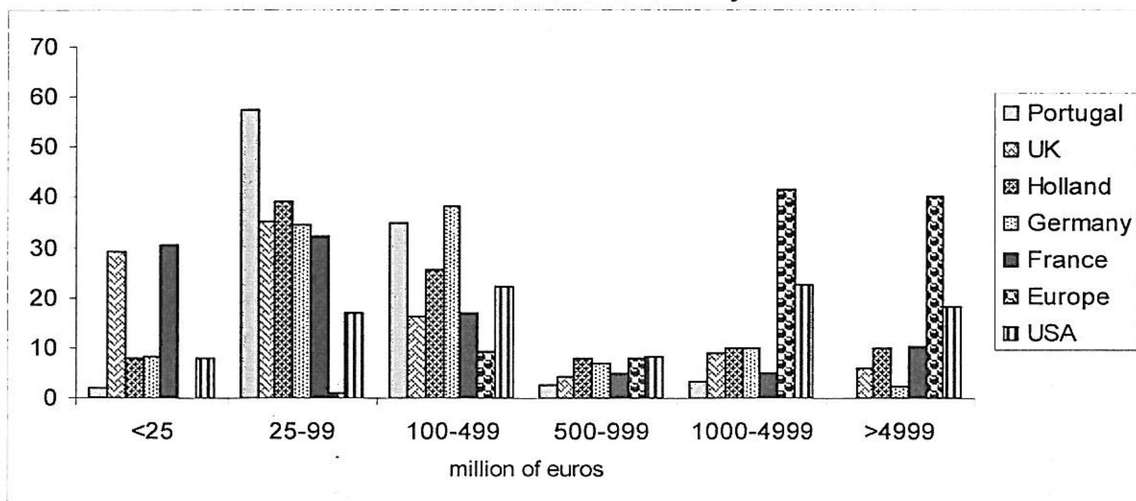
Figures 2.1 and 2.2 show the total sales and the distribution of the 190 firms in the sample among a wide variety of industries. These figures also include data from the samples of Brounen et al. (2006) for firms in the United Kingdom, Holland, Germany and France, the data of Bancel and Mittoo (2004) for 87 firms from 16 European countries and the sample of 393 firms from the United States of Graham and Harvey (2001).

FIGURE 2.1 – Distribution of firms by industry



As in the samples of Brounen et al. (2006) and Graham and Harvey (2001), this sample registers a high number of firms in manufacturing (43.68%), followed by the retail and wholesale sector (25.26%) and construction (11.58%).

FIGURE 2.2 – Distribution of firms by total sales



At the level of size, it is clear that none of the larger firms that operate in Portugal attain the highest scale, that is, have total sales greater than 4,999 million euros. Only 11 firms, 5.79% of the firms in the sample, are placed on the two following scales, that is, 1,000 – 4,999 million euros and 100 – 499 million euros, and 51.37% on the scale 25 – 99 million euros. The two last scales of sales also registered a greater number of firms in the study of Brounen et al. (2006) and Graham and Harvey (2001) although with a much smaller number of firms. As the target population for this study was large firms, in comparison to the data from samples of other countries, the smaller size of firms which operate in Portugal can easily be concluded.

As for other criteria related to being listed on the stock exchange, it was confirmed that 14.21% (or 27) firms are quoted on the stock exchange and, of these, 50% considered the cost associated with financing as the determinant factor for this decision. For 33% it was the credibility factor; and for 29.2% of responding firms, other factors, such as maintaining the capital structure, the process of privatisation, the increase in the range of sources of finance and the growth of the firm, were the factors considered determinant for being listed on the stock exchange. Few firms trading in Portugal are listed on the stock market and development has been slow because of barriers such as the important role of the banking sector and tradition of entrepreneurships. Today only 51 firms are listed on the Portuguese stock market, Euronext Lisbon.

In comparison with the other works considered, it is clear that the sample of French firms included only 11.67% of listed firms, Germany 22.73%, Holland 41.18%, the United Kingdom 57.73%, the United States 65.56% and the European sample of Bancel and Mittoo (2004) was composed wholly of listed firms.

FIGURE 2.3 – Free float and shareholders' equity

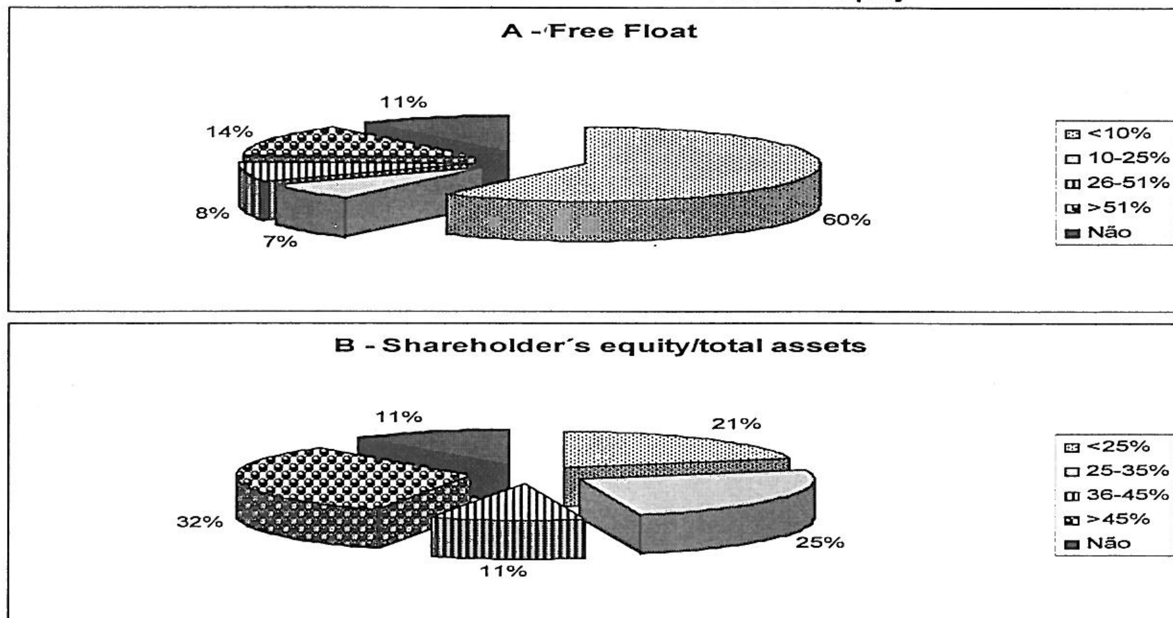


Figure 2.3 reveals a high level of debt among firms in the sample and a low free float, with only 22% of the firms that responded presenting a dispersal rate of common stock equal to or higher than 25%. This result characterises high ownership concentration and control of the largest Portuguese firms by a single individual or a family.

As to the option by distribution of results or the capacity for such, 60.4% of the firms were regularly engaged in the distribution of dividends while, in the samples from other countries, this rate was 41.18% in Holland, 53.73% in the UK, 22.73% in Germany, 11.67% in France and 65.56% in the USA (Brounen et al., 2005).

Eighty nine percent of CFO respondents (169 firms) declared that they sought the continuation of growth for their firms by new investments in the expanding market shares and by the diversification of products and markets.

In relation to the profile of the respondents, it is confirmed that 74.2% are male and 23.2% are female; 91.1% of respondents are Portuguese and 2.6% are from countries within the European Union. Only 6.4% of respondents did not experience higher education (university degree, postgraduate qualification, masters degree or doctorate); 75.3% of respondents had been with the firm for five years or more, which confirms a high level of knowledge concerning financing decisions.

The results of the questionnaire reveal that Portuguese financial CFOs are on average younger than in America and the rest of Europe, that most have educational qualifications at graduate level (64.21%), while in the rest of Europe and in the United States the majority have an MBA.

3. ANALYSIS AND DISCUSSION OF THE RESULTS

In this section are described the results which correspond to the three principal objectives of this study. In the first section, the opinions of the managers are analysed in relation to the process of making financing decisions, in the second section are described the instruments for hedging risk and in the third section are described the reasons for firms not going public in order to finance their investments.

3.1 Theory and Practice of Financing Decisions

The first question about the capital structure has as its objective investigating which criteria are used by managers in the decision-making process relative to obtaining additional long-term funds. In contrast to Graham and Harvey (2001), the question asked here seeks to establish a direct confrontation between the trade-off theory and the pecking order theory, to which is added the hypothesis of decisions being taken based on other criteria. The choice of these alternatives was determined by a certain lack of robustness in the results of earlier study and in the understanding that other theoretical positions connected with the costs of bankruptcy and of agency could be seen from the perspective of trade-off.

Of the 190 firms comprising the sample, 189 responded, which represents a valid response rate of 99.5%. The responses obtained indicate that 48.7% prefer to follow a financing hierarchy, 18.9% seek to maintain or attain a target capital structure and 32.1% make their decisions based on the opportunity and the cost associated with each source of funding (Table 3.1).

TABLE 3.1 – What is the principal criterion used in raising new funds?

Survey statement	N.º	%		
		Total	Valid	Accumulated
Maintains / attains a target capital structure	36	18.9	19.0	19.0
Follows a hierarchy of sources of funds	92	48.4	48.7	67.7
Other	61	32.1	32.2	100.0
Total valid responses	189	99.5	100.0	
No response	1	0.5		
TOTAL	**190**	**100.0**		

In the following question, respondents were asked to place in order of preference the four principal sources of funds (Table 3.2).

Of the firms that use as criterion the hierarchy of sources of funds, 64.2% prefer to be financed primarily from funds that are internally generated, 50% use straight debt as the second most preferred source, 44.6% use external common equity as the third preferred source and 52.8% use the issue of bonds as the last choice. Respondents prefer internal financing to external and, within the latter, bank loans to increases in external equity. The results are consistent with those postulated in the pecking-order hypothesis with the exception that the last place is occupied by the issue of bonds. This difference is

certainly related to the transaction costs that are borne by Portuguese firms in bond issues.

TABLE 3.2 – Rank the sources of long-term funds by order of preference

Order of preference	Internal equity (retained earnings)		External common equity		Straight debt		Debt securities (bonds)	
	Nº	%	Nº	%	Nº	%	Nº	%
1st	52	64.2	2	3.6	35	41.7		
2nd	20	24.7	11	19.6	42	50	7	13.2
3rd	8	9.9	25	44.6	5	6.9	18	34
4th	1	1.2	18	32.1	2	2.4	28	52.8
TOTAL	**81**	**100**	**56**	**100**	**84**	**100**	**53**	**100**

To validate the results, an indication of the relative importance of the various determinant factors in the capital structure identified in the literature was then solicited. In calculating this importance, the scale of 1 (of little importance) to 6 (extremely important) was used, divided into three, with 1 and 2 signifying of little importance, 3 and 4 signifying important and 5 and 6 signifying very important. The purpose in choosing this scale was to resolve the problem of centrality and to eliminate possible irrelevant factors.

Applying the chi-square test to the factors that were enunciated gives the result that the responses obtained for "taxes and fees for issuing debt" and "the tax advantage of interest deductibility" are not statistically significant of the sample of respondent firms.

Table 3.3 presents a summary of the responses from CFOs in relation to the determinant factors in governing decisions to finance through debt. The interest-rate level was indicated as the most important factor by 76.4% of the respondents, reaching a mean of 4.99 on the scale 1 to 6. The volatility of earnings and of cash flow is also considered very important (5) or extremely important (6) by managers (mean = 4.51). Other factors considered very or extremely important are the maintenance of financial independence (mean = 4.39) and the pledge collateral required (mean = 4.11), indicated by 49.7% and 45.6% of managers, respectively. Other factors considered important as far as the appropriate amount of debt is concerned were the need to ensure the commitment of managers (mean = 3.85), credit rating (mean = 3.72) and financial flexibility (mean = 3.62). The level of debt of firms in the sector (mean = 2.2) was clearly considered by 67.1% of the respondents as of little importance in decision-making about the amount of debt.

TABLE 3.3 – Evaluation of the importance of factors in decision making about the appropriate amount of debt

Factors	Importance (%)			Response		NR		
	Little	Important	Very	No.	Mean	(%)	λ^2	α
The volatility of earnings and cash flow	10.0	30.0	60	160	4.51	15.8	6.65	0.75
The level of interest rate	02.4	21.2	76.4	165	4.99	13.2	4.31	0.82
The debt levels of other firms in industry	67.1	27.7	5.2	155	2.20	18.4	11.5	0.31
Financial flexibility	25.3	42.7	32	150	3.62	21.1	6.38	0.78
Taxes and fees for issuing debt	27.7	37.7	34.6	159	3.65	16.3	18.9	0.04
Credit rating	23.7	44.9	31.4	156	3.72	17.9	10.5	0.39
Maintaining financial independence	06.8	43.5	49.7	161	4.39	15.3	15.1	0.12
The tax advantage of interest deductibility	33.8	40.1	25.5	157	3.39	18.0	26.6	0.01
Ensuring that management works hard and efficiently	18.1	47.7	34.2	149	3.87	21.6	9.31	0.50
Pledge collateral	15.2	39.2	45.6	158	4.11	16.8	13.3	0.20

These results are a strong contrast to those found by Graham and Harvey (2001) and Bancel and Mittoo (2004) for firms in European countries and in the United States. In these studies, the four principal factors that were considered important and very important by more than 50% of the managers were, in decreasing importance, financial flexibility, credit rating, tax advantage from interest deductibility and the volatility of earnings and cash flows. Of these factors, only the last was considered very important by 60% of Portuguese CFOs, while the other three factors are placed lowest in terms of mean relative importance. The results reveal the enormous importance of the banking sector, since the three factors connected to this sector were considered as the most important determinants in financial decision-making through the issue of the appropriate amount of debt.

TABLE 3.4 – Evaluation of the importance of factors in making decisions about issuing common stock.

Factors	Importance (%)			Response		No Response (%)	λ^2	α
	Little	Import	Very	No.	Mean			
Stock is the "least risky" source of funds	30.8	38.5	30.8	91	3.47	52.1	9.82	0.45
Providing shares to employee bonus/stock option plans	66.3	23.6	10.1	89	2.25	53.2	6.33	0.61
Common stock is the cheapest source of funds	38.6	30.7	30.7	88	3.31	53.7	6.72	0.75
Maintaining a target of debt-to-equity ratio	14.0	43.0	43	93	4.18	51.1	16.32	0.09
Using a similar amount of equity as is used by other firms in industry	70.0	27.8	2.2	90	2.04	52.6	12.02	0.15
Recent profits have been insufficient to fund activities	20.2	40.4	39.4	94	3.83	50.5	12.91	0.22
Issuing stock gives a better impression of firm's prospects	45.6	32.2	22.2	90	3.01	52.6	7.75	0.65
The capital gains tax rates faced by investors relative to tax rates on dividends	45.1	41.8	13.2	91	2.85	52.1	13.90	0.17
Inability to obtain funds from other sources	48.4	35.2	16.5	91	2.77	52.1	8.50	0.58
Earnings-per-share dilution	56.2	39.3	4.5	89	2.42	53.2	4.85	0.90

Although the mean for valid responses was less than 50%, through the analysis of the chi-square test it was concluded that the responses obtained for each factor are representative of the sample of respondent firms. However, this result reveals the lower importance attributed by managers to financing through the issue of common stocks, which is considered to be residual and only used after other alternatives have been exhausted. From the results it is noticeable that none of the factors represented have been indicated as important or very important by 50% or more of the respondents, a result which confirms the strong dependence on the banking sector. Only the maintenance of a target debt-to-equity ratio and insufficient recent profits to fund activities were indicated as important by around 40% of the respondents with mean values of 4.18 and 3.83 respectively. With the exception of the lowest risk associated with the issue of common stocks (mean = 3.47) and the fact that they considered this source of financing to be cheaper (mean = 3.31), which places the values close to the mean, all the rest of the factors indicated were considered of little importance by most of the respondents.

These results, despite appearing to contradict those described in Table 3.1, are in fact complementary and demonstrate that, although firms choose sources of financing with a base in a hierarchy, considered as most likely, they use the issue of common stocks as a last resort for attaining a target capital structure.

In the studies of Graham and Harvey (2001) and Bancel and Mittoo (2004), the results were coincident in the ordering of the relative importance of the determinant factors in the issue of common stocks. The

coincidence of the opinions of European managers and those in the United States shows that factors connected with lower risk, image, fiscal advantage from the contribution of capital gains and lowest cost are the principal conditions for financing through the issue of common stocks. Although these results are somewhat different from the concerns of Portuguese managers, they represent greater proximity to those relative to the issue of debt.

As far as evaluating financing decisions is concerned, it is confirmed that 153 of the 190 firms (80.5%) systematically assume this practice. In evaluating these decisions, the predominance of evaluation methods that are relatively financial in nature, rather than non-financial, is clear. Of the first, the most used are the method of cost of capital, by 42.1% of firms, and the method of actuarial interest rate (define as the interest rate or discount rate that equates to zero the sum of the present values of all cash flows associated with the sources of funds), by 38.6% of firms. Non-financial criteria are used by 16.6% of firms (Table 3.5). Salient is the fact that each of the responding firms can use one or various methods.

Table 3.5 – Evaluation of the sources of funds

Evaluation methods	Public limited firms		Limited partnership		Others		Total	
	No.	%	No.	%	No.	%	No.	%
Cost of capital	49	42.6	10	38.5	2	50	61	42.1
Actuarial interest rate	44	38.3	10	38.5	2	50	56	38.6
Present value	35	30.7	6	23.1	1	25	42	29.2
Non-financial criteria	17	14.8	4	15.4	3	75	24	16.6
Others	2	1.7	3	11.5			5	3.4

For firms listed on the stock market, the lower use of non-financial criteria should be noted (3 firms, 11.5%, use non-financial criteria and 1 firm, 3.8%, uses other criteria) as well as a rate of use greater than the two first methods relative to the total sample.

In summary, the results presented show the systematic use of the evaluation of financing decisions for the investments carried out and the use of financial methods for evaluating these decisions, with the frequency of use increasing in line with the level of sophistication of the management of the firm.

3.2 Hedging Financial Risk

As far as the systematic practice of operations to hedge financial risks is concerned, in first place is to assess whether firms are exposed to currency-exchange risk resulting from having to use foreign debt. Thus, of the firms in the sample, 183 responded (96.3%) and, of these, 48.1% are or have already been exposed to exchange risk because they have had to use foreign debt. This is a lower percentage than that registered in the sample of Bancel and Mittoo (2004) for the firms of four major European economies. As for the legal form of the firm, 51% of public limited firms and 45.2% of limited partnerships are or have already been exposed to currency-exchange risk. The same happens with 57.7% of the public traded firms on the stock market. The results show an increase in the use of foreign debt related to the level of sophistication of the management (derived from the effect of the size of the firm and / or, eventually, from the type of market in which the firm operates).

Stemming from eventual exposure to currency-exchange risk and thus to the risk of eventual increases in interest rates, 40.3% proceed in a systematic way to the hedging financial risk. As is the case with the use of foreign debt, analysis of the results shows an increase in the practice of hedging financing risk related to the level of sophistication of the management. Thus, 42.3% of public limited firms – a percentage higher than the mean – and 36.7% of limited partnership – a percentage lower than the mean – practise in a systematic way the hedging of financial risks. The same thing happens with 60% of public traded firms on the stock market.

As for the type of risk hedged, 75.7% of firms hedge against foreign currency devaluation, 65.2% hedge interest rates and 5.8% hedge other types of risk. These results confirm those found in the survey of Bodnar, Hayt and Marston (1998) that foreign-currency risk is the most commonly managed by non-

financial U.S. firms, followed by interest rate risk. As far as the distribution of results according to the legal form of the firm is concerned, 77.6% and 68.6% of public limited firms hedge currency-exchange risk and interest-rate risk respectively. The same thing applies to 80% and 40% of limited partnerships (taking into account the low number of these firms that hedge risks), respectively.

As far as the firms listed on the stock market are concerned, 80% and 93.3% hedge currency-exchange risk and interest-rate risk, respectively. It should be noted that, depending on the level of exposure, a firm can hedge more than one type of risk.

Table 3.6 – Which financial products are used to hedge risk?

Financial Products	Public limited firms		Limited partnership		Others		Total	
	No.	%	No.	%	No.	%	No.	%
Futures	11	19.0	2	22.2			13	18.8
Options	19	32.8	3	33.3	1	50	23	33.3
FRAs	23	39.0					23	32.9
Currency - exchange swaps	33	56.9	6	66.7			39	56.5
Interest-rate swaps	33	56.9	3	33.3	2	100	38	55.1
Others	1	01.7	1	11.1			2	02.9

Among the financial products, the most used in the hedging of risks are currency-exchange swaps, by 56.5% of firms, and interest-rate swaps, by 55.1% of firms (Table 3.6). The choice of swaps over options and futures implies a preference for risk-hedging through the banking sector rather than the stock market.

As far as, these products by public traded firms on the stock market is concerned, the results show a preference for the use of derived composite products to the detriment of futures (principally) and options. Although, for firms not listed on the stock market, there is predominance for the use of derived composite products, there is equally recourse to futures and options at a level that is not negligible.

3.3 DECISION TO GO PUBLIC

One of the ways to increase equity capital, coming from the issue of new common stocks, is to go public, as long as it fulfils the requirements defined in the Code of Securities. But, the listing requirements of Portuguese stock exchanges are very strict. Such requirements make it almost impossible for the small business to go public.

Of the public limited firms which are in a position to approach this market (113 limited firms), only 8 (that is, 7.1%) usually go public as a way of acquiring new equity capital through the issue of new common stocks. Of these, only 2 are not listed on the stock exchange. This result suggests there is little interest in going public and that one characteristic of the Portuguese capital market is its bank-centeredness.

With the purpose of validating the conclusion referred to above, the other firms which made up the sample were questioned as to whether they considered the possibility of going public independently of their legal make-up and of their eventually fulfilling the admission requirements. A total of 167 valid responses were obtained, equivalent to 91.8% of the valid response rate. Of these, 19 firms (11.38%) admitted the possibility of going public as a way of acquiring equity capital through the issue of new common stocks. Of these19 firms, 18 (14.3% of the 126 public limited firms that responded) had the legal make-up of a public limited firm and 1 (3.1% of the 32 limited partnerships that responded) had the legal make-up of a limited partnership. This result suggests little future interest in relation to the demand for equity capital by going public among the larger Portuguese firms as well as the lack of tradition of supporting growth in the stock market. When firms need financing, they can more easily raise debt capital from banks than equity financing through an IPO. In such an environment, firms may not be willing or possess the knowledge necessary for going public as a means of equity financing.

The firms were also questioned about the factors which supported the willingness to go public. Of the 19

firms that fit this hypothesis, 17 responded (89.5%) and, of these, 76.5% considered the cost associated with the financing to be the determinant factor, 47.1% and 35.3% considered the increase in public awareness and credibility, respectively, of the firm in relation to the market.

Table 3.7 – Determinant Factors for Going Public

Factors	Nº	%
Public awareness	8	47.1
Publicity	2	11.8
Credibility	6	35.3
The cost of financing	13	67.5
Others	1	5.9

At the same time, of the 104 firms which do not fit this hypothesis, 88 responded (84.6%) and, of these, 53.4% consider lack of interest in the market as the determining factor in the decision, 34.1% consider diverse factors and 13.6% consider the cost associated with financing as the determinant factor.

Table 3.8 – Determinant Factors for Not Going Public

Factors	Nº	%
Not fulfilling the requirements	8	9.1
The cost of financing	12	13.6
Lack of knowledge about the market	2	2.3
Lack of interest in the market	47	53.4
Others	30	34,1

Given that 11% of respondents admitted a desire to go public, it seems that there isn't a demand for equity capital through the issue of new common stocks in the stock exchanges. Three primary determinants for firms to consider going public were the cost of financing, public awareness and increased credibility and the main reason for not going public was the lack of interest in the market.

4. CONCLUSIONS

In this paper, the process of making financing decisions of the biggest firms that operate in Portugal has been analysed. The practice of financing decision making was compared with the results of earlier studies relating to firms in the United States and in Europe undertaken by Graham and Harvey (2001), Bancel and Mittoo (2004) and Brounen et al. (2004).

The results of this study confirm the pecking-order behaviour identified earlier and clarify that the motivation of managers for using this criterion in the choice of sources for financing resides in their perceptions in relation to cost and availability and not for reasons connected with asymmetrical information.

Analysis of the determinant factors in decision making concerning sources of financing reveals a harmony with the managers of European and US firms as regards the low response rate of managers to the issue of common stock, something which could come from a lack of interest or from a less secure feeling in their responses. In relation to the decision concerning the issue of debt, the results are divergent and reveal the great importance of the banking sector in financing Portuguese firms, to the extent that the level of interest rates, the maintenance of independence and the type of pledge collateral were indicated as the most important factors of debt decision for the majority of managers.

In relation to the process of evaluating decision making, the results show the systematic practice of the evaluation of sources of funds, with predominance for using financial evaluation methods, particularly the method of cost of capital and the method of actuarial interest rate of sources of funds.

As far as exposure to risk is concerned, particularly as regards financing in foreign currency, the results suggest a level of exposure proportional to the level of sophistication of the management and / or the size

of the firm, that is, it is more used by public traded firms on the stock market and by other public limited firms. Based on the aggregated results, there is some evidence of the systematic practice of hedging financial risk. As to the type of risks, there is evidence of hedging currency-exchange risks and interest-rate risks. The financial products that are most used in hedging are currency-exchange swaps and interest-rate swaps, as against derived products that are not composite (futures and options).

In respect of interest in obtaining equity capital from going to the stock market, the results suggest there is a lack of interest in this market. This fact indicates the existence of an entrepreneurial structure with a predominance of firms with little spread of capital. The results of this study confirm the conclusions of Pagano et al. (1998) about the small dimension of the stock market in Europe Continental Countries relative to the size of its economy.

Among the factors which determine interest in eventually going public were indicated the cost associated with financing, the raising of public awareness and credibility. At the same time, among the factors which contribute to the decision not to have recourse to this market, lack of interest is found.

In comparison with work about other European and American countries, we can conclude that Portuguese firms are smaller in size and CFOs have a lower level of academic qualifications and they remain longer with their firms. As far as financing decisions are concerned, it can be concluded that the concerns that are found are mostly centred on the costs of sources of financing, even though the majority of managers have as their base criterion for decision making a hierarchy of sources defined within these parameters.

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