

FACTORS ON VOLUNTARY ACCOUNTING INFORMATION BY GREEK COMPANIES

By

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Abstract

This paper reports on voluntary accounting disclosure practices of Greek listed corporations and relates the extend and quality of disclosure to firms variables such as size, financial leverage, age, share marketability and proportion of asset in place. The extent and quality of disclosure have been measured by the average of scores given by 43 Greek Certified Public Accountants. Studying the voluntary disclosure of Greek firms, the paper provides new insights into factors behind voluntary disclosure choices. Disclosure varies widely within a sample of 36 Greek manufacturing firms listed on the Athens Stock Exchange. According to expectations, the extent and quality of disclosure is found to be significantly and positively related to the firm size, whereas the innovation of the paper rests with the found relationship between disclosure and share marketability and the non-significant association of disclosure with financial leverage, firm age and asset in place (JEL Classification = M40, G14).

1. Introduction

Financial information provided by the companies through their published financial statements, is the major means of their communication with all agents that compose the "market". This communication is provided by companies, not only because the publicity of financial data is compulsory from the national legislation, but also because the companies recognize its importance for the promotion of their products and the formation of a favourable image of their present and potential prospects.

The fundamental means of communication with a company's economic environment is its Annual Report. The content, the format of information and the variety of the data included in the Annual Report, are specified

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by external regulations, such as the commercial and fiscal law of each country, the standards of the accounting profession, and, for listed companies, the relevant Stock Exchange regulations. These authorities determine minimum rules or guidelines, referring to the degree of disaggregation of information disclosed in the corporate Annual Reports. However, many companies disclose some data in addition to the minimum requirements, basically because their managers perceive that more data is valuable to outside parties. In the course of decision-making about disclosing additional information, the management must "evaluate" the degree of disclosure demanded by the users (external decision-making groups) of financial statements. Despite the findings of many research papers, the supply of financial information is not quite satisfactory due to the absence of a clear mechanism of recording the user's needs. In any case, the "evaluation" of managers, which is subject to the limitations of the minimum compulsory information, the cost and the reluctance to disclose competitive information, is the basis of the disclosure policy of companies. The extent of company disclosure policy, is diversified according to whether the managers are stockholders or not. In the case of companies administered by non-stockholder managers, there is a relation between voluntary disclosure and agency theory .

Recent studies (Holthausen - Leftwich, 1983; Watts - Zimmermann, 1986) have assumed that the companies' voluntary accounting and disclosure choices are aimed at controlling the interest conflict among shareholders, debtholders and management. It is held that the extent of these interest conflicts - hence the incentives behind voluntary accounting/disclosure choice - varies with certain characteristics of companies.

These questions have been examined to a certain degree in the literature. Among other points, researchers in the United States (Singhi 1967; Singhi and Desai, 1971; Buzby, 1974), Great Britain (Firth, 1979), New Zealand (MacNally et al, 1982), Nigeria (Wallace, 1988), Sweden (Cooke, 1988), Japan (Cooke, 1992), and Spain (Wallace et al, 1994), have examined the relationship between some selected company characteristics and the extent of disclosure, i.e. the extent to which selected items of financial and other information, considered important by external users (Public Accountants, Auditors, Financial Analysts, Managers, Financial Directors, Bank Loan Officers, Stock Exchange members, etc), are presented by companies in their Annual Report.

These researchers have focused on the following characteristics of firms:

Size variables: The first measure of size, total assets, was found to be significant in previous studies in the U.S. (Singhi, 1967; Singhi and Desai, 1971 and Buzby, 1975), U.K. (Firth, 1979), Nigeria (Wallace, 1987), Sweden (Cooke, 1988), Japan (Cooke, 1992) and Spain (Wallace et al, 1994).

The second measure of size, annual sales, was found to be a significant explanatory variable by Firth (1979) and Cooke (1988), but not significant in research carried out by Wallace (1987, 1994).

The third measure of size, number of shareholders, was found to be a significant explanatory variable by Singhi and Desai (1971) and by Cooke (1988, 1992). In contrast, Wallace (1987) found that the variable was not significant for Nigeria.

Listed status (listed or non listed companies): Studies by Singhi (1967), Singhi and Desai (1971), Firth (1979), Cook (1988, 1992) all found that listed status was a significant explanatory variable. In contrast, Buzby (1974) found that the listed status was not significant in his study based on U.S. corporations.

Industry type: Cooke (1988) found that industries versus non industries, give better explanation (Wallace, 1994), confirmed that industry type as well as listing status and auditor type are factors that influence the corporate reporting cultures of firms.

Auditing type: Firms audited by one of the Big Eight (Six) Audit firms will disclose more information. The results of previous studies are not consistent. Singhi and Desai (1971) confirmed this hypothesis, but Firth (1979) and Wallace et al. (1994) did not report any relation.

The present study aims to examine the factors which affect voluntary accounting information supplied by Greek companies. It examines the quality of voluntary accounting - financial disclosure practices of Greek corporations and the association between the degree of voluntary information provided by Greek companies, through their published Annual Reports and companies' characteristics.

The paper is organized as follows: First, a sample of Annual Reports of companies is selected. Secondly, "evaluation" is made of the extent to which information is voluntarily supplied by the companies through their Annual Reports. Thirdly, the relationship between the extent of non-compulsory

disclosure of companies and companies characteristics is empirically investigated.

2. Research Design

2.1. Sample Selection of Annual Reports

The selection of an appropriate sample of Annual Reports, presents special problems in Greece. These problems are mainly due to difficulties in obtaining an adequate number of Annual Reports and to the absence or inadequacy of published Annual Reports. Annual Reports are regularly published by Banks, Investment Companies, only a part by other listed companies, some of the state-owned companies and a small number of non-listed companies.

Moreover, occasional Annual Report publications are offered by few companies, while in the majority of cases, shareholders do not receive any of the above reports. Consequently, one has to spend time and effort in order to obtain them. Even if they succeed to acquire a substantial number of them, there are other problems that have to do with the incomplete content, i.e. they include the compulsory information required by Greek law (Financial Statements - Balance Sheet, Profit and Losses Account, Profit's distribution - the Auditor's report and/or a brief analysis of Financial Statements and a sparse report of the Board of Directors).

Due to the above reasons, it was impossible to investigate the Annual Reports with the methods of random sampling, so we had to work with only Annual Reports from listed companies of the Athens Stock Exchange.

A questionnaire has been designed and addressed to companies whose main activity is in manufacturing. Thus a sample of 70 companies was collected, excluding companies from services, commercial and construction sectors, as well as Banks, Insurance Companies and Investment Funds - listed in the Athens Stock Exchange in 1989. Of those, 36 were considered in the analysis. Table 1 contains the list of companies included in the sample.

2.2. Evaluation of the Extent of Disclosure of Companies' Annual Report

2.2.1. Selection of financial-accounting and non financial items (questionnaire)

The first stage of the process was to construct a list of items that appear or could appear in Corporate Annual Reports. Using the existing literature related to the financial information needs of the main financial statement

users, we found items presenting frequency of appearance in these studies. More items were gradually added which were proposals, directives, statements and standards required by National or International Organizations or Professional Accounting Associations .

The later were co-evaluated with items originating from needs of Financial Statement users mentioned in the relevant literature. So we created a list of 122 items⁵.

Finally, we proceeded with the following steps: i) We eliminated items whose appearance in the Annual Reports were compulsory by Greek Law. The items included in the Appendix and the Board of Directors Report were not eliminated because they failed to appear in all the Annual Reports ii) We also eliminated items which were difficult to understand, or were vague or finally were impossible to interpret due to the different socio-economic and legislative background of Greece compared to other countries where similar studies were conducted. During the final stage of the construction of the 46-item questionnaire (the Questionnaire at the back of the paper), we consulted two Public Accountants who made useful questions and clarifications.

2.2.2. Importance of items (User preferences for disclosure).

As some of the 46 items are likely to be perceived as being more important than others, importance weightings were attached to each of them (see Table 2). The weightings were obtained by sending a list of the items to external users (Public Accountants) and asking them to grade the importance of each item on a 1 to 5 scale, where 5 denotes a very important item, 4 important, 3 moderately important, 2 slightly important and 1 unimportant items.

The list of items was sent to a total of 77 members of the Greek Institute of Certified Public Accountants (51% of all the members). A total of 43 replies were received, giving a response rate of 56%. To examine whether there was any significant non-response bias (i.e. the opinions of the respondents may not be representative of the whole population) a test suggested by Oppenheim (1966) was employed. The purpose of this test is to establish whether the mean value of late respondents, had significantly different scored from the mean value of early respondents. The eight earliest and eight latest replies were identified and mean scores obtained for the responses of each group to the items in the questionnaire.

To compare these two means, the Wilcoxon-test method was used. According to the results ($z=1.52$), the calculated ζ was statistically non significant, which indicated the absence of non-response bias.

2.2.3. Measuring the disclosure level (*Voluntary disclosure practices of companies*).

The next stage in the research design was to build up a disclosure index for each company. Each company's Annual Report was then inspected to see if and how many of the 42 items were contained and a weighted disclosure index score was derived (see Table 1).

The disclosure score is defined as follows:

Let i = index of items ($i=1, 2, \dots, 42$)

j = index of companies ($j= 1, 2, \dots, 36$)

k = index of Public Accountants ($k = 1, \dots, 43$)

The weighted S_j of company j is given by the formula :

$$S_j = \sum_{i=1}^{42} \bar{W}_i h_{ij}$$

where

$$\bar{W}_i = \frac{1}{43} \sum_{k=1}^{43} w_{ik}$$

and w_{ik} = weight given to item i by Public Accountant k

$h_{ij} = 1$ if company j discloses item i , 0 otherwise

2.3. Choice of Explanatory Variables - (Company Characteristics)

Within the above framework, five hypotheses were developed to explain the relation between supply of voluntary accounting information (explanatory variable) and company's characteristics.

The conceptual basis for the hypotheses is discussed below.

A. *Size*

A number of reasons have been put forward supporting the hypothesis that larger firms tend to give greater financial disclosure. First, the cost of accumulating detailed information is relatively high for smaller corporations. In larger corporations, such information is accumulated for internal reporting to top executives and, therefore, disclosure of such information is not a single costly affair for them. Second, the management of larger corporations is likely to realize the possible benefits of better disclosure, such as easier financing. Smaller corporations usually do not raise funds in the securities market and, therefore, cannot realize the possible benefits of better disclosure. Another reason is that smaller corporations are more likely to feel that the full disclosure of information could endanger their competitive position.

Also, large firms tend to be more publicly disposed and attract more interest from Government bodies, and they may, therefore, disclose more thinking that they will allay public criticism or Government intervention in their affairs. Last, Jensen and Meckling (1976) have shown analytically that agency costs increase with the amount of outside capital while, Leftwich, Watts and Zimmermann (1981) have suggested that the proportion of outside capital tends to be higher for larger firms. Accordingly, the potential benefits from shareholder - debt holder - manager contracting - including the extent of financial disclosure - would also increase with firm size.

The explanatory variable initially considered as measure of size is the market value of equity plus the book value of debt. However, to avoid the problems caused by heteroscedasticity, natural logarithms of these variables were calculated (Maddala 1985, p. 271) instead of raw value.

In the preliminary stage we used other size variables drawn on relevant studies such as number of shareholders, capital stock and bank borrowings, which were eliminated from the study because we found them highly correlated with market value of equity plus the book value of debt ($r=0.808$ $p=0.0005$ and $r=0.960$ $p=0.00$ and $r=0.729$ $p=0.01$, respectively).

We did not test sales, as size variable, because we had no data for the period 1985-1986, as well as total assets since this variable was highly correlated with the explanatory variable "proportion of assets in place" ($r=0.741$ $p=0.00$).

B. *Financial Leverage*

Some of the researchers in "agency theory" claim that the higher the debt levels and debt to equity levels, the greater the amount of disclosure

a firm may make (Watts 1977). Also, Jensen and Meckling (1976) and Smith and Warner (1979) have observed that agency costs are higher for firms with proportionally more debt in their capital structures, suggesting a positive relationship between the extent of voluntary financial disclosure and financial leverage.

As measure of financial leverage we used the Book value of debt/Market value.

C. Proportion of assets in place

Myers (1977) has suggested that wealth transfers are more difficult (hence agency costs are lower) with assets that are already owned, than assets as yet to be acquired, implying that the extent of voluntary financial disclosure would be inversely related to a firm's proportion of assets in place.

As measure of this characteristic we used the Book value of fixed assets net of depreciation/Total assets.

D. Age

This variable can be of possible importance in populations which include both old and new firms. Incentives for disclosure can differ according to age. Older firms may be less fearful of negative competitive effects, and therefore be willing to offer more information. Thus, we expect age to be related positively to higher voluntary disclosure.

As measure of this characteristic we used the year of the company's entrance in the Athens Stock Exchange.

E. Marketability

Marketability of shares can also be an important explanatory factor of disclosure among listed firms in the Greek environment. Although past disclosure may have led to high present marketability, we hypothesize a positive relation between marketability and concurrent disclosure.

Essentially, high marketability can be seen to offer an incentive for present and future disclosure, since within such disclosure firms may fear that their marketability will erode.

As measure of this characteristic we used the number of common shares which have been traded during the year/Total number of common shares.

Data on corporate characteristics were obtained for each company. To remove cyclical fluctuations, the explanatory variables were expressed as mean values over a five year period (1985-1989).

2.4. Data Collection

The primary data for determining the firm's characteristics were derived from Annual Reports, Annual Bulletins of the Athens Stock Exchange, and the Government Gazette of Greece where the financial statements of companies are published.

The set of data and the uniformity of content were ensured through contact with Accounting Departments of companies used in the study. The main reason for this step was the application of Accounting standards by Greek companies. More specifically, before 1987 - when the Greek Company Law 2190/20 was amended with the relevant IV and VII Directive of European Union - the published Financial Statements were characterized by non uniform techniques and were marked by confused and inconsistent terminology. As examples we mention, the absence of disclosure of sales, the confusion between Reserves and Provisions, the inclusion of the accumulated losses in Assets, etc. Also, even at the present time Financial Statements are prepared according to the Fiscal Law and not according to the Commercial Law and the Internationally accepted Accounting Principles.

So, we had to review data from the Annual Reports especially in the accounting value of Fixed Assets. As an example we mention the absence of analysis of depreciations (ordinary and additional fiscal ones), the voluntary revaluation of machinery in 1987, the compulsory revaluation of land and buildings in 1988.

3. Cross - Sectional Analysis

The weighted score S (obtained in the way described in Section 2.2.3.) has a mean value of 44.178 and a standard deviation of 23.878. This score is used as the dependent variable in a multiple regression on the explanatory variables discussed above: size, leverage, age, marketability, proportion of assets in place.

Tables 3 and 4 give the simple correlation and Spearman correlation matrices of the dependent and explanatory variables. We note that S is significantly correlated with "size" in both tables and has a significant Spearman correlation coefficient with "marketability". The results of the multiple regression are given in Table 5 which shows an Adj $R^2 = 0.331$, a standard error of the estimate $SEE = 19.951$ as compared to the standard deviation of S, $S_s = 23.878$ and an F-value of 4.31 as compared to the critical value $F_{(5,30)} 0.05 = 2.53$.

Table 5 also indicates that the regression coefficients of the explanatory variance "size" and "marketability" have the expected signs and are significant at the 1% level, (two-tail tests were performed) whereas the coefficients of the variables "leverage" and "proportion of assets" in place have signs opposite to the expected. However, these two variables as well as the variable of "age" are not significant.

The possibility of multicollinearity of the explanatory variables was tested by two approximate tests, i.e. 1) the comparison of the multiple correlation coefficient of the dependent variable with those of each explanatory variable with the remaining variables (Green 1978) and 2) the use of the Conditional sum of squares of each explanatory variable (Belsley et al 1980). These tests did not indicate the presence of significant collinearity. The residuals of the multiple regression were tested for heteroscedasticity using the ARCH test and were found non-heteroscedastic.

The influence of the weighting by the Certified Public Accountants on the results of the multiple regression was tested by defining an unweighted disclosure index .

$$S'_j = \sum_{i=1}^{42} h_{ij}$$

where h_{ij} was defined in section 2.2.3.

This unweighted index (see Table 1) is highly correlated with S and moreover the multiple regression of S' on the same explanatory variables gives results very similar to these of the multiple regression as S.

4. Conclusion

The purpose of this paper was to examine whether the level of voluntary disclosure in corporate Annual Reports of Greek listed companies, is asso-

dated with firms' characteristics. Using a sample of 36 Athens Stock Exchange listed companies, it was found that the extent of voluntary disclosure varied widely within this environment. Three characteristics suggested by agency theory - firm size, financial leverage and proportion of asset in place - as well as marketability and age of the firm were used to explain the cross-sectional variation. It was found that both firm size and marketability were related to extent of voluntary disclosure. No significant effects due to financial leverage, proportion of asset in place and firm age were observed.

Regarding size, these conclusions are consistent with the conclusions of similar studies where size was found to be significant: size is a dominant corporate characteristic, the "leader" in explaining voluntary disclosure practices. This may be an outcome of having available the resources to prepare more comprehensive financial reports, it may arise because of the greater exposure that their reports receive or because the implicit or explicit pressures originating either inside or outside the organization.

The finding of the positive effect of marketability on disclosure confirms the existence of an incentive to companies to supply higher transparency on their accounts in order to maintain or expand the attractiveness of its shares to investors.

The non-existence of a relationship between voluntary disclosure and financial leverage and proportion of asset in place - which was expected from agency theory - may be due to the financial environment of Greek manufacturing in this period (1985 - 1989), where even listed manufacturing companies had often raised most of their capital from Banks and these institutions had the power to demand and receive inside information. Because of this, the companies had no incentives to provide additional financial information to the public.

Future research can investigate if other mechanisms, as use of the outside Directors, executive compensation schemes, restrictions on certain resource allocation activities (e.g. mergers, dividends, new financing), can shed light on both the accounting environment and firms' practice, acting complementarily to corporate voluntary financial disclosure.

Also, future research could investigate the influence of several variables such as, frequency of external financing, stability of growth in earnings, the type of industry, trend variables, sectoral and macroeconomic variables, as well as, specific securities measures.

TABLE 1

List of companies included in the sample with their value of the disclosure indexes

COMPANY	SCORE (S _j)	SCORE (S' _j)
AAA	15.96	4
ALLATINI	57.52	14
ALUMINIO	72.77	18
ATHINAIKA PLASTIKA	53.90	13
BIS	11.90	3
BIOSOL	26.30	7
BIOTER	61.61	15
BOUTARIS	42.70	11
DIMITRIADES	15.54	4
ELAIS	61.57	15
ELFIKO	57.62	14
ETMA	44.36	11
FINTEXSPORT	11.92	3
HALIPS	67.91	17
HERCULES	83.70	21
KAMBAS	72.94	18
KAMSI SOGLOU	45.15	11
KERAMIA ALLATINI	10.98	3
LAVREOTIKI	53.90	13
LEKKAS	30.06	8
LEVENTERIS	66.97	17
LIPASMATA	33.59	9
MAKEDONIKA KLOSTIRIA	21.80	5
MAVIS	20.14	5
MERINOS	18.94	5
METKA	34.83	9
MILOI AG. GEORGIU	15.08	4
NAOUSSA	35.42	9
NIMATEMBORIKI	23.95	6
OINON AND OINOPNEVMATON	38.01	10
PAPOUTSANIS	15.55	3
PAVLIDES	57.76	14
PETZETAKIS	60.84	15
SHELMAN	72.67	17
TITAN	103.95	27
XYLEMBORIA	72.60	18

QUESTIONNAIRE

The enclosed questionnaire lists information items which could be presented in the Annual Reports of manufacturing companies. You are requested to rank the questions, according to their importance on a 1 to 5 scale (tick where appropriate).

Grade "1" indicates that it is the lowest degree of importance,

Grade "5" indicates the highest, and the grades "2", "3", "4" are moderates.

In assigning these grades remember that:

- a) Any additional item of information involves additional cost for the company
- b) The items of information have different importance.

Thank you for your help

Note: there are 3 pages to this questionnaire

TABLE 2

	VOLUNTARY DISCLOSURE ITEMS (QUESTIONNAIRE)	Importance Weighting			Nbr. (%) of firms disclosing this item (N=40)*	
		Av. Score	STD Dev.	Var.		
1.	Description of major plants warehouse and other properties including location size and function.	3.95	1.34	1.81	35	88%
2.	Money value of the firms order backlog	3.18	1.20	1.45	0	0%
3.	Imports	3.28	1.31	1.73	0	0%
4.	Exports	3.86	1.13	1.28	22	55%
5.	Valuation of bad debts / customers (i.e. ageing of debtors/customers)	4.04	1.03	1.06	0	0%
6.	Information about the extent of company's dependance on a few customers or the existence of specialized customers (i.e. Government contacts and/or contacts in foreign markets etc.)	3.98	1.10	1.21	0	0%
7.	Measures of the physical level of output such as the percentage of plant capacity utilized	3.88	1.14	1.31	3	8%
8.	Discussion of the progress of any recent issued shares and acquisition of own shares	3.86	1.17	1.37	21	53%
9.	Discussion of the company's results for the past year	3.62	1.39	1.95	13	33%
10.	Description of main products produced including an indication of those products that are new	3.41	1.14	1.31	11	28%
11.	Information on the major details of Long-Term debt outstanding (i.e. Lending Institutions, maturity, etc)	3.69	1.42	2.02	1	3%
12.	Breakdown of sales revenue by main customers classes, product lines and geographical location	3.25	1.46	2.14	22	55%
13.	Information about the changes of Fixed Assets (increases decreases) and the possible leasing of Assets (firm in the lessee)	4.18	1.01	1.03	26	65%

TABLE 2 (cont'd)

14.	Information about business risk (uncertainty of sales, variability of profits, share price fluctuation, etc).	3.90	1.15	1.34	1	3%
15.	Maintenance and repair expenditure	2.46	1.12	1.27	0	0%
16.	Summary of statistical data of the current and previous year	4.04	1.09	1.20	13	33%
17.	Breakdown of sales revenue and gross profit by major product lines	2.93	1.28	1.64	6	15%
18.	Discussion of the major factors which will influence next year's results including an indication, of the firm's competitiveness, and the relationship to its industry and to the economy	4.09	0.98	0.96	24	60%
19.	Percentage of value added on its productive activity	3.44	1.20	1.45	0	0%
20.	Tax contingencies which are not presented in the liabilities and reserves	4.62	0.61	0.37	17	43%
21.	Amount expended on human resources apart from salaries (i.e. training facilities, catering expenses, entertainment, personnel insurance, etc.)	3.02	1.28	1.65	3	8%
22.	Possible changes in the Board of Directors	2.56	1.12	1.26	1	3%
23.	Brief company's history and information about its basic policy and objectives	3.53	1.33	1.78	9	23%
24.	Information concerning the leverage ratio	4.23	0.80	0.64	3	8%
25.	Description of marketing network for finished goods	2.62	1.20	1.44	2	5%
26.	Structure of consolidated Balance Sheet for the case of the existence of subsidiary companies	4.39	0.99	0.98	18	45%
27.	Research and development expenditure (i.e. current year expenditure, progress with new product development, planned expenditure, etc.)	4.02	0.97	0.95	5	13%

TABLE 2 (cont'd)

28.	Reporting on possible repurchase/participation shares in other companies when the share exists 10% on its share capital	4.23	0.86	0.73	9	23%
29.	Number and type of employees and their remuneration salaries	3.74	1.10	1.21	18	45%
30.	Share of the market in major areas of activity	3.88	1.18	1.40	0	0%
31.	Advertising expenditure (i.e. expenditure in past year, future commitments in advertising, etc)	2.95	0.83	0.69	0	0%
32.	Earning per share, share price behaviour and companys dividend policy	4.13	0.95	0.97	6	15%
33.	Information about subsidiaries such as (i.e. names, addresses, percentage ownership, main activities, etc.)	3.69	1.02	1.04	2	5%
34.	Cash-Flow Statement and Cash-Flow Projection for the next 1 to 5 years	3.58	1.06	1.12	6	15%
35.	Methods of properties valuation (i.e. Fixed Assets, Inventories, Investments etc), and methods used to compute depreciation including depreciation rates)	4.74	0.68	0.46	21	53%
36.	The base of conversion into drachmas of properties acquired foreign exchanges (i.e. Receivables, Liabilities, Loans - exclusively for Fixed Assets - disposables) and accounting methods used for exchange differences (losses or gains)	4.51	0.90	0.80	21	53%
37.	In the case of changes in the valuation method in the current period concerning the questions 35, 36, the valuation difference is given in the Annual Report?	4.72	0.62	0.39	20	50%
38.	Indication of employee moral (i.e. labour contracts, labour turnover, strikes, absenteeism, etc.)	2.25	1.03	1.07	1	3%

TABLE 2 (cont'd)

39.	Information about the companys Member of the Board of Directors (i.e. their names, salaries, their functional responsibilities, their major outside affiliations, etc.)	3.44	1.35	1.82	2	3%
40.	Information about the General Manager and Company Managers (i.e. their names, salaries, main functional responsibilities, etc.)	3.18	1.35	1.32	2	3%
41.	Possible significant difference between the value of Fixed Assets and Inventories presented in the Balance Sheet and their current resale value	4.3	0.91	0.83	0	0%
42.	Breakdown of shares (i.e. ordinary preferences, etc.)	3,88	1,26	1,59	36	90%
43.	Number and type of ordinary shareholders (i.e. Institutional, Individuals, Government, etc.)	2.97	1.19	1.41	1	3%
44.	Information relating to capital expenditure (i.e. expenditure for the last financial year, planned expenditures, narrative and quantitative data on expenditure, etc.)	4,25	0.97	0.93	17	43%
45.	Statement of sources and uses of funds	3.95	0.88	0.78	4	10%
46.	Extraordinary (unusual) losses or gains	3.81	1.28	1.63	17	43

TABLE 3
Correlation matrix between variables

	Size	Marketability	Age	Leverage	Assets in place
S ₁	*0.50	0.21	0.28	0.03	0.20
Size	-	-0.04	*0.41	0.22	0.26
Marketability	-	-	-0.02	-0.00	-0.12
Age	-	-	-	0.11	0.20
Leverage	-	-	-	-	*0.75
Assets in place	-	-	-	-	-

$P_{36(0.05)} = 0.32$ * Significant at 5%

TABLE 4
Spearman rank correlation between variables

	Size	Marketability	Age	Leverage	Assets in place
S ₁	*0.43	*0.32	0.04	-0.09	-0.06
Size	-	0.08	0.25	*0.34	0.29
Marketability	-	-	*0.34	-0.30	-0.29
Age	-	-	-	*0.46	*0.36
Leverage	-	-	-	-	*0.66
Assets in place	-	-	-	-	-

* Significant at 5%

TABLE 5

Determinants of voluntary disclosure in Greek listed manufacturing corporations 1985-89

Explanatory Variable	Constant	Size	Leverage	Assets in Place	Age	Marketability	R ²	Adj R ²	SEE	ARCH	F
Theoretically expected Sign	N/A	+	+	-	+	+					
	* 25.572 (3.575)	* 0.001 (2.957)	-0.726 (-1.427)	1.309 (1.634)	0.146 (0.842)	* 0.892 (2.469)	0.412	0.331	19.951	0.437	4.31

* Significant at 1%

Notes

1. For an analysis of the relationship between voluntary information and the agency theory, see Burton (1981), Leftwich et al (1981) and Shipper (1981).

2. 34 companies were excluded from the research due to several reasons. Thus, 14 companies have either stopped working, or the trading of their stock on the Stock Exchange has been suspended, or they have not published their financial statements, or they had gone into liquidation. In addition, 3 had mainly commercial activity, 13 had not published annual reports, and 4 companies had negative capital for at least 1 year in the period 1985-1989.

3. We refer to studies on: Private shareholders (Baker-Haslem, 1973; Lee-Tweedy, 1975; Wilton-Tabb, 1978), Investors advisors (Chendal-Juchaw, 1977; Chung-Most, 1981; Arnold Moiser, 1984; Day, 1984), Institutional investors (Anderson, 1981), Financial analysts (Norr, 1970), Employees-Trade Unions (Mitchel et al, 1981; Lewis et al, 1984), Bankers (Stanga-Benjamin, 1978) and Comparative studies related with different financial user needs (Baker,1977; Firth, 1978; Miquel-Stephens, 1982).

4. We refer to: The Directives IV and VII of "Companies Law" which were adopted by the Greek Legislation (Law 2190/20), The proposal of the Organization of Economic Cooperation and Development (OECD) 1988, The (10-K) form which is compulsory published by the listed companies on the New York Stock Exchange (NYSE), The Appendix (article 43a of the Greek Companies Law 2190/20), The Board of Directors Report (para. 3 of article 43 of the Greek Companies Law 2190/20),

The questionnaire for the analysis of the French Annual Reports which is in use by the Observatoire de l' Information Comptable et Financiere du Centre HEC-ICA.

The prospectus which is compulsory published by the companies before they are listed in the Athens Stock Exchange (Presidential Decree 348/1985).

5. In order to facilitate the collections of items in a homogenous way we have classified 122 items under the following categories: Fixed Assets (10) - Bonds (2) - Inventories (8) - Receivables / Liabilities (8) - Share Capital (5) - Long Term Liabilities (2) - Profit and Loss Accounts (17) - Other Financial Statements (4) - Investment (5) - Accounting Methods (5) - Estimations (13) - Statistics and other information (43). The list of items is not included due to shortage of space, but is available upon request from the author.

6. For the completion of the questionnaire, the studies of Grove-Savich (1979) and Curtis (1992) were taken into consideration.

7. The weighting of companies was among (46-4) in 42 items of the questionnaire. The exclusion of these 4 items (No. 3, 22, 33, 41) was necessary so that no unfavourable weighting of companies could result; these companies might not be important, might not have subsidiaries or might give negative answers to financial items of the questionnaire expressing probability.

8. 14 items of the questionnaire were related with items included in Appendix (Greek Company Law 2190/20, article 43a). So, the presence or not of the Appendix in the Published Annual Reports of the investigated companies, had a significant influence on Score Sj.

9. Other relevant characteristics analysed in the literature, have been eliminated during the preliminary stage of the analysis for the following reasons: (1) Type of industry (since

there were only a few firms from each industry, it was not feasible to test for industry effects), (2) Type of Auditing (since Auditing in Greece till 1992 was not allowed for foreign audit firms).

10. This unweighted score was introduced to compensate for two potential limitations of the importance ratings. First, since these ratings were obtained through a survey and without real economic consequences to the respondents, they may not fully reflect Public Accountants actual use of each item. Second, Public Accountants are only a subset (though an important one) of financial report users in Greece. So, using the unweighted score, the analysis is independent of the perceptions of a particular user group.

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