

Influence of Adoption of IAS/IFRS on the Information Disclosed by the Companies: The case of Pension Plans in Spain

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Abstract

The purpose of this study is to contrast the level of information disclosed by Spanish companies during and after the transition to the IAS/IFRS (International Accounting Standards/International Financial Reporting Standards). We have selected information about pensions provided by the companies quoted in the IBEX-35 (Index of Stock-Market of Madrid). Before the transition to the new set of standards, this information was voluntary, but after the transition, the information to disclose became compulsory. Thus, we have analysed the level of fulfillment of rules in the elaboration of the annual report.

The methodology used for this study is quantitative. First, through a content analysis, we have studied the information on pension funds that discloses the companies quoted in the consolidated annual report once the IAS/IFRS has been adopted. Second, through a multivariate analysis, we have contrasted our results. Thus, we aim to determine the causes of the variation of the information supplied by the companies.

The results suggest that after controlling size, sector and the existence of post-employment obligations, the disclosure quality and extent are positively associated with the enforcement of the accounting regulation..

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1 Introduction

The adoption of the IAS/IFRS is causing important changes in information that companies must provide in consolidated financial statements in European Union companies (Pope and McLeay 2011) and Spanish companies (Tua 2005). Many of the standards are related to the use of fair value and the implementation of new techniques far from the Spanish tradition. Additionally, the use of new terminology has appeared as another problem to be solved by accountants. Finally, the caution that has traditionally been used in the valuation of assets in Spain has been de-emphasized.

Important changes to the existing regulation of pension funds are introduced (FEF 2003; Ali 2005). The current Spanish accounting regulation does not gather this type of information as an “informative unit” to be disclosed in the annual report, and most of the information to be provided is not compulsory, so the provided information is quite limited. However, the IAS/IFRS regulates the recognition, valuation and disclosure of this information, primarily through IAS 26 (Accounting and Reporting by Retirement Benefit Plans) and secondarily through IAS 19 (Employee Benefits), in a more extensive and exhaustive way than present Spanish accounting regulations.

In addition to the changes introduced by these accounting regulations, there are other aspects related to the inclusion of this information in the annual reports of the promotional companies. In this respect, among others, the following trends can be mentioned: (1) the rise of pension plans as a disadvantaged instrument of social forecast, due to the incapacity of the public systems to support public pensions (FEF 2005); and (2) the legal changes in recent years that require Spanish companies to express their commitments to pensions through a Plan of Pensions and/or contracts of insurance (González and González 2003).

In spite of the legal changes introduced in the last few years regarding pensions in Spain and Europe, literature is scarce on in-depth studies and empirical information disclosed by companies (Larson and Street 2004). In agreement with Alí (2005), more empirical evidence needs to be provided in the literature about the fulfillment of IAS/IFRS after the adoption of these regulations by the national legislation (García-Benau and Zorio 2002; Larson and Street 2004, Nobes 2006).

The objective of this work is to study the adoption of the IAS/IFRS with respect to the information on retirement benefits disclosed in companies’ annual reports. The companies quoted in the IBEX 35 Index of the stock market of Madrid (IBEX) must comply with international accounting rules (Kvaal and Nobes 2010).

The sample is taken from the companies that formed the IBEX for the first half of 2005, which had to provide consolidated information. We have chosen those companies because their consolidated annual reports must be formulated according to IAS/IFRS beginning January 1, 2005. The period of 2004 to 2005 is considered in our analysis to verify the change experienced by the information offered on pension funds as a result of the implementation of the IAS/IFRS.

There is a growing interest in pension funds because the population in developed countries from the second half of the previous century has aged significantly. Thus, the public systems cannot allow for citizens’ expectations of pensions to be satisfied. As a result, people need to supplement the contributions of the public systems with private investments in a pension plan or fund to obtain a higher income in retirement.

Furthermore, it must be taken into account that there are many people who, whether currently working or not, are not covered by pensions and need to be supported by this

system. Another factor to be considered is an even later start to employment achieved by young people, the effect of which is to reduce the contributions that will be made to public system over their working life. Therefore, an alternative needs to emerge for assuring an adequate future income at retirement.

Thus, private pension plans constitute a complementary system to the public one that will be carried out freely and voluntarily by the promoters of such plans through financial investments. With all initiatives of this type, the intention is only to complement the public system and not to replace it. However, the imminent crisis expected in the collective social coverage of pensions has led political and social agents to encourage the individualized type of pension coverage to compensate for the reduced future prospects presented by public pension systems.

To illustrate this growing interest, in the case of Spain, the assets related to pension funds reached a figure of 57,537 million euros in June 2004. That value represents an increase of 12.6% over the previous twelve months.

This study contributes to the literature by offering evidence with respect to the following: 1) explaining how Spanish companies comply with the change in accounting legislation that modifies the financial information that they provide (Giner 1997); 2) describing the impact on the level of disclosure of pension funds by the companies (Alí 2005); and 3) specifying a set of determining factors that can be related to the level of information reported in fulfillment of the new IAS/IFRS (García Benau and Zorio 2002; Alí 2005).

2 Spanish Regulations on Pensions and Accounting Harmonization

The actual Spanish pension regulation has experienced modifications recently, given the social repercussions that it can provide in the future. The Organization for Economic Co-operation and Development (OECD), the supranational institution that advises the most important international macroeconomic matters, is also the forum for the two principal currents regarding the regulation of Pension Plans. The country members of the OECD differ from each other in the degree of regulation that they apply to pension funds. Thus, we find two currents or approaches. On one hand, there are those countries with a strict regulation and application of the established standards. On the other hand, we find the less regulated ones, such as the Anglo-Saxon countries.

Based on these identified differences, there exists a new trend that supports the hypothesis that stricter regulation will encourage increased investment in pension plans. This trend is found even in the Anglo-Saxon countries, which are characterized by a lower degree of regulation, where the absence of solid regulation has led governments to put forward a series of legislative reforms to meet these needs. However, an opposite line of opinion defends a freer market, arguing that greater regulation is costly and therefore reduces the returns to investors in such plans.

Current Spanish regulations do not require the inclusion of private pension plans within the set of financial information that every company must provide. This information remains outside the company's accounts, specifically in the pension funds accounts, which include data on the contributions to the funds, reflecting their management as a whole. Therefore, the company promoting the funds does not need to include this information in its annual accounts. In fact, Spanish accounting regulations do not treat the pension plan as an informative entity, and it is the fund management entity that must prepare the annual reports of all the pension funds managed.

The information required by Spanish regulators and provided by companies is scarce and always trying to solve the problems regarding the pension funds. Thus, the information required by the main regulation, the Accounting Plan of 1990, only includes the following:

- The initial and final amount of the debt due to pensions of the companies.
- The motives of increase and decrease of this account.
- Information regarding covered risks and the discount rate used.

In the accounting field, IAS 19 (Remuneration of Employees) and IAS 26 (Accounting treatment and Financial Information on Plans for Retirement Provision) cover the regulation of the information to be provided for pension funds. In the first case, IAS 19 addresses the determination of the cost of the retirement provisions in the financial statements of the employer companies that have a plan established. In the second, IAS 26 addresses the accounts and information to be offered on the plan.

IAS 26 (paragraph 34) specifies the information that must be provided by companies covered by this standard with regard to Pension Plans, in the form of the minimum information content depending on the plan chosen (see Appendix A). This rule introduces technical modifications to be applied when the company prepares the accounting information if it adopts the accounting regulation introduced by the IAS. It supposes a major jump from Spanish regulations, given that the information to be revealed is more detailed and more extensive, covering aspects such as, e.g., "...17. The report of a defined benefit plan should contain either (a) a statement that shows: (i) the net assets available for benefits; (ii) the actuarial present value of promised retirement benefits, distinguishing between vested benefits and non-vested benefits; and (iii) the resulting excess or deficit; or (b) a statement of net assets available for benefits including either (i) a note disclosing the actuarial present value of promised retirement benefits, distinguishing between vested benefits and non-vested benefits; or (ii) a reference to this information in an accompanying actuarial report..."

3 Methodology

The methodology used is quantitative and uses "content analysis" (Krippendorff 1990) and the "disclosure index" (Marston and Shrives 1991; Beattie *et al.* 2004). These methods have been used extensively in recent decades to analyze the information disclosed by companies (Jones and Shoemaker 1994) and its association with possible determining factors (Ahmed and Curtis 1999). In the Spanish context, they also constitute the main methods used to analyse the compulsory information disclosed by the companies (Wallace *et al.* 1994; Giner 1997).

Content analysis will allow a set of general aspects related with pension disclosure to be evaluated. To conduct content analysis, it is necessary to define the unit of analysis, a list of categories and the recording unit (see table 1).

Table 1: Content analysis design

| UNIT OF ANALYSIS | CATEGORIES | RECORDING UNIT |
|--|---|--|
| Notes to the consolidated annual reports | Character | An ordinal scale of four ranks: (3) monetary information (2) Quantitative/Qualitative (1) Not exist /Not Material (0) Absence of information |
| | Extent | Number of pages that include pension data. |
| | Theme: - Decision to disclose - Type of the pension plan. - Accounting policy. | An ordinal scale of two ranks: 1–Presence of information 0 – Absence of information |

In table 2, the index design is presented. To understand the nature of pension disclosure, we consider in the analysis four sub-indexes: (1) A statement of net assets (items 1-5); (2) A statement of changes in net assets available for benefits (items 6-16); (3) A description of the Plan (items 17-26); and (4) Actuarial data (items 27-29).

Table 2: Index Design

| Selection | Weighting | Quantification |
|--|----------------------------|--|
| 29 items based on IAS 26 Non-disclosure of a relevant information item is interpreted as non-compliance 4 Sub-indexes: Sub-index 1: A statement of net assets (items 1-5). Sub-index 2: A statement of changes in net assets available for benefits (items 6-16) Sub-index 3: A description of the plan (items 17-26). Sub-index 4: Actuarial data (items 27-29) | The index is not weighted. | Dichotomous scale. Presence or absence of information. 1–Presence of information 0 – Absence of information |

To quantify the pension disclosure practices of each company, a disclosure-measuring template was developed with information required by IAS-26 (see Appendix A). Non-disclosure of relevant information item is interpreted as non-compliance. The indexes were not weighted to reflect the perceptions of any user-group (as in Wallace *et al.* 1994; Giner 1997). Empirical evidence has suggested that weighted and unweighted disclosure indexes draw similar conclusions (Giner 1997). All data were coded to ensure that the indexes reflect the true disclosure compliance behavior.

The sample consists of companies that were listed on the IBEX-35 Index of the Madrid Stock Exchange in 2005. The IBEX-35 index is composed of the firms with the highest stock exchange dealings and liquidity in the continuous market in Spain. The selected companies met two conditions: (a) annual accounts were available from the records of the Spanish Securities and Exchange Commission (hereafter CNMV) for 2004 and 2005 and (b) 2004 annual accounts were not prepared following IAS/IFRS. Two firms were excluded from the final sample: Arcelor (because in 2004, this company presented annual financial statements under IAS/IFRS rules) and Gestevisión Telecinco (because this company was not quoted during the whole period). Thus, we have 66 observations. The final sample comprises 33 firms with a total of 66 firm-year observations.

Data have been obtained from different sources. Consolidated annual financial reports have been retrieved from the companies' websites. The measures of size used in our study were the total assets at the year-end, total number of employees and capitalization. Data were obtained from the "Bolsa de Madrid" Review. Descriptive data for these variables are shown in table 3.

Table 3: Index items

| Sub-index | item | Description |
|---|-----------------------------------|--|
| A statement of net assets | 1 | assets at the end of the period suitably classified. |
| | 2 | the basis of valuation of assets |
| | 3 | details of any single investment exceeding either 5 % of the net assets available for benefits or 5 % of any class or type of security |
| | 4 | details of any investment in the employer |
| | 5 | liabilities other than the actuarial present value of promised retirement benefits |
| A statement of changes in net assets available for benefits | 6 | employer contributions |
| | 7 | employee contributions |
| | 8 | investment income such as interest and dividends |
| | 9 | other income |
| | 10 | benefits paid or payable |
| | 11 | administrative expenses |
| | 12 | other expenses |
| | 13 | taxes on income |
| | 14 | profits and losses on disposal of investments and changes in value of investments |
| | 15 | changes in value of investments |
| 16 | transfers from and to other plans | |
| A description of the plan | 17 | a description of the funding policy |
| | 18 | the names of the employers |
| | 19 | the employee groups covered |
| | 20 | changes in the names of the employers and the employee groups covered |

| | | |
|----------------|----|---|
| | 21 | the number of participants receiving benefits and the number of other participants, classified as appropriate |
| | 22 | the type of plan - defined contribution or defined benefit |
| | 23 | a note as to whether participants contribute to the plan |
| | 24 | a description of the retirement benefits promised to participants |
| | 25 | a description of any plan termination terms |
| | 26 | changes in any plan termination terms |
| Actuarial Data | 27 | for defined benefit plans, the actuarial present value of promised retirement benefits |
| | 28 | for defined benefit plans, a description of the significant actuarial assumptions made and the method used to calculate the actuarial present value of promised retirement benefits |
| | 29 | Method used to calculate the actuarial present value of promised retirement benefits. |

4 Empirical Study

4.1 Content Analysis

This section shows the descriptive results of the content analysis (see table 4). The sample is composed of 33 companies for the period 2004-2005 quoted on the IBEX-35 in Madrid Stock Exchange. Where are represented the variables selected.

Table 4: Descriptive Statistics of content analysis.

| VARIABLES | DESCRIPTION | Frequency | |
|---|---|------------|------------|
| | | 2004 | 2005 |
| DECISION TO DISCLOSE | 1 – Firm disclosed some pension information on the notes to consolidated annual reports | 23 (69.7%) | 27 (81.1%) |
| | 0 – Absent of information | 10 (30.3%) | 6 (18.2%) |
| SECTOR | 1 – Firm belongs to the financial sector | 5 (15.2%) | 5 (15.2%) |
| | 0 – Rest of companies | 28 (84.8%) | 28 (84.8%) |
| TYPE OF THE PLAN - Defined contribution plan | 1 – It is remarked clearly that exists a defined contributions plan or defined benefit plan | 15 (45.5%) | 20 (60.6%) |
| | 0 – Absent of information | 18 (54.5%) | 13 (39.4%) |
| - Defined benefits plan | 1 – It is remarked clearly that exists a pension fund on contributions or benefit defined | 14 (42.4%) | 20 (60.6%) |
| | 0 – Absent of information | 19 (57.6%) | 13 (39.4%) |
| ACCOUNTING POLICY | 1 – It is included information on the accounting policies on pension funds. | 17 (51.5%) | 22 (66.7%) |
| | 0 – Absent of information | 16 (48.5%) | 11 (33.3%) |
| CHARACTER | 3 – It is included monetary information on pension funds. | 20 (60.6%) | 23 (69.7%) |
| | 2 – There is qualitative or quantitative information on pension funds. | 2 (6.1%) | 2 (6.1%) |
| | 1 – There is only a mention on pension funds or that there are no pensions funds. | 1 (3%) | 2 (6.1%) |
| | 0 – Absent of information | 10 (30%) | 6 (18.2%) |

Regarding the decision to disclose, the number increased at the first year of implementation of the pension accounting standard from 23 to 27 companies.

Additionally, the character of the submitted information has increased in such a way that at every instance, there is an increase in the specificity of the information supplied. From an average of 1.97 at the index (which runs from 0 to 3), it increases to 2.27. There is an increase of 15%. It is noteworthy that every company marked with 3 for 2004 has the same rank for 2005. Telefónica Móviles is an exception; the company decreases from 3 to 2. The rest of the samples show increases.

The number of pages dedicated to reporting on pension funds (see table 5) can be considered an unreliable index, given that changes in the format of the annual financial reports are a constant feature of companies. However, the number of pages that the companies devoted to pension funds has been counted. In 2004, there were 24.84 pages, as a total amount (0.86 pages per company) and in 2005 there were 54.34 pages, as a total amount (1.65 pages per company). Bearing in mind the before restriction, it is interesting to consider that the number of pages dedicated to pension funds has increased.

Pension funds can be classified as defined contribution plans or defined benefit plans. Both types of plans increased in the sample analyzed (see table 4). This observation means that many companies have the two types of plans. In particular, the banking companies show information on both types of funds for the considered years. However, the BSCH does not offer this classification in 2004, although it offers information regarding both pension fund types in 2005. Interestingly, neither the defined contribution plans nor the defined benefit plans show a different evolution during 2004-2005 (there were 15 on defined contribution and 14 on defined benefit in 2004 and 20 of both in 2005).

It is interesting to consider whether the accounting policies on pension funds are supplied. There is an increase in the number of companies that disclose this parameter (see table 4). The increase is 29%, without any item showing a decrease.

Furthermore, a nonparametric statistic test (Wilcoxon test with sign ranks) was performed with the aim of evaluating whether significant differences in the financial reports could be identified between 2004 and 2005 in each of the general parameters (see table 6).

| VARIABLES | DEFINICIÓN | DESCRIPTIVE STATISTICS | | | | | |
|------------------------|---|------------------------|---------------|-----------------|------------|---------|----------|
| | | N | Mean | Std. Dev. | Median | Min. | Max. |
| EXTENT | Number of pages in 2004 | 33 | .863 | 1.132 | .600 | .00 | 5.20 |
| | Number of pages in 2005 | 33 | 1.647 | 1.701 | 1.210 | .00 | 5.50 |
| CAPITALISATIO N | Capitalisation on march 2004 (Thousand euros) | 33 | 10.316,337 | 14.005,289 | 4635,740 | 1025.59 | 61007.02 |
| | Capitalisation on march 2005 (Thousand euros) | 33 | 12.366,312 | 16.330,310 | 5905,860 | 1185.76 | 66607.17 |
| ASSETS | Total Assets in 2004 (thousand euros) | 33 | 43,890,197.42 | 109,876,593.911 | 11,336.842 | 628,150 | 6E+008 |
| | Total Assets in 2005 (thousand euros) | 33 | 56,312,768.85 | 150,275,037.369 | 13,712.020 | 769599 | 8E+008 |
| NUMBER OF EMPLOYEES | Number of employees in 2004 | 33 | 28,767.18 | 38,511.828 | 13971 | 549 | 156,270 |
| | Number of employees in 2005 | 33 | 31,638.52 | 43,155.803 | 14.088 | 917 | 195,086 |

The results show that for the whole sample, there are significant differences between both annual financial reports of 5% regarding the decision to disclose, the character of the information and the accounting policy. On the other side, the null hypothesis has been rejected at a significance level of 1% ($p=0.001$) with respect to the extent of the supplied information.

In spite of the fact that the descriptive analysis shows a few changes regarding the types of fund disclosed, the Wilcoxon test with sign ranks illustrates the differences between the defined benefit and defined contribution plans. Regarding the disclosure of defined benefit plans, the null hypothesis has been rejected at the 5% level of significance ($p=0.034$) between both years (2004-2005), and therefore, there are significant differences between both years. However, for the defined contributions plans the null hypothesis cannot be rejected at a 5% level of significance ($p=0.059$).

4.2 Disclosure Level

The following results were obtained for the application of the disclosure index for the total number of the companies of the sample. There is generally an increase over the 2004-2005 periods, from 0.14 to 0.26 (85%). This increase shows that the companies have increased their information on pension funds to comply with IAS 26. The statistics of the index and the four sub-indexes are shown in table 5.

From the statement of net assets available for benefits (items 1-5), it can be extracted that in general terms, the companies show information on pension funds but not to the level of detail that the IAS requires. In this sense, it is interesting to note that the number of companies reporting item 1 increase from 1 to 13. However, it seems that the companies do not report or show poor information for item 3 (4 out of 27 in 2005) and item 4 (3 out of 27 in 2005). Item 5 is fulfilled in both years regularly (11 companies in 2004 and 17 in 2005).

Items 6 to 16 show the statement of changes in net assets available. This group of items goes from 0.1 in 2004 to 0.22 in 2005. This change gives an increase of 120%. This increase can be explained if we consider the adoption of this statement, which was not considered before the accounting regulation in Spain. This increase in reporting can be shown in items 8 (which increases from 1 to 11 companies) and 12 (which increases from 5 to 13 companies). However, item 16 goes from 3 to 2 companies. Item 8 was also unusual in the traditional accounting regulation in Spain, as well as item 12. Finally, item 13 was reported by 0 companies because the fiscal effects on pension funds are not considered in annual accounts.

The description of the fund and the effects of the changes during the accounting year are considered in items 17-26. As is the case with the previous groups, it goes from 0.18 to 0.22. This change is also an increase, but in a lesser way than the previous items. In this group, the items either grow from 12% to 33% (items 17, 18, 19 and 22) or have no change (items 25 and 26). The first collection of information included the names of the employers and the employee groups covered; the number of participants receiving benefits and the number of other participants, classified as appropriate; the type of plan—defined contribution or defined benefit; or a note as to whether participants contribute to the plan. This information was offered by the companies before 2004, and therefore, it could only increase. Items 25-26 are related to reasons to stop the plan, and they are not included in the pension funds of the companies in the IBEX 35 index.

Finally, items 27-29 are referred to as the actuarial information of the pension funds.

Again, the results show an increase, from 0.23 to 0.48. Specifically, items 27 and 29 are most representative of such an increase. The main reason is the tradition of companies to avoid all the complex information on methods and hypotheses used to set the fund value. In spite of the fact that descriptive analysis illustrates changes in the index and sub-indexes, a nonparametric statistic test was performed (Wilcoxon test with sign ranks; see table 7) with the aim of evaluating if significant differences can be identified between the two annual financial reporting years (2004 and 2005) in each of the general parameters.

Table 7: Wilcoxon signed-rank test Results

General Characteristics

| <i>Wilcoxon signed-rank test (a)</i> | <i>Decision to disclose</i> | <i>Character</i> | <i>Extent</i> | <i>Type of the plan</i> | | <i>Accounting Policy</i> |
|--------------------------------------|-----------------------------|------------------|---------------|-----------------------------|------------------------|--------------------------|
| | | | | <i>defined contribution</i> | <i>defined benefit</i> | |
| Z | -2.000(a) | -1.983(a) | -3.277(a) | -1.890(a) | -2.121(a) | -2.236(a) |
| Sig. (two-tailed) | .046 | .047 | .001 | .059 | .034 | .025 |

a Based on negative ranks.

Global Index and Sub-indexes

| <i>Wilcoxon signed-rank test (a)</i> | <i>Global Index</i> | <i>Sub Index</i> | | | <i>Actuarial Data</i> |
|--------------------------------------|---------------------|----------------------------------|--|----------------------------------|-----------------------|
| | | <i>A statement of net assets</i> | <i>a statement of changes in net assets available for benefits</i> | <i>a description of the plan</i> | |
| Z | -4.020(a) | -3.334(a) | -3.170(a) | -2.239(a) | -3.458(a) |
| Sig. (two-tailed) | .000 | .001 | .002 | .025 | .001 |

a Based on negative ranks.

When the test is applied to the disclosure level for the total number of the companies in the sample, there are significant differences between 2004 and 2005. The 0-hypothesis is rejected at the significance level of 1% ($p=0.000$). In regards to the sub-indexes, there are significant differences between 2004 and 2005 at a 1% level for the information supplied on the statement of net assets available, the statement of changes in net assets available and the actuarial information. For the sub-index of the description of the plan, the results only show significant differences at the 5% level ($p=0.025$).

4.3 Determinant Factors

It has been tested whether the size of the firm, measured as the number of employees, the market value of the company (capitalization) and the total amounts of assets (assets), has a positive relationship with the disclosure of information on pension funds (following Wallace *et al.* 1994). The statistics of these variables are shown in table 6.

These variables have been transformed to a logarithmic scale with the aim of closing their distribution to a normal curve, allowing the use of parametric proceedings. A T-test has been performed with samples related to the results of the disclosure level, showing a significance of less than 1% in 2004 and 2005 for the three variables.

Moreover, it has been evaluated whether there are differences between the companies that are related to the banking and insurance sector and the rest of the sectors. It has been considered that the differences between these groups will be decreasing in 2005 due to the higher level of pressure from the accounting regulation.

Thus, statistics from the Mann-Whitney nonparametric test were considered as the application variable belonging to the insurance and banking sector to the following features of the information: the decision to disclose, the extent of the information, the character of the information, the existence of accounting policies and the type of pension fund used. The obtained results show that there are significant differences between both groups in 2004 only at the 5% level for the feature of the existence of accounting policies ($p=0.045$) and at the 1% level for the extent of the information ($p=0.009$). These differences disappeared in the annual financial reports of 2005.

If the level of disclosure is considered, there are significant differences at 5% in 2004 ($p=0.048$) between both groups, disappearing in 2005. The sub-indexes show differences at the 5% level for the information regarding the statement of changes in net assets available ($p=0.032$) and at the 1% level for the actuarial information ($p=0.008$). In 2005, there were only significant differences at the 5% level for the actuarial information ($p=0.030$).

4.4 Multivariate Analysis

To complete our analysis, a multivariate analysis was performed. As we have proven, the level of disclosure has changed due to the new regulations in Spain. Next, we wanted to determine the causes of the variation of the information supplied by the companies. We analyzed the effect produced by the rules and the influence in the level of disclosure.

With the intent of understanding the nature of pension disclosure, we analyzed the influence of certain variables on the global index. As we explained previously, we selected the IAS adoption, the capitalization, the type of the plan, the financial sector and risk as independent variables, and we intended to determine the influence of these variables on the disclosure index.

Our analysis started by estimating a multivariate regression model of the following general form:

$$\text{GLOBAL INDEX} = \beta_0 + \beta_1 \text{IAS ADOPTION} + \beta_2 \text{DEFINED BENEFIT PLAN} + \beta_3 \text{FINANCIAL SECTOR} + \beta_4 \text{FINANCIAL SECTOR} + \beta_5 \text{RISK} + \varepsilon \quad (1)$$

where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN is a dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR is a dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances, and RISK is calculated as the pensions deficit divided by market capitalization.

The results are given in table 9, where the regression results show that the model suggested is highly significant with an adjusted R-squared of 55%. At the same time, the independent variables have positive coefficients. Those results show the explanatory level of the model. Therefore, we can confirm that the global index depends on the variables selected, and the level of disclosed information increases when those variables increase as well.

Table 9: Multivariate Analysis. Dependent variable: GLOBAL INDEX

| <i>Variable</i> | | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-----------|-----------------------|------------|-------------|--------|
| C | | -12.53463 | 4.306074 | -2.910919 | 0.0051 |
| IAS ADOPTION | | 3.131957 | 0.803618 | 3.897320 | 0.0002 |
| LOG (CAPITALISATION) | | 3.228857 | 1.139598 | 2.833330 | 0.0063 |
| DEFINED BENEFIT PLAN | | 5.249840 | 0.883038 | 5.945204 | 0.0000 |
| FINANCIAL SECTOR | | 1.921026 | 1.069595 | 1.796030 | 0.0775 |
| RISK | | 7.580962 | 4.855619 | 1.561276 | 0.1237 |
| R-squared | 0.588523 | Mean dependent var | 5.893939 | | |
| Adjusted R-squared | 0.554234 | S.D. dependent var | 5.306393 | | |
| S.E. of regression | 3.542853 | Akaike info criterion | 5.454250 | | |
| Sum squared resid | 753.1083 | Schwarz criterion | 5.653309 | | |
| Log likelihood | -173.9902 | F-statistic | 17.16326 | | |
| Durbin-Watson stat | 1.616379 | Prob(F-statistic) | 0.000000 | | |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalization.

The number of observations is 66.

Secondly, we considered the extent of a dependent variable because the literature asserts that this variable can be a proxy variable to measure the quality of the level of disclosure

of the information. With these data, we developed a second model with the following regression formula:

$$\text{EXTENT} = \beta_0 + \beta_1 \text{IAS ADOPTION} + \beta_2 \text{DEFINED BENEFIT PLAN} + \beta_3 \text{FINANCIAL SECTOR} + \beta_4 \text{FINANCIAL SECTOR} + \beta_5 \text{RISK} + \varepsilon \quad (2)$$

The regression results are given in table 10.

Table 10: Multivariate Analysis. Dependent variable: EXTENT

| <i>Variable</i> | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|-----------------------|-------------|--------|
| C | -4.569112 | 1.261808 | -3.621083 | 0.0006 |
| IAS ADOPTION | 0.720752 | 0.243758 | 2.956838 | 0.0044 |
| LOG (CAPITALISATION) | 1.194776 | 0.348704 | 3.426336 | 0.0011 |
| DEFINED BENEFIT PLAN | 0.997491 | 0.213065 | 4.681628 | 0.0000 |
| FINANCIAL SECTOR | 0.548175 | 0.390274 | 1.404590 | 0.1653 |
| RISK | 3.142775 | 1.863610 | 1.686390 | 0.0969 |
| R-squared | 0.547036 | Mean dependent var | 1.308802 | |
| Adjusted R-squared | 0.509289 | S.D. dependent var | 1.472094 | |
| S.E. of regression | 1.031213 | Akaike info criterion | 2.985857 | |
| Sum squared resid | 63.80405 | Schwarz criterion | 3.184917 | |
| Log likelihood | -92.53329 | F-statistic | 14.49217 | |
| Durbin-Watson stat | 1.636965 | Prob(F-statistic) | 0.000000 | |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalisation; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalization.

The number of observations is 66.

According to the results, the model is highly significant: the adjusted R-squared is 50%, and all the variables are positively correlated, so the model is explanatory. Therefore, we can conclude that the adoption of IAS, the type of plan, the characteristic of belonging to the financial sector and the risk assumed have a positive influence on the extent of the information disclosed.

Continuing with our study, we generated one model for each sub-index to complete the analysis.

The next regression model contains sub-index 1, where we analyze the statement of net assets. The regression resultant is the following:

$$\text{SUB INDEX 1} = \beta_0 + \beta_1 \text{IAS ADOPTION} + \beta_2 \text{DEFINED BENEFIT PLAN} + \beta_3$$

$$\text{FINANCIAL SECTOR} + \beta_4 \text{ FINANCIAL SECTOR} + \beta_5 \text{ RISK} + \varepsilon \tag{3}$$

Table 11 reports the results.

Table 11: Multivariate Analysis. Dependent variable: Sub-index 1 (Statement of net assets)

| <i>Variable</i> | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -2.231815 | 1.224360 | -1.822842 | 0.0733 |
| IAS ADOPTION | 0.875792 | 0.241692 | 3.623592 | 0.0006 |
| LOG (CAPITALISATION) | 0.506926 | 0.332904 | 1.522738 | 0.1331 |
| DEFINED BENEFIT PLAN | 0.855009 | 0.233997 | 3.653931 | 0.0005 |
| FINANCIAL SECTOR | 0.319018 | 0.294453 | 1.083426 | 0.2830 |
| RISK | 1.524433 | 1.411064 | 1.080343 | 0.2843 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.375159 | Mean dependent var | 0.893939 |
| Adjusted R-squared | 0.323089 | S.D. dependent var | 1.254270 |
| S.E. of regression | 1.031946 | Akaike info criterion | 2.987278 |
| Sum squared resid | 63.89476 | Schwarz criterion | 3.186337 |
| Log likelihood | -92.58017 | F-statistic | 7.204876 |
| Durbin-Watson stat | 1.763749 | Prob(F-statistic) | 0.000024 |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalization.

The number of observations is 66.

As we prove in the previous models, the findings are satisfactory and the variables are correlated. The adjusted R-squared is 32%. The results show that the correlation is lower than the results obtained of the above variables. Therefore, as previously proven, it could be possible that companies report on it, but the level of information supplied is lower in this case.

The regression proposed for the statement of changes in the net assets available for benefits (sub-index 2) is the following:

$$\text{SUB INDEX 2} = \beta_0 + \beta_1 \text{ IAS ADOPTION} + \beta_2 \text{ DEFINED BENEFIT PLAN} + \beta_3 \text{ FINANCIAL SECTOR} + \beta_4 \text{ FINANCIAL SECTOR} + \beta_5 \text{ RISK} + \varepsilon \tag{4}$$

The results are given in table 12.

Table 12: Multivariate Analysis. Dependent variable: Sub-index 2 (Statement of changes in net assets available for benefits)

| <i>Variable</i> | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -3.832197 | 1.668950 | -2.296172 | 0.0252 |
| IAS ADOPTION | 1.167461 | 0.351462 | 3.321728 | 0.0015 |
| LOG (CAPITALISATION) | 0.947273 | 0.446324 | 2.122389 | 0.0379 |
| DEFINED BENEFIT PLAN | 1.325856 | 0.312350 | 4.244774 | 0.0001 |
| FINANCIAL SECTOR | 0.884812 | 0.650505 | 1.360193 | 0.1789 |
| RISK | 3.643028 | 2.435567 | 1.495762 | 0.1400 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.447173 | Mean dependent var | 1.666667 |
| Adjusted R-squared | 0.401104 | S.D. dependent var | 1.955925 |
| S.E. of regression | 1.513658 | Akaike info criterion | 3.753443 |
| Sum squared resid | 137.4696 | Schwarz criterion | 3.952503 |
| Log likelihood | -117.8636 | F-statistic | 9.706619 |
| Durbin-Watson stat | 1.985134 | Prob(F-statistic) | 0.000001 |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalization.

The number of observations is 66.

Where the adjusted R-squared is equal to 40%, and all variables are positively correlated. In this case, the model is also explanatory. Thus, the information about the statement of changes in the net assets available for benefits increases when the variables selected increase as well.

The next regression analyses the relationship between the variable description of the plan and independent variables selected. The regression form is the following:

$$\text{SUB INDEX 3} = \beta_0 + \beta_1 \text{IAS ADOPTION} + \beta_2 \text{DEFINED BENEFIT PLAN} + \beta_3 \text{FINANCIAL SECTOR} + \beta_4 \text{FINANCIAL SECTOR} + \beta_5 \text{RISK} + \varepsilon \quad (5)$$

Table 13 shows the results of the model.

Table 13: Multivariate Analysis. Dependent variable: Sub-index 3 (Description of the plan)

| <i>Variable</i> | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -3.163089 | 1.517060 | -2.085013 | 0.0413 |
| IAS ADOPTION | 0.300905 | 0.291092 | 1.033711 | 0.3054 |
| LOG (CAPITALISATION) | 0.956535 | 0.397276 | 2.407736 | 0.0191 |
| DEFINED BENEFIT PLAN | 1.998835 | 0.369138 | 5.414874 | 0.0000 |
| FINANCIAL SECTOR | 0.256055 | 0.265126 | 0.965788 | 0.3380 |
| RISK | -0.384526 | 1.531947 | -0.251005 | 0.8027 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.478540 | Mean dependent var | 2.136364 |
| Adjusted R-squared | 0.435085 | S.D. dependent var | 1.625625 |
| S.E. of regression | 1.221834 | Akaike info criterion | 3.325091 |
| Sum squared resid | 89.57266 | Schwarz criterion | 3.524150 |
| Log likelihood | -103.7280 | F-statistic | 11.01230 |
| Durbin-Watson stat | 1.264236 | Prob(F-statistic) | 0.000000 |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalization.

The number of observations is 66..

Where it can be proven that the description of the plan depends positively on the independent variables. The adjusted R-squared is equal to 43%, and most of the variables are positively correlated. In this case, the model is also explanatory. However, there is an exception with the risk variable. With an increased risk, there was a drop of description of the plan.

The last regression model presents the relationship between the actuarial data information and the rest of the independent variables:

$$\text{SUB INDEX 4} = \beta_0 + \beta_1 \text{ IAS ADOPTION} + \beta_2 \text{ DEFINED BENEFIT PLAN} + \beta_3 \text{ FINANCIAL SECTOR} + \beta_4 \text{ FINANCIAL SECTOR} + \beta_5 \text{ RISK} + \varepsilon \tag{6}$$

The results are given in table 14.

Table 14: Multivariate Analysis. Dependent variable: Sub-index 4 (Actuarial data)

| <i>Variable</i> | Coefficient | Std. Error | t-Statistic | Prob. |
|----------------------|-------------|------------|-------------|--------|
| C | -3.307532 | 0.985288 | -3.356920 | 0.0014 |
| IAS ADOPTION | 0.787800 | 0.198969 | 3.959407 | 0.0002 |
| LOG (CAPITALISATION) | 0.818124 | 0.272733 | 2.999726 | 0.0039 |
| DEFINED BENEFIT PLAN | 1.070140 | 0.200698 | 5.332086 | 0.0000 |
| FINANCIAL SECTOR | 0.461141 | 0.291963 | 1.579449 | 0.1195 |
| RISK | 2.798028 | 1.493628 | 1.873310 | 0.0659 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.603483 | Mean dependent var | 1.196970 |
| Adjusted R-squared | 0.570440 | S.D. dependent var | 1.255385 |
| S.E. of regression | 0.822789 | Akaike info criterion | 2.534275 |
| Sum squared resid | 40.61895 | Schwarz criterion | 2.733335 |
| Log likelihood | -77.63108 | F-statistic | 18.26353 |
| Durbin-Watson stat | 2.064154 | Prob(F-statistic) | 0.000000 |

Where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalisation; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances and RISK is equal to the pensions deficit divided by market capitalisation.

The number of observations is 66.

In this case the adjusted R-squared is 57%, and all variables are highly correlated. It is interesting to note the importance of the relationship between the actuarial data and the risk with a coefficient of 2.79. The main reason for this relationship is the increase in the information supply in the case of a high level of risk.

Finally, table 15 presents the correlation matrix to prove the level of correlation between the variables selected. All the variables selected are positively associated and highly correlated. Therefore, the models selected are significant.

Table 15: Correlation matrix.

| Rho de Spearman | Extent | Global Index | Sub-index 1 (Statement of net asset) | Sub-index 2 (Statement of changes in net assets available for benefits) | Sub-index 3 (Description of the plan) | Sub-index 4 (Actuarial Data) |
|--|--------|--------------|---|--|--|---------------------------------|
| Extent | 1,000 | | | | | |
| Global Index | ,898** | 1,000 | | | | |
| Sub-index 1 (Statement of net asset) | ,769** | ,887** | 1,000 | | | |
| Sub-index 2 (Statement of changes in net assets available for benefits) | ,835** | ,921** | ,804** | 1,000 | | |
| Sub-index 3 (Description of the plan) | ,742** | ,839** | ,639** | ,665** | 1,000 | |
| Sub-index 4 (Actuarial Data) | ,832** | ,895** | ,847** | ,805** | ,679** | 1,000 |

Table 16 summarizes the results obtained with the regressions models calculated, and it confirms our results.

Table 16: Multivariate Analysis. Comparative results for the models

| | Sing | Model 1 extent | Model 2 Global index | Model 3 Sub-index 1 | Model 4 Sub-index 2 | Modelo 5 Sub-index 3 | Model 6 Sub-index 4 |
|-------------------------|------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|
| INTERCEPT | ? | -4,579112 (-3,621083) | -12,53463 (-2,910919) | -2,231815 (-1,822842) | -3,832197 (-3,832197) | -3,163089 (-2,085013) | -3,307532 (-3,356920) |
| IAS ADOPTION | + | 0,720752 ** (2,956838) | 3,131957** (3,897320) | 0,875792** (3,623592) | 1,167461 ** (1,167461) | 0,300905 (1,033711) | 0,787800** (3,959407) |
| LOG (CAPITALISATION) | + | 1,194776 ** (3,426336) | 3,228857 ** (2,833330) | 0,506926 (1,522738) | 0,47273 * (0,947273) | 0,956535 * (2,407736) | 0,818124** (2,999726) |
| DEFINED BENEFIT PLAN | + | 0,997491 ** (4,681628) | 5,249840 ** (5,945204) | 0,855009 ** (3,653931) | 1,325856 ** (1,325856) | 1,998835 ** (5,414874) | 1,070140** (5,332086) |
| FINANCIAL SECTOR | + | 0,548175 (1,404590) | 1,921026 (1,796030) | 0,319018 (1,083426) | 0,884812 (0,884812) | 0,256055 (0,965788) | 0,461141 (1,579449) |
| RISK | + | 3,142775 (1,686390) | 7,580962 (1,561276) | 1,524433 (1,080343) | 3,643028 (3,643028) | -0,384526 (-0,251005) | 2,798028 (1,873310) |
| adjusted R-squared | | 0,509289 | 0,554234 | 0,323089 | 0,401104 | 0,435085 | 0,570440 |

Table 15 presents the results from the six regression models selected, where IAS ADOPTION is a dichotomous variable with a value of 1 in the first period of adoption of IAS; LOG (CAPITALISATION) is the logarithm of market capitalization; DEFINED BENEFIT PLAN dichotomous variable with a value of 1 for a defined benefit plans; FINANCIAL SECTOR dichotomous variable, with a value of 1 for the observations that belongs to the financial sector and insurances; RISK is equal to the pensions deficit divided by market capitalization. *p < 0,05; **p < 0,01.

The number of observations: 66

The findings of the multivariate analysis confirm that the decision to adopt IAS, the market capitalization, the type of plan, the characteristic of belonging to the financial sector and the level of risk can positively affect the information disclosed by the company.

Therefore, the multivariate analysis shows that after controlling size, sector and the existence of post-employment obligations, the disclosure quality and extent are both positively associated with the enforcement of the accounting regulation.

5 Conclusions

This work has empirically analyzed the information supplied on pension funds by the companies that are on the IBEX 35 index. This work is exploratory, given the absence of other works on adoption of IAS on pension funds. If the literature is growing on the adoption of IAS in different aspects (Ali 2005), it is, however, scarce related to pension funds. Moreover, one should bear in mind the growing interest in pension funds by companies and by the accounting regulation.

Accounting regulation in Spain has been sparse and scarce since the Accounting Plan of 1990. This Plan established the content on pension funds by Spanish companies in the annual financial reports, that, in a summary, should include the following: the accounting criteria to register the funds, a general description of the method of calculation and estimation of the different risks covered by the fund and a description of the evolution of the paragraph on pension funds and similar liabilities.

One particular point to note is that the Spanish Securities and Exchange Commission, the Spanish Institute of Accounting and Auditing and the different adaptations of the Accounting Plan of 1990 have not augmented the information to be supplied by the companies on pension funds.

The irruption of the IAS/IFRS was not achieved in a hurried way. In 2002, the EC supplied rules on this issue. However, the information required by the IAS/IFRS on pension funds is higher than the Spanish regulation suggested. Thus, the effort involved in supplying information on pension funds is higher.

By using content analysis, a test was performed of some of the features of the disclosure level and the decision to disclose, the character of the information, the type of pension funds and the information on accounting policies. The use of a disclosure index allowed for analyzing the level of general disclosure and some requirements at the international regulation, such as the statement of net assets available, the statement of changes in net assets available, the description of the plan and the actuarial information.

The empirical results show, at a descriptive level, that the companies have supplied more information on pension funds after the irruption of the IAS/IFRS and that those that supplied information before have increased their information. Thus, the information characterized has been increased by 15%. In the same vein, the number of pages dedicated to pension funds has been increased by approximately 100%. Additionally, there is a growing number and type of pension funds assumed by the companies (from 29 to 40). Finally, the disclosure of the information on accounting policies has increased by 29% from 2004 to 2005.

On the disclosure level, as IAS 26 requires, it can be established that in general terms, the disclosure of pension funds has increased by 85%. Specifically, the information on the statement of net assets available (items 1-5) has been fulfilled by the companies that offer

information of this type. Consequently, the information on the statement of changes in net assets available, valued by the item 6-16, has grown 120%. The description of the fund and the effects of changes on it (items 17-26) have increased to 22%. Finally, the actuarial information on pension funds (items 27-29) increased from 0.23 to 0.48 (this information has been increased by approximately 108%).

The results of the statistical tests show that there are significant differences in the disclosure of information between 2004 and 2005 regarding the decision to disclose, the character of the information, the extent of this information and the accounting policies supplied. Additionally, there are significant differences in the disclosure index as well as in the different sub-indexes. Moreover, it has been shown that the size of the company has a positive and significant relationship on the level of fulfilling the information required by the IAS 26. It is interesting to note that the differences between the banking and insurance sector and the rest of sectors decrease when the companies have to follow the IAS/IFRS.

The multivariate analysis show that after controlling for size, sector and the existence of post-employment obligations, the disclosure quality and extent are positively associated with the enforcement of the accounting regulation.

Although the results shed light on the disclosure of pension funds, one must bear in mind some limitations. First, even though the sample of companies can be representative, it is not the total population of companies subjected to IAS/IFRS. Thus, in future works, the sample should be expanded to include all of the companies in the General Index of the Madrid Stock Exchange. Similarly, a test is needed on the influence of other contextual and corporative variables, far from the regulating pressure, with the intent of testing the efficiency of the accounting regulations.

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Appendix

A. IAS 26 dispositions

“DEFINED CONTRIBUTION PLANS”

13. The report of a defined contribution plan should contain a statement of net assets available for benefits and a description of the funding policy.

14. Under a defined contribution plan, the amount of a participant's future benefits is determined by the contributions paid by the employer, the participant, or both, and the operating efficiency and investment earnings of the fund. An employer's obligation is usually discharged by contributions to the fund. An actuary's advice is not normally required although such advice is sometimes used to estimate future benefits that may be achievable based on present contributions and varying levels of future contributions and investment earnings.

15. The participants are interested in the activities of the plan because they directly affect the level of their future benefits. Participants are interested in knowing whether contributions have been received and proper control has been exercised to protect the rights of beneficiaries. An employer is interested in the efficient and fair operation of the plan.

16. The objective of reporting by a defined contribution plan is periodically to provide information about the plan and the performance of its investments. That objective is usually achieved by providing a report including the following:

- (a) a description of significant activities for the period and the effect of any changes relating to the plan, and its membership and terms and conditions;
- (b) statements reporting on the transactions and investment performance for the period and the financial position of the plan at the end of the period; and
- (c) a description of the investment policies.

DEFINED BENEFIT PLANS

17. The report of a defined benefit plan should contain either:

- (a) a statement that shows:
 - (i) the net assets available for benefits;
 - (ii) the actuarial present value of promised retirement benefits, distinguishing between vested benefits and non-vested benefits; and
 - (iii) the resulting excess or deficit; or
- (b) a statement of net assets available for benefits including either:
 - (i) a note disclosing the actuarial present value of promised retirement benefits, distinguishing between vested benefits and non-vested benefits; or
 - (ii) a reference to this information in an accompanying actuarial report.

If an actuarial valuation has not been prepared at the date of the report, the most recent valuation should be used as a base and the date of the valuation disclosed.

18. For the purposes of paragraph 17, the actuarial present value of promised retirement benefits should be based on the benefits promised under the terms of the plan on service rendered to date using either current salary levels or projected salary levels with disclosure of the basis used. The effect of any changes in actuarial assumptions that have had a significant effect on the actuarial present value of promised retirement benefits should also be disclosed.

19. The report should explain the relationship between the actuarial present value of promised retirement benefits and the net assets available for benefits, and the policy for the funding of promised benefits.

20. Under a defined benefit plan, the payment of promised retirement benefits depends on the financial position of the plan and the ability of contributors to make future contributions to the plan as well as the investment performance and operating efficiency of the plan.

22. The objective of reporting by a defined benefit plan is periodically to provide information about the financial resources and activities of the plan that is useful in assessing the relationships between the accumulation of resources and plan benefits over time. This objective is usually achieved by providing a report including the following:

- (a) a description of significant activities for the period and the effect of any changes relating to the plan, and its membership and terms and conditions;
- (b) statements reporting on the transactions and investment performance for the period and the financial position of the plan at the end of the period;
- (c) actuarial information either as part of the statements or by way of a separate report; and
- (d) a description of the investment policies.

Report content

28. For defined benefit plans, information is presented in one of the following formats which reflect different practices in the disclosure and presentation of actuarial information:

(a) a statement is included in the report that shows the net assets available for benefits, the actuarial present value of promised retirement benefits, and the resulting excess or deficit. The report of the plan also contains statements of changes in net assets available for benefits and changes in the actuarial present value of promised retirement benefits. The report may include a separate actuary's report supporting the actuarial present value of promised retirement benefits;

(b) a report that includes a statement of net assets available for benefits and a statement of changes in net assets available for benefits. The actuarial present value of promised retirement benefits is disclosed in a note to the statements. The report may also include a report from an actuary supporting the actuarial present value of promised retirement benefits; and

(c) a report that includes a statement of net assets available for benefits and a statement of changes in net assets available for benefits with the actuarial present value of promised retirement benefits contained in a separate actuarial report.

In each format a trustees' report in the nature of a management or directors' report and an investment report may also accompany the statements.

29. Those in favour of the formats described in paragraphs 28(a) and 28(b) believe that the quantification of promised retirement benefits and other information provided under those approaches help users to assess the current status of the plan and the likelihood of the plan's obligations being met. They also believe that financial reports should be complete in themselves and not rely on accompanying statements. However, some believe that the format described in paragraph 28(a) could give the impression that a liability exists, whereas the actuarial present value of promised retirement benefits does not in their opinion have all the characteristics of a liability.

30. Those who favour the format described in paragraph 28(c) believe that the actuarial present value of promised retirement benefits should not be included in a statement of net assets available for benefits as in the format described in paragraph 28(a) or even be disclosed in a note as in 28(b), because it will be compared directly with plan assets and such a comparison may not be valid. They contend that actuaries do not necessarily compare actuarial present value of promised retirement benefits with market values of investments but may instead assess the present value of cash flows expected from the investments. Therefore, those in favour of this format believe that such a comparison is

unlikely to reflect the actuary's overall assessment of the plan and that it may be misunderstood. Also, some believe that, regardless of whether quantified, the information about promised retirement benefits should be contained solely in the separate actuarial report where a proper explanation can be provided.

31. This Standard accepts the views in favour of permitting disclosure of the information concerning promised retirement benefits in a separate actuarial report. It rejects arguments against the quantification of the actuarial present value of promised retirement benefits. Accordingly, the formats described in paragraphs 28(a) and 28(b) are considered acceptable under this Standard, as is the format described in paragraph 28(c) so long as the financial information contains a reference to, and is accompanied by, an actuarial report that includes the actuarial present value of promised retirement benefits.

ALL PLANS

Valuation of plan assets

32. Retirement benefit plan investments should be carried at fair value. In the case of marketable securities fair value is market value. Where plan investments are held for which an estimate of fair value is not possible disclosure should be made of the reason why fair value is not used.

33. In the case of marketable securities fair value is usually market value because this is considered the most useful measure of the securities at the report date and of the investment performance for the period. Those securities that have a fixed redemption value and that have been acquired to match the obligations of the plan, or specific parts thereof, may be carried at amounts based on their ultimate redemption value assuming a constant rate of return to maturity. Where plan investments are held for which an estimate of fair value is not possible, such as total ownership of an enterprise, disclosure is made of the reason why fair value is not used. To the extent that investments are carried at amounts other than market value or fair value, fair value is generally also disclosed. Assets used in the operations of the fund are accounted for in accordance with the applicable International Accounting Standards.

Disclosure

34. The report of a retirement benefit plan, whether defined benefit or defined contribution, should also contain the following information:

- (a) a statement of changes in net assets available for benefits;
- (b) a summary of significant accounting policies; and
- (c) a description of the plan and the effect of any changes in the plan during the period.

35. Reports provided by retirement benefit plans include the following, if applicable:

- (a) a statement of net assets available for benefits disclosing:
 - (i) assets at the end of the period suitably classified;
 - (ii) the basis of valuation of assets;
 - (iii) details of any single investment exceeding either 5 % of the net assets available for benefits or 5 % of any class or type of security;
 - (iv) details of any investment in the employer; and
 - (v) liabilities other than the actuarial present value of promised retirement benefits;
- (b) a statement of changes in net assets available for benefits showing the following:
 - (i) employer contributions;
 - (ii) employee contributions;
 - (iii) investment income such as interest and dividends;
 - (iv) other income;

- (v) benefits paid or payable (analysed, for example, as retirement, death and disability benefits, and lump sum payments);
 - (vi) administrative expenses;
 - (vii) other expenses;
 - (viii) taxes on income;
 - (ix) profits and losses on disposal of investments and changes in value of investments; and
 - (x) transfers from and to other plans;
- (c) a description of the funding policy;
- (d) for defined benefit plans, the actuarial present value of promised retirement benefits (which may distinguish between vested benefits and non-vested benefits) based on the benefits promised under the terms of the plan, on service rendered to date and using either current salary levels or projected salary levels; this information may be included in an accompanying actuarial report to be read in conjunction with the related financial information; and
- (e) for defined benefit plans, a description of the significant actuarial assumptions made and the method used to calculate the actuarial present value of promised retirement benefits.
36. The report of a retirement benefit plan contains a description of the plan, either as part of the financial information or in a separate report. It may contain the following:
- (a) the names of the employers and the employee groups covered;
 - (b) the number of participants receiving benefits and the number of other participants, classified as appropriate;
 - (c) the type of plan - defined contribution or defined benefit;
 - (d) a note as to whether participants contribute to the plan;
 - (e) a description of the retirement benefits promised to participants;
 - (f) a description of any plan termination terms; and
 - (g) changes in items (a) to (f) during the period covered by the report.

It is not uncommon to refer to other documents that are readily available to users and in which the plan is described, and to include only information on subsequent changes in the report...”