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IMPACTS AND CHANGES IN THE ACCOUNTING POLICIES AFTER THE IAS ADOPTION: A COMPARISON BETWEEN THE MANUFACTURING AND THE COMMERCIAL SECTOR IN GREECE

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ABSTRACT

The present study examines the changes that occurred in the accounting policies of the Greek companies after the adoption of IAS. More precisely, a comparison analysis between the manufacturing and the commercial sector is conducted. In order to achieve that, we analyze the impact of the IAS transition in the net income of the Greek listed manufacturing and commercial companies by applying a new index on the field, we identify the most important changes in accounting policies and we proceed by comparing the differences and similarities between the two sectors. Results suggest that the application of the “fair value” is the accounting policy that affected most significantly both sectors, while the similarities between the two sectors seem to excel their differences.

✂ *Accounting policies, IAS, manufacturing sector, commercial sector, Greece*

INTRODUCTION

Starting with the 1st of January 2005 all listed companies in the European Union (EU) have to prepare their financial statements according to the International Accounting Standards (IAS¹) issued by the International Accounting Standards Board (IASB). The introduction of new international standards brought great changes in the way that companies prepared their financial statements, especially in

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countries where the domestic accounting standards were stakeholder oriented, (e.g. Greece, Germany, France) since IAS are heavily influenced by the shareholder oriented Anglo-Saxon accounting model.

The Greek accounting system is typically characterized as stakeholder-oriented and tax-driven (Ballas, 1994; Spathis *et al.*, 2003) and differs substantially from IAS, which are shareholder oriented and independent of tax reporting considerations. The different roles of the accounting systems have several important implications for accounting standards. The Greek Generally Accepted Accounting Principles (GAAP) generally encourage a 'prudent' approach to asset valuation and liability recognition to facilitate contract with stakeholders, thus allowing managers great flexibility in valuing assets at the lowest amount possible to minimize tax liability, while IAS promote a 'true and fair' presentation of balance sheets to facilitate decision-making for investors, limiting such flexibility (Spathis and Georgakopoulou, 2007).

In general, the new accounting standards show significant differences from the Greek GAAP and brought forth new basis in the preparation of financial statement reporting and the analysis of financial information. The new standards have significant deviations from the Greek legislation, while their application demanded various changes in the internal environment of Greek companies, since a great number of accounting policies that were used, had to be rejected and replaced by new. Moreover, according to Rahman *et al.* (2002) studies that deal with accounting policies in single country contexts indicate that the choice of accounting methods and policies is also affected by the firm characteristics, which means that the changes in the internal environment of the Greek companies could vary depending on the specific sector characteristics of each company. In other words, the new accounting policies that affected most significantly the manufacturing sector might differ from those that mostly affected the commercial sector.

The purpose of the present study is to draw the picture of the changes in accounting policies that occurred in the Greek manufacturing and commercial sectors, and to compare the implications in the two sectors. In order to achieve that we analyze the impact of the IAS transition in the net income of all the manufacturing and commercial companies listed in the Athens Stock Exchange (ASE), we identify the most important changes in accounting policies and we proceed by comparing the differences and similarities between the two sectors. We quantify the impact by presenting a new index on the field, and we investigate which IAS caused the most significant changes in each of the two sectors, from the establishment of new accounting policies.

The differences in the income statements between the two different accounting standards are presented in the 2005 reconciliation statement, which also provides the reasoning behind these changes in the form of adjustments. We proceeded by analyzing the reconciliation statements, we examined the adjustments that took

place in every company of the two sectors and finally found the impact of the IAS transition as it appears through the changes of accounting policies.

The remainder of the paper is organized as follows: In the next section the relevant literature is reviewed. In the third section the paper's methodology is analyzed and in the fourth the results are presented. Finally, in the fifth section we conclude by discussing the outcomes of the survey.

1. PRIOR RESEARCH

The adoption of the IAS by the EU is considered to be one of the greatest changes in the history of financial reporting, making IAS the most widely accepted financial reporting model (Hung and Subramanyam, 2007). However, there is still an urgent need for managers and investors to understand the implications of the transition. This is especially true in European countries with stakeholder oriented accounting systems such as Greece, Germany, France, Spain and Italy, since IAS is an accounting model heavily influenced by the share-holder oriented Anglo-Saxon model. Consequently, the IAS adoption caused fundamental changes in the basis of financial reporting of many European countries.

Several studies have been conducted in order to compare IAS to national accounting standards and to identify the impacts of the transition in European countries. For example, studies that focus on the transition and implementation of IAS in the EU and their impact on firms include those conducted by Jermakowicz (2004) in Belgium, Street and Larson (2004), Schipper (2005) and Whittington (2005) within EU member states, Sucher and Jindrichovska (2004) in the Czech Republic, Vellam (2004) in Poland, Weissenberger *et al.* (2004), Haller and Eierle (2004) and Hung and Subramanyam (2007) in Germany, while other studies investigate the financial reporting and the quality of information under IAS (Glaum and Street, 2003; Tarca, 2004; Cuijpers and Buijink, 2005; Barth *et al.*, 2005; Van Tendeloo and Vanstraelen, 2005, etc.).

Most of the studies investigating the impacts of the IAS transition, confirmed the problems of implementing IAS (Jermakowicz, 2004; Sucher and Jindrichovska, 2004; Hung and Subramanyam, 2007), while others analyzed the differences between domestic financial reporting and the IASB conceptual framework (Vellam, 2004). These studies concluded that the major differences between domestic and international accounting standards are related to the linkage between financial reporting and tax accounting. Greece has also been the setting for studying (e.g. Apostolou *et al.*, 2006; Bellas *et al.*, 2007; Georgakopoulou *et al.*, 2009 etc.), mostly due to the country's stakeholder orientation and the existence of several creative accounting practices prior to IAS (Baralexis, 2004; Tsalavoutas and Evans, 2010).

The most common method to examine the transition from an accounting model to another is by analyzing the reconciliation statements provided by the adopting companies. Surveys that analyze the reconciliation statements include those of Weetman and Gray (1990, 1991), Cooke (1993) and Hellman (1993) who examined the differences between US GAAP and IAS as presented through the 20-F reconciliation statements by applying Gray's (1980) 'conservatism index'. Adams *et al.* (1993) extended the use of this index and of partial indices and were the first to employ the index in comparing Finnish GAAP to IAS. By 1998, Weetman *et al.* renamed the Gray (1980) index as 'comparability index', in order to highlight the use of the index as a means of comparability.

The recent transition of European companies to IAS in 2005 and its impacts are widely examined through the analysis of the 2004 financial statements which were initially prepared on the basis of national GAAP and later restated under IAS, as comparatives for the 2005 financial statements. Such recent studies, include the study conducted by Bertoni and De Rosa (2006) who applied the 'comparability index' to net income, equity and partial adjustments on the 2004 financial statements of companies listed in the Italian stock exchange and concluded that Italian GAAP are more conservative than IAS, while Lopes and Viana (2006) applied the 'comparability index' in companies listed in the Portuguese stock exchange and found that IAS had led to less conservative reported profits. Furthermore, by applying this index to compare IAS and Greek GAAP Tsalavoutas and Evans (2010) found that IAS have a significant impact on the financial position of Greek listed companies as well as on gearing and liquidity ratios while Cordazzo (2008) provided empirical evidence of the nature and the size of the differences between Italian GAAP and IAS by proposing a new measure of accounting comparability, the 'proportionality index'.

The present study is an attempt to identify which of the new accounting policies that were applied following the IAS adoption caused the most significant changes in the Greek manufacturing and commercial companies. Furthermore it is a first comparison of the transition's implications between the two sectors. According to Watts and Zimmermann (1990) there is ample evidence that companies with different characteristics such as industry membership adopt different accounting practices, subsequently, it is expected that different accounting policies had different level of impact in the under-examination sectors. As Jaafar and McLeay (2007) note, the conventional research focuses on variations in the accounting policies adopted by firms between countries, presupposing that accounting methods and policies systematically reflect rules and regulations of the country where the firms operate. However, diversity of accounting policies results from the "real" differences in the operating circumstances each sector faces (Jaafar and McLeay, 2007), while furthermore, Aisbitt (2001) points out that, sector characteristics play a significant role in accounting policy choice.

2. RESEARCH DATA AND METHODOLOGY

2.1 Scope of the study

The scope of the present study is to examine the impacts and changes that were caused by the IAS adoption, in the accounting policies used in the Greek companies. More precisely, we conduct a comparison analysis between the manufacturing and the commercial sector. We attempt to draw the picture of the changes that occurred in the accounting policies of the Greek listed manufacturing and commercial companies.

In order to achieve that, we analyze the reconciliation statements of the net income as they are presented in the annual reports of the companies in the transition year 2005. We analyze the adjustments on net income since they provide a great amount of information concerning changes in accounting methods and policies as for example those used for inventory valuation, assets valuation, impairment and depreciation, determination of provisions, etc.

At first, we conduct a frequency analysis of the adjustments caused by each IAS application in the sample, in order to gain a general view of the transition effects and to identify the new accounting policies that affected the majority of the Greek companies. Then, by applying the proposed index in the data, we quantify the total impact of each IAS on net income and we find those accounting policies the application of which affected most significantly each sector's net income in total.

2.2 Data collection

The sample under investigation includes all the manufacturing and commercial companies listed on the Athens Stock Exchange, which have completed the transition of consolidated financial accounts to IAS. According to IFRS 1 '...company's first IFRS financial statements should include a reconciliation of shareholders' equity and net income...'. In order to have a more thorough view of the changes in accounting policies, we examined the net income reconciliation statements. It turned out though, that from the 87 manufacturing companies listed on the ASE, only 59 provided adequate net income reconciliation statements, while from the 82 listed commercial companies, only 54 did so. It should be mentioned here that from the 59 manufactures, 3 belong to the 'Gas and Oil' sub-sector, 13 to the 'Basic Resources' sub-sector, 20 to the 'Construction and Material' sub-sector, 2 to the 'Chemicals' sub-sector and 21 to the 'Industrial Goods and Services' sub-sector. While from the 54 commercial companies, 8 belong to the 'Retail' sub-sector, 26 to the 'Personal and Household Goods' and 19 to the 'Food and Beverage' sub-sector.

2.3 Descriptive evidence

At first we gathered the net income reconciliation forms of the 59 manufactures and the 54 commercial companies, and proceeded by analyzing the frequency of the adjustments on the companies' net income that were caused due to the IAS transition. The net income reconciliation statements provide the following data (Appendix):

- the net income based on the Greek GAAP,
- the adjustments that were caused due to the application of IAS in the company, and finally
- the net income based on the International Accounting Standards.

Table 1 shows the frequency of the adjustments to the net income caused by each IAS, in order for the sample companies to convert to IAS.

Table 1. Frequency of all individual adjustments caused by IAS adoption

Adjustments by:	Title	No of companies affected:	
		Manufacturing sector	Commercial sector
IAS 2	Inventories	10	10
IAS 11	Construction contracts	13	1
IAS 12	Income taxes	46	48
IAS 16	Property, plant and equipment	57	50
IAS 17	Leases	25	23
IAS 18	Revenue	6	10
IAS 19	Employee benefits	50	47
IAS 20	Accounting for government grants and disclosure of government assistance	22	22
IAS 21	The effects of changes in foreign exchange rates	26	23
IAS 23	Borrowing costs	2	-
IAS 27	Consolidated and separate financial statements	14	9
IAS 28	Investments in associates	13	14
IAS 31	Interests in joint ventures	5	2
IAS 36	Impairment of assets	9	7
IAS 37	Provisions, contingent liabilities and contingent assets	44	35
IAS 38	Intangible assets	52	52
IAS 39	Financial instruments: recognition and measurement	22	31
IAS 40	Investment property	3	-
IAS 41	Agriculture	-	6
IFRS 3	Business combinations	10	3
<i>Total No. of companies:</i>		<i>59</i>	<i>54</i>

First evidence deriving from the examination of the net income reconciliation statements of the **manufacturing** companies, show that the most frequent adjustments were caused by the application of the following IAS:

- IAS 16 - caused adjustments in 57 companies,
- IAS 38 - affected 52 companies,
- IAS 19 - affected 50 companies,
- IAS 12 - affected 46 companies, and
- IAS 37 - caused adjustments to 44 companies.

On the other hand, concerning the **commercial** sector, the most frequent adjustments were caused by the application of the IAS are as follows:

- IAS 38 - which affected 52 companies
- IAS 16 - 50 companies
- IAS 12 - affected 48 companies
- IAS 19 - caused adjustments to 47 companies, and
- IAS 37 - affected 35 companies

From the above first evidence it turns out that IAS 12, 16, 19, 37 and 38 affected the majority of the sample companies both in the manufacturing and the commercial sector. By examining the adjustments on the reconciliation statements it turns out that the most important changes that occurred in the accounting policies from the application of the above-mentioned IAS in both sectors, are the following:

Concerning **IAS 16** the most important changes on accounting policies were:

- The valuation of tangibles on fair value
- The change in the depreciation rates of tangible assets

Regarding **IAS 38** the most frequent adjustments in accounting policies were:

- The differentiation of the depreciation rate for intangibles
- The non-recognition of start-up costs as intangible assets

The most frequent adjustments deriving from the application of **IAS 19** were:

- The recognition of compensations due to retirement, and
- The recognition of benefits to the personnel

Concerning **IAS 12**, the most frequent adjustments deriving from its application were:

- The recognition of deferred taxes
- The recognition of the income taxes of the period as expenses

And finally, the most frequent adjustments deriving from the application of **IAS 37** turned out to be:

- The general adjustments of the account 'provisions', and more specific
- The provisions for 'bad debtors' and for 'impairment of assets'.

First evidence shows that the introduction of fair value for the valuation of tangible and intangible assets (IAS 16 and 38), in contrast to the Greek historical cost

valuation, and the subsequent change in the depreciation amounts which are calculated based on the useful life of the asset, are the new accounting policies that affected the majority of the Greek manufacturing and commercial companies. Moreover, the non-recognition of the start-up costs (IAS 38), in contrast to their capitalization according to the Greek GAAP is another important change of policy, while IAS 19 introduced compensations and employee benefits that were not calculated according to the Greek GAAP. Another important change in accounting policy was established by the recognition of deferred taxes (IAS 12), which is different from the treatment based on the Greek GAAP, according to which the concept of deferred taxes does not exist and there is no distinction between current and deferred tax. Additionally, IAS 12 defines the expense of the income tax when incurred, in contrast to the Greek non-recognition of taxes as an expense of the period. Finally, the explicit distinction of provisions from contingent liabilities introduced by IAS 37 is a different policy compared to the requirement of the Greek GAAP to companies to recognize liabilities for any risk which can be defined.

After identifying the aforementioned evidence and in order to run into more valid conclusions we quantified the impact from the IAS adoption and thus found which IAS affected most significantly the net income of the two sectors, and consequently the changes in accounting policies that affected most significantly the sectors' income.

2.4 Methodology

The indices that are used in the accounting literature to measure the impact of the IAS adoption on a company can be also applied to quantify the impacts on the entire sector the company belongs to. There is though a very important omission: they don't take much into consideration the fact that particular IAS may affect only specific companies and, thus, are difficult to be measured on a total basis in order for them to be compared with other IAS that affected other companies so as to find the most important IAS that affected the entire sector. In several cases, the application of a particular IAS might affect only few companies but to a great extent. Moreover, the adoption of IAS could have a different impact on the financial results of companies belonging to different sectors, thus a subsequent comparison of the IAS implication between the two sectors is conducted.

The proposed index can be used to analyze the impact of the transition, by taking as a parameter of significance the extent to which each IAS affected the companies under examination in each sector. The analysis is applied on the data extracted from the annual reports of the Greek listed companies, examining the impact of IAS in a group of 59 manufacturing and 54 commercial companies. The IAS that we examined were those that turned out to appear more frequently in the adjustments that took place in the income statement of the sample companies (see

Table 1). Specifically, regarding the manufacturing sector, IAS 21 “The effects of changes in foreign exchange rates”, IAS 18 “Revenue” and IAS 40 “Investment property”, which were found to have a very small numeric impact on the net income, were excluded from the analysis. However, the limited impact they have on net income is captured by the error term included in the proposed index. While concerning the commercial sector, IAS 23 “Borrowing costs”, IAS 28 “Investments in associates”, IAS 31 “Interests in joint ventures”, IAS 40 “Investment property” and IFRS 3 “Business combinations” were excluded due to the very small numeric impact. The IAS that was eventually examined are presented in *Table 2*.

The first step of the analysis aims to identify whether the companies of the sector were affected at any degree by the application of the IAS under examination. For this reason, a dummy variable was created for each IAS_i and we placed the data as follows:

- 0 in cases where the impact of the IAS application in a company’s net income was zero, i.e. IAS_i caused no change on net income
- 1 in cases where the impact of the IAS application in a company’s net income was either positive or negative

Then we proceeded by conducting frequency analysis and particularly central tendency analysis in order to find the tendency of the impacts caused in net income by the application of IAS_i (d_i). This analysis provides useful information concerning the effect of IAS application on income. The results are presented in *Table 2* and refer to each specific sector. It is obvious that there is a noticeable differentiation concerning the impact of each IAS to the income of the under-examination companiesⁱⁱ.

The second step of the analysis concerns the estimation of the coefficients of each IAS. Thus a Regression analysis was conducted based on Ordinary Least Squares (OLS) by using the following equation:

$$Y_j = \sum_{i,j}^n b_i X_{i,j} + \varepsilon_i \quad \text{Eq. 1}$$

Where,

- Y_j is the difference between income calculated based on Greek GAAP and income calculated based on IAS for each company belonging to the under examination sector
- the vector b_i shows the estimated coefficient of each IAS under examination,
- X_{i,j} is the observed difference of IAS_i over company_j, and
- an error is added to the model in order to describe changes in income (before and after IAS) depending on other parameters (other IAS).

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From this equation the coefficient of each IAS under examination (b_i) is calculated. These coefficients comprise the sign of the change on income by the implementation of the IAS. Finally, the following index is proposed resulting from the combination of the above calculations:

$$\text{impact factor}_i (IF_i) = \frac{1}{c_i} \quad \text{Eq. 2}$$

Where c_i equals:

$$c_i = b_i \frac{1}{d_i} \quad \text{Eq. 3}$$

And d_i is the score resulting from the central tendency of IAS_i .

The impact of each IAS on the income of the under-examination companies is estimated by applying the index to the collected data (Table 2, "Impact Factor"). The positive or negative figure of the Impact Factor shows the total positive or negative impact that the application of the particular IAS had on the income of the manufacturing or the commercial sector.

Table 2. IAS under examination, tendency analysis and impact factor

Sectors	Manufacturing		Commercial	
<i>Parameters</i>	<i>Tendency score (d_i)</i>	<i>Impact factor</i>	<i>Tendency score (d_i)</i>	<i>Impact factor</i>
IAS 2	0,1525	0,183	0,1887	-0,327
IAS 11	0,2203	0,308	0,0189	0,001
IAS 12	0,7627	1,375	0,9057	-1,155
IAS 16	0,9661	2,660	0,9245	-1,693
IAS 17	0,4068	2,998	0,6434	2,934
IAS 18	-	-	0,3774	-0,427
IAS 19	0,8475	0,304	0,8868	-0,680
IAS 20	0,3729	-0,123	0,4151	0,989
IAS 21	-	-	0,434	-0,327
IAS 23	0,0339	-0,002	-	-
IAS 27	0,2373	0,157	0,1698	-0,145
IAS 28	0,2203	-0,125	-	-
IAS 31	0,0847	-0,102	-	-
IAS 36	0,2004	0,205	0,1321	0,427
IAS 37	0,7288	1,151	0,6604	-0,862
IAS 38	0,8814	1,998	0,9057	-0,780
IAS 39	0,3559	0,290	0,5849	-0,537
IAS 41	-	-	0,1132	-0,170
IFRS 3	0,1695	0,748	-	-

Finally, the absolute values of the impact factors provide the importance rate. That is the significance of each IAS impact on the sector's net income. Thus as Eq.4 shows, the Importance Rate of the IAS_i (IR_i) is equal to the absolute value of the Impact Factor of the specific IAS_i (IF_i):

$$IR_i = |IF_i| \quad \text{Eq. 4}$$

Eventually the outcomes of the index we applied rated as most significant impacts on the **manufacturing sector**, those caused by the application of IAS 17 (2,998), IAS 16 (2,660), IAS 38 (1,998), IAS 12 (1,375) and IAS 37 (1,151). Moreover, it turned out that IAS 20, 23, 28 and 31 had in total a negative impact on the net income of the manufacturing sector.

Concerning the commercial sector, it turned out that the most significant impact on the entire sector's net income was caused by the application of IAS 17 (2,934), IAS 16 (1,693), IAS 12 (1,155), IAS 20 (0,989) and IAS 37 (0,862), while, the vast majority of the IAS (IAS 2, 12, 16, 17, 18, 19, 21, 27, 37, 38 and 39) had a negative impact in total on the sector's income. In the following table (Table 3), the ranking of the IR of each applied IAS is presented together with the estimated weight based on the proposed index.

Table 3. Importance rate

	Manufacturing sector		Commercial sector	
1	IAS 17	2,998	IAS 17	2,934
2	IAS 16	2,660	IAS 16	1,693
3	IAS 38	1,998	IAS 12	1,155
4	IAS 12	1,375	IAS 20	0,989
5	IAS 37	1,151	IAS 37	0,862
6	IFRS 3	0,748	IAS 38	0,780
7	IAS 11	0,308	IAS 19	0,680
8	IAS 19	0,304	IAS 36	0,620
9	IAS 39	0,290	IAS 39	0,537
10	IAS 36	0,205	IAS 18	0,427
11	IAS 2	0,183	IAS 21	0,327
12	IAS 27	0,157	IAS 41	0,170
13	IAS 28	0,125	IAS 27	0,145
14	IAS 20	0,123	IAS 2	0,144
15	IAS 31	0,102	IAS 11	0,001
16	IAS 23	0,002	-	-

CONCLUSIONS

According to Jaafar and McLeay (2007) the sector of operations determines the financial reporting practices adopted by a firm. Consequently, we expected that the IAS transition had different impact in the manufacturing and the commercial sector. However, in this first attempt to compare the Greek manufacturing and

commercial sectors in terms of changes in accounting policies following the IAS adoption, the similarities between the two sectors seem to excel their differences.

In the frequency analysis of the adjustments caused by the IAS transition, it turns out that the majority of the companies belonging to either sector were affected by the same IAS, specifically IAS 16, IAS 38, IAS 12, IAS 19 and IAS 37. Consequently, as it turns out from the adjustments' examination, the new policies that were applied and affected the majority of the companies in both sectors were the assets' revaluation on fair value, the depreciation rates based on the useful life of the asset, the non-recognition of start-up costs as intangibles, the recognition of employee benefits, the recognition of deferred taxes and the expense of the income taxes of the period, as well as the distinction of provisions from contingent liabilities.

A few differences turned out though, when we examined the accounting policies the application of which had the most significant impact on the net income of the entire manufacturing and commercial sectors. By applying the proposed index to the data from the manufacturing sector, we found that the most significant impact on the entire sector's income was caused from the application of IAS 17, IAS 16, IAS 38, IAS 12 and IAS 37. Regarding the commercial sector the respective IAS with the most significant impact were IAS 17, IAS 16, IAS 12, IAS 20 and IAS 37.

It is very important to note that IAS 17 had the most significant impact on the entire net income of both sectors, although it affected only 25 of the 59 manufactures and 23 of the 54 commercial companies. In particular, the new policies that were established from the application of IAS 17, were the recognition of financial leasing as tangible assets and their subsequent treatment concerning revaluation and depreciation and the recognition of the profit gained from Sales and Leaseback directly in income through transitional liabilities accounts, instead of initially presenting this profit as non-operating profit and then through a tax regulation transferring it to the tax-free reserves. This great impact shows that these new policies affected the companies that operate with the use of leases to a great extent.

The most noticeable differences that turned out derive from the application of IAS 20, IFRS 3, IAS 11 and IAS 41. IAS 20 had a very significant impact on the net income of the commercial sector while it didn't significantly affect the manufacturing sector. In the meantime, this particular IAS affected the same number (22) of companies in both sectors, which shows that it affected the commercial companies to a greater extent and thus we could conclude that the amounts of government grants are higher in the commercial sector. To be more specific, the new accounting policy established by IAS 20 defines that government grants shall be recognized as income over the periods necessary to match them with the related costs, which are indented to compensate on a systematic basis, instead of being credited directly to shareholders' interests according to the Greek GAAP.

Contrarily, IFRS 3 had a strong impact in the net income of the manufacturing sector, while it had a minor impact on the commercial companies and IAS 11 "Construction contracts" had an impact only on manufactures. More specific, IFRS 3 defines that all business combinations within its scope, would apply the purchase method and therefore will valuate and depreciate goodwill and recognize negative goodwill directly on the income statement, in contrast to the Greek Law which also permits the pooling of interests method. The fact that IFRS 3 affected only 10 of the 59 manufacturing companies, shows that it had a very strong impact to companies that applied the pooling of interests method and were obliged to adopt the purchase method. Regarding IAS 11, it is expected that its application would affect only manufacturing companies which mainly deal with constructions, due to its nature. Likewise, IAS 41 is expected to affect only the commercial sector.

Concluding, in general the two sectors appear to have more similarities than differences regarding the impact and the changes in accounting policies that followed the IAS transition. The most significant impact was caused from the new accounting policies concerning the revaluation of assets on fair value and the new depreciation rates which are linked to IAS 16, 38 and 17.

It should be mentioned here, that due to the insufficient or completely absent data concerning the reconciliation statements of 28 companies belonging to the manufacturing sector and 28 belonging to the commercial sector, we don't provide evidence that picture the total view of the two sectors. However, the sample of the study comprises from the 68% of the listed manufacturing companies and the 66% of the commercial companies and thus is considered to be representative. As for further research, it would be very interesting to compare the outcomes of the proposed methodology with the outcomes of the classical approach by applying Gray's comparability and partial adjustment indices to the collected data.

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**Impacts and changes in the accounting policies after the IAS adoption:
A comparison between the manufacturing and the commercial sector in Greece**

Appendix. Example of net income reconciliation statement

	Net Income - 31 December 2004 - (Euro in thousands)	
	Balance as per Greek Consolidated Financial Statements	91.283
1	Difference between the provision for staff leaving indemnity (per Greek legislation) and defined benefit plan with the provision as calculated by the actuarial valuation - IAS 19	1.262
2	Provision for deferred tax - IAS 12	(9.346)
3	Reversal of the revaluation of fixed assets and the effect of depreciation taken - IAS 16	186
4	Write off of capitalized costs with no future benefit - IAS 38	5.036
5	Write off of capitalized research and development costs and reversal of related depreciation - IAS 38	(1.082)
6	Adjustment of tangible assets depreciation to conform with the group policy - IAS 16	23.009
7	Equity accounting (Differences from conversion to IAS of associates' accounts) – IAS 28	(8.643)
8	Other provisions / adjustments - IAS 37	(14.013)
9	Reclassification of grant from equity to deferred income or liabilities - IAS 20	1.285
10	Income tax for the period - IAS 12	(3.244)
11	Goodwill and depreciation of goodwill - IFRS 3	4.602
12	Exchange gains (timing differences) - IAS 21	9.808
13	Different method of stock valuation - IAS 2	31.446
14	Effect of IAS 39 – IAS 39	(106)
15	Other	(616)
	Balance as per IFRS Consolidated Financial Statements	130.867

ⁱ In the present paper the term IAS refers both to International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS).

ⁱⁱ Despite the amount of the impact, in some cases the application of certain IAS affected a small number of companies but to a great extent. To provide a common basis for the survey, we take under consideration the degree to which the entire sector was affected by the IAS application. For instance, according to the reconciliation statements, IAS 20 affected 22 of the 59 manufacturing companies. Therefore in 27 companies the application of this IAS caused no change on net income (dummy variable: 0). As for the 22 affected companies, despite the fact that 16 had a decrease on net income (negative impact) and 6 an increase on income (positive impact) they are all affected by IAS 20 (dummy variable: 1). The frequency analysis for the 59 cases of the variable provides the tendency of the impact from the application of IAS 20 (d_{20}), which equals to 0.3729 (Table 2). This value is later used in the calculation of the impact factor of IAS 20. The latter is depending on the ratio of d_{20} to the coefficient of IAS 20 (b_{20}) as calculated based on the Equation 1. On the other hand d_{16} equals to 0.9661 which is very close to 1, since IAS 16 affected 57 of the 59 manufacturing companies etc.