“THE IMPACT OF THE REVALUATION OF TANGIBLE FIXED ASSETS AT FAIR VALUE ON BORROWING ABILITY, ON EXPORTS AND ON FINANCIAL POSITION. EVIDENCE FROM THE GREEK SMEs IN TEXTILE INDUSTRY”

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ABSTRACT

This study investigates the impact of the revaluation of tangible fixed assets at fair value instead of historical cost on the borrowing ability, on exports and on financial position. The survey conducted on the Greek small and medium sized companies in textile industry, which are located in the region of Thessaloniki, exports products and apply the Greek Accounting standards (GAS). Based on previous studies and literature, five research hypotheses are developed which are directly connected with the central issue. For testing the five research hypotheses, a questionnaire is designed. This is used to survey a sample of forty eight (48) companies, which finally accepted to respond the questionnaire. The analysis of the primary data is conducted via the statistical computer software ‘SPSS’. More precisely, descriptive analysis of the results, chi-square test of the variables of research hypotheses and exploratory factor analysis are delivered. The results verify four of five research hypotheses and depict a clear relationship between revaluation of tangible fixed asset at fair value with the borrowing ability and the level of exports. The factor analysis (KMO=0.837) leads to two factors which contain six and one variables respectively with Cronbach's Alpha= 0.632 of first factor. This study contributes to the literature by verifying empirically the existing theories from a Greek perspective in concern to revaluation of assets. Moreover, its results could add Knowledge and guidance to the discussion of the implementation of IAS/IFRS by Greek SMEs and to the effort of reforming Greek tax system conducted by Greek government for boosting Greek economy.

Key words: Fair value, Historical cost, Borrowing ability, Exports, Financial Position

1. INTRODUCTION

The interface between financial and tax accounting is a highly debatable issue. Although, their principles are quite similar, their core objectives of financial reporting and definition of taxable income, retrospectively, are sharply different. To eliminate the negative effects of using two distinct accounting systems in a global economic and
accounting environment, a concentrated effort for aligning them has been launched both in national and international level (Schön, 2004; Freedman, 2008).

Within this context, the European regulation 1606/2002 requires all listed European Union (EU) companies from January 1st 2005 onwards, to prepare their consolidated accounts in accordance with the International Accounting Standards (IAS) and the International Financial Reporting Standards (IFRS). In respect to this EU regulation, Greece as an EU member-state, adopted it through the enactment of Law 3301/2004, which goes one step further by demanding all listed companies to prepare both corporate and consolidated financial statements in conformity with IAS/IFRS (Floropoulos et al., 2010; Evans & Tsalavoutas, 2010). In brief, Greek Accounting System is stakeholder-oriented, tax-driven, conservative and historic cost based, while IAS/IFRS accounting system is shareholder-oriented and fair value based. Consequently, their conceptual frameworks and objectives are quite different and that affects the outcome of financial statements (Bellas et al., 2007; Athianos & Bazakides, 2010).

In Greek reality, the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), up to now, are mandatory applied only by companies which are listed on Athens Stock Exchange and their subsidiaries. Consequently, the entities, that voluntarily apply IFRS / IAS, are a few companies that have the size and the resources to meet the requirements of International Accounting Standards, or are associated with listed companies and so they should use them indirectly. But, the vast majority of small and medium Greek businesses do not apply them. Generally speaking, the main reason that discourages small and medium sized businesses from their application is the cost of implementation and their complexity. Besides, the implementation of IFRS/IAS requires specialized and familiar accountants and new accounting computer software (Institute of Chartered Accountants in England and Wales (ICAEW), 2007; Gornik-Tomaszewski & Jermakowicz, 2006).

This research will be limited to Greek small and medium enterprises (SMEs). Before analyzing the profile and the importance of SMEs in Greek and EU economy, a definition of SMEs is delivered. According to the European Committee, a firm is regarded as SME if it fulfills the following conditions. Its total revenues, total assets and the numbers of its employees are less than 50 million Euros, 43 million Euros and 249 respectively. In addition, the criterion of independence is taken into
consideration, which defines a SME as independent if the percentage of equity or voting rights held by any person or entity located outside of the company shall not exceed 25% of total capital or voting rights of that company. These criteria are difficult to implement in Greece, since more than 95% of companies in secondary and tertiary sectors of the Greek economy employs up to 10 people. However, the Greek authorities use the EU definition in the case of EU funds. In the case of national investments, they characterize a manufacturing company as an SME if it meets cumulatively the two conditions which are the average annual turnover during the last three years not to exceed 2,347,000 euros and the average annual employment in the last three years not to exceed one hundred (100) people, regardless of whether the company is operating with one or more shifts (Athens Chamber of Commerce and Industry, 2007a).

Small and medium-sized enterprises are particularly important in the employment sector of the economy, since they create jobs both in Greece and in other countries - EU members. In Greece, more than 700,000 small and medium businesses operate and they employ over 1,000,000 employees. Their business dynamics is very strong and they are an important part of the Greek economy. In 2003, there were in the European Union 19 million businesses which employed 140 million people. The vast majority (99.8%) were SMEs. The 90% of SMEs were very small and half of them employed just three people each, i.e. the owner and his family. The 99.7% of enterprises in the EU are SMEs, which employ 70% of all workers, achieve 58% of total turnover and contribute to the 51% of the total added value created in the EU (Athens Chamber of Commerce and Industry, 2007a; Observatory of European SMEs, 2003).

Especially, in a peripheral economy of the EU, such as Greek one, the economic performance and the growth dynamics of small and medium businesses have a crucial impact on long term growth of the country’s economy. Moreover, the predominance of SMEs in many sectors of the Greek and European economy, particularly in the technology sector lately, imposes the support and even more the strengthening of their competitive capacity in the new economic environment, which is developed by the European integration model. To sum up, SMEs form the backbone of both the Greek and European Union (EU) economy. Their contribution is critical for the economic growth, the employment, the development of
entrepreneurship and of innovation (Athens Chamber of Commerce and Industry, 2007a; Observatory of European SMEs, 2003).

In the context of integrated EU market and global economy, the Greek SMEs faces the problem of invalid financial information provided to the users of financial statements and the challenge of the competitiveness (Athens Chamber of Commerce and Industry, 2007a; Observatory of European SMEs, 2003). The implementation of different accounting standards by Greek SMEs complicates the assessment of their financial position and performance and creates obstacles to their access to capital markets. Consequently, the adoption of IAS/IFRS by Greek SMEs whose main purpose is to provide true and fair financial statements to their users, which are mainly investors and credit institutions, would eliminate the above obstacles.

In particular, the IFRS/IAS could ensure high quality of financial reporting which leads to the transparency and to the effectiveness of capital markets. The registration of assets and liabilities as well as disclosure of cash flows of companies in a uniform manner, based on financial - accounting policies, which are internationally recognized and accepted, will help the Greek companies to compete on an equal basis for finding financial resources, both in EU and in international markets. Using generally accepted accounting standards promotes financial reporting and the comparability of financial statements, especially when investors are located in countries with different accounting policies. As a result, the credibility of Greek companies will be improved towards their investors, suppliers, customers and lenders. For instance, banks and funds are based on financial information for granting loans and investing decisions respectively (Alexander & Nobes, 2007).

As Greek economy is in recession and faces debt crisis, many Greek SMEs strive for survival. In other words, Greek SMEs not only have insufficient equity to finance its activities but also they find serious difficulties and obstacles to borrowing from the Greek banks. That is because the Greek banking system faces liquidity problems and so banks are reluctant on lending. When they decide to lend, they require high interest rates and high guarantees from SMEs which they, in most cases, are unable to offer. Consequently, the borrowing cost of Greek companies is comparatively higher than other EU countries. It is estimated that the 60% of companies consider banking borrowing necessary for their operating. Furthermore, the level of domestic production and consumption has been reduced seriously, which affects negatively the total revenues of SMEs. This means that they should find other
markets apart from domestic one to promote their products or in other words to export their products (Athens Chamber of Commerce and Industry, 2007a; Athens Chamber of Commerce and Industry, 2007b)

At this point, it should be mentioned that the International Accounting Standards Board (IASB) published in July 2009 the International Financial Reporting Standard for Small and Medium Enterprises (IFRS for SMEs). The purpose of the proposed standard is to empower the relevance, the reliability and the comparability of the financial statements, to increase the competitiveness of SMEs and to reduce implementation costs of IFRS/IAS. It provides a simplified, self-contained set of accounting principles that are appropriate for smaller, unlisted companies, by removing choices for accounting treatment, eliminating topics that are not generally associated to SMEs and simplifying methods for recognition and measurement (IASB, 2009).

The standard has not yet legislated by the European Union, nor has it included as a theme in the processes of ratification of the standards of EFRAG, although the EU participated actively in the drafting process. The standard is in the process of consultations in the EU, particularly for identifying the concept of SMEs in each country and for determining the beginning date of implementation. The adoption of IFRS for SMEs will be in the jurisdiction of each country. For example, the EU requires listed companies to comply with International Financial Reporting Standards, but it will give the opportunity to Member States to decide what standards should be followed by the SMEs (IASB, 2009). However, it is generally accepted that any effort to improve financial reporting for SMEs is necessary to take into consideration the basic principle of cost / benefit analysis. This process is important, as SMEs lack the necessary financial and human resources to meet the needs that are posed by the implementation of all IAS / IFRS (Gornik-Tomaszewski & Jermakowicz, 2006).

This study intends to examine whether the possible implementation of IAS 16 can affect the access to financial markets and the competitiveness of small and medium-sized textile industries in the regional of Thessaloniki. The aim is to prove whether the change in the revaluation of property, plant and equipment of these companies at fair value under IFRS / IAS, opposed to the current way based on Greek accounting standards, is beneficial for them by offering better access to capital markets and by increasing the exports of their products. The extraction and analysis of primary data focused on the perceptions of heads of accounting departments of the
companies. It could be mentioned that the contribution of the survey will be twofold. First, its results would add empirical knowledge to the discussion of the implementation of IAS/IFRS by Greek SMEs and its impact on their borrowing ability, level of exports and financial position. Second, as Greek Authorities are now striving for boosting and reforming economy, its results could contribute to the discussion of reforming the Greek tax system in order to be effective and competitive.

The paper is organized as follows. In section 2, the accounting treatment of tangible fixed assets under IFRS/IAS and Greek GAS is presented. Besides, it is delivered literature review and studies on fair value as well as on revaluation of tangible fixed assets at fair value which leads to the development of the research hypotheses. Section 3 analyzes the research methodology that have been followed, the manner and the means of collecting primary data and the questionnaire construction. Besides the above, it explains the choice of the sample and of statistical method for analyzing the primary data. In section 4, the results that are derived from SPSS are presented and discussed. Finally, section 5 presents the conclusions and the recommendations arising from the interpretation of the primary data.

2. LITERATURE REVIEW

2.1 Accounting treatment of tangible fixed assets according to Greek GAAP and to IAS/IFRS

Greek GAAP define tangible fixed assets as the material goods which a company purchases for using them in its production during their useful economic life which is certainly more than one year. More precisely, they include land, buildings, premises, engineering, machinery, transportation means, furniture, tools and equipment. The tangible fixed assets are classified into non – depreciable ones which have unlimited useful life and don’t lose their value by usage or overtime (lots and plots) and depreciable ones whose useful life is limited (buildings, plants and machinery) (Presidential Decree 1123, 1980). In the same vain, IAS 16 generally refers them as ‘Property Plant and Equipment’ (PPE) which are used in the production or supply of goods or services for more than one period. However, IAS 16 combined with the ‘framework for the preparation and presentation of the financial statements’
recognizes an item as tangible fixed asset only if it is possible that the company might
gain future economic benefits from it and its cost could be measured reliably (Luca &
Vlachos, 2008).

After the recognition of a tangible fixed asset, both Greek GAAP and
IAS/IFRS measure the initial cost of the asset which comprises its purchase price
(invoice price or contract value) plus import duties and purchase taxes minus trade
discounts. Generally, this initial cost includes any costs directly contributable to bring
the asset to the location and condition ready for operation such as installation and
assembly costs, initial delivery and handling costs. The same principles are applied in
case of a self-constructed asset. At this point, it should be mentioned that in Greek
legislation the additional purchase costs of land and buildings (such as contract fees)
do not increase the purchase value, but they are written off in the balance sheet as a
separate asset account called ‘Expenses of long – term depreciation’ (Luca &
Vlachos, 2008).

For the measurement of tangible fixed assets, Greek GAAP implements the
historical cost model. In other words, the value of a tangible fixed asset is estimated
by increasing the initial cost as described above with any cost of additions and
improvements and by reducing with any accumulated depreciation. It is worth noting
that the Greek legislation poses limitations to the depreciation methods and to the
duration of useful life since it permits only straight - line method and declining
balance method using certain depreciation rates (Presidential Decree 1123, 1980;
Presidential Decree 299, 2003). The revaluation of tangible assets is generally
prohibited by Greek GAAP, except for being permitted by specific laws. After the
implementation of these specific laws, the revalued amount is considered as the new
value (Law 2190, 1920). Apart from the revaluation of land and buildings, which had
been occurred the last years in Greece first according to the articles from 20 to 27 of
the Law 2065/1992 for the businesses that have implemented the Greek Accounting
Standards and second according to the article 15 of the Law 3229/2004 for the
businesses that have implemented the IAS/IFRS, no other revaluation has been
permitted. It should be pointed that the article 15 of the Law 3229/2004 is in full
agreement with the procedure of revaluation of tangible fixed assets posed by IAS 16.

On the other hand, IAS 16 allows the option between two accounting and
measurement policies. Fist, the Cost Model which is quite similar with that of GAS
since a tangible fixed asset after its recognition will be presented in the financial
statements upon the cost of its acquisition, reduced by any accumulated depreciation and accumulated impairment losses (Luka & Vlachos, 2008; IASB, 2009). Moreover, IAS 16 gives entity the opportunity to choose any depreciation method based on future economic benefits of assets and the duration of useful time based on expected utility of assets to the company (IASB, 2009). It is clear that IAS has a few constrains in accounting policy of depreciation in contrast with that of Greek GAS.

Second, the Revaluation Model considers that tangible fixed assets (PPE), whose fair value can be measured with reliability, could be written off at a revalued amount, which is actually its fair value at the date of revaluation reduced by any subsequent accumulated depreciation and accumulated impairment losses. More precisely, fair value is the value of an asset that could be exchanged between parties acting in their will and with full knowledge of market conditions. For instance, the fair value of land and buildings is usually defined by qualified and professional estimators who appraise the market’s evidence. The fair value of plant and equipment is, by rule, their market value defined by evaluation. When there is lack of market indications in which the evaluation of the fair value can be relied on, due to manufacturing or other features of the tangible fixed assets and due to lack of assets that are for sale, the business have the ability to evaluate the fair value through an approach of depreciated replacement cost or through income. In the latter case, fair value is calculated as the current value of the future estimated cash flows which are anticipated to come in the business by the continuous usage of the tangible asset. Most of the times, the fair value coincides with the current value and the present value of the asset (Luka & Vlachos, 2008; IASB, 2009).

Revaluations should be applied periodically, so that the book value has no significance difference from the fair value at the date of the balance sheet. In other words, in case of small fluctuations in the value of the assets, revaluations are required every 3 or 5 years. Otherwise, when the value constantly changes, revaluations are required every 1 year. Finally, it is important that the selected policy should be implemented in the entire category of the tangible fixed assets, which means that if a tangible fixed asset is revalued, the entire category which this asset belongs to should be revalued (Luka & Vlachos, 2008; IASB, 2009).

2.2 Fair value in literature
The Accounting Standards, which launch the fair value, have come along since 1975, when the Financial Accounting Standards Board of the United States (F.A.S.B.) issued the Statement of Financial Accounting Standards (S.F.A.S.) No. 12 called “Accounting Treatment of Certain marketable securities”. Since then, there is a strong debate about if the fair value might be implemented as a benchmark and if it is better than the historical cost (Peng & Bewley, 2010). Hoffmann (2010) rephrase that some previous studies, which dealt with the concept of valuations and its information value and are conducted by Beaver et al. (1982), Beaver & Ryan (1985) and Bernard & Ruland (1987), support that the historical cost outclasses. In contrary, other surveys conducted by Bublitz et al. (1985), Murdoch (1986) and Haw & Lustgarten (1988) assume that the information given by the valuation at the fair value is more significant than that of the historical cost.

Academic research upon the issue of the superiority of the fair value to the historical cost was continuing during 1990’s. Barth et al. (1995), Barth et al. (1996) and Barth et al., (1999) through their investigations proved that fair value is more significant in decision making which is the primary goal of the presentation of the financial statements. These studies influenced significantly the regulators of the accounting standards all over the world which led to a continuous increasing implementation of fair value in the accounting standards settled by the Financial Accounting Standards Board of the United States (F.A.S.B.), the International Accounting Standards Board (I.A.S.B.) and many national regulatory accounting authorities (Peng & Bewley, 2010). Herrmann et al. (2006) support that the application of fair value in property, plant and equipment provides the users of Financial Statements, which are mainly investors, with relevant information. In addition, fair value provides comparable information since it allows assets that are purchased at different periods to be evaluated on a comparable basis, taking into account the different purchasing power overtime. This comparability not only is applied across periods but also across companies. Last, the historical cost does not represent the true and fair value of assets, when the market rate of revaluation or impairment differs significantly from one that is depicted in financial statements. Consequently, the information that is flown from the implementation of the fair value is consistent and up to date (Alexander & Nobes, 2007).

On the other hand, many researchers oppose to fair value and consider historical cost method of evaluation reliable because it provides information which is
free from material error and bias. In the same context, historical cost fulfills the principles of neutrality and conservatism which protects from the risk of manipulating the financial statements. As a result, it is an objective method opposed to the subjectivity of the fair value. It is clear that the choice between the two valuation methods reflects a trade-off between reliability and relevance. Moreover, historical cost is a cheaper and easier valuation method because it uses data already recorded without requiring expensive estimations by professional and qualified appraisers (Alexander & Nobes, 2007). Main objections focus on the way through which the accounting evaluation of the fair value functions during the period of the economic cycles (He & Zhang, 2010).

Finally, sometimes the option, between the two methods, which is given from the IAS 16 leads to the appearance of the so-called “creative accounting”. Consequently, firms that want to bubble their profits prefer the historical cost which results in smaller depreciation and so in higher profits. Others which want to present strong financial position and low “total liabilities to equity” ratio choose the revaluation model which results in revaluation reserves (Luka & Vlahos, 2008).

### 2.3 The revaluation of tangible fixed assets in literature

Academic community has investigated the motives that lead businesses to the revaluation of assets. The findings in this field prove that businesses revalue their tangible fixed assets in order to improve their creditworthiness and their access to financial markets. From this dimension, fair value is used as an indicator for the users of financial statements which help in overcoming the problems of asymmetric information. Through the revaluation, the company points its development potential and provides more warrants to its creditors. Other studies have analyzed the correlation between the revaluation of assets and the profitability of the company in following periods (Rodriguez-Perez et al., 2011). Some of the surveys which drew the above conclusions are delivered in the next paragraphs.

Initially, Brown et al. (1992) found two possible explanations for the revaluation of assets. First, businesses with high level of borrowing have opportunistic incentives to revalue their assets upwards for improving their debt ability. But this issue is addressed occasionally, because the company takes advantage of avoiding paying additional financial expenses (increase in rates, expenses of
additional banking services etc.) against its creditors. Second, businesses with limited access to funding use revaluations to decrease asymmetric information, which means that their assets are underestimated. The increase of total fixed assets through the process of revaluation allows companies to improve their borrowing conditions and to increase the possibility of access to other ways of funding. In the same vain, Whittred & Chan (1992) support that the revaluation of fixed assets is the less expensive way for a company to increase its funding ability through borrowing. In other words, through this process, firms could improve their borrowing conditions, due to the increase of their property and to decrease of the financial leverage.

Moreover, Easton et al. (1993) concluded, via their research, that the major reason for revaluation of tangible fixed assets was the decrease of “Total Liabilities to Equity” ratio. They found a strong relation between the share performance and the businesses which implement revaluations with high ratios of “Total Debt to Equity”. They also support that the revalued accounting value of the assets is more aligned with the market value of the business in relation to businesses that they haven’t apply revaluations. While, Barth & Clinch (1998) have proved that the revaluation of the operating assets, such as buildings and machinery, is regarded as a more significant process by the financial markets than the revaluation of assets which are not related directly to the operating activities of the company.

Furthermore, Aboody et al. (1999) supports that there is a strong and positive relation between the revaluation of the assets and the future performances of the business until three years after the revaluation. They also pointed a weak relation between the revaluation of assets and the future performance for the companies that have high ratios of “Total Debt to Equity”. Jaggi & Tsui (2001) studied the revaluation of assets in Hong Kong form 1991 to 1995 and they found a major positive relation between the revaluation of the assets and the future operating income, which proved and empowered the usefulness and the significance of the valuation of assets at fair value for the users of financial statements.

Missonier-Piera (2007) uses a sample of industrial and commercial companies in Switzerland during the years 1994, 1997, 2000 and 2004 in order to prove that the revaluation of assets at the fair value improves the creditworthiness of companies which rely their funding on credit institutions and results in the increasing of borrowing ability. Even, the exports of Swiss companies are in direct relation to the application of revaluation of assets. It is obvious that companies try to improve the
presentation of their financial statements, since foreign customers consider as the key point the strong financial position of a company and not its maximum profitability.

Another aspect that should be mentioned is that the implementation of revaluation at tangible fixed assets, especially of buildings and land affect the financial ratios. Due to the fact that IAS/IFRS are oriented to the capital markets, they put emphasis on the fair value, because they incorporate more information into the financial statements and finally they proved to be more useful for investors. Therefore I.A.S.B. regards that fair value is more appropriate basis for measuring. Because of the fact that the majority of national accounting standards of the European member states allowed the assets evaluation through the method of historical cost, the recently acceptance of the fair value has an obvious impact on the elements of the financial statements and consequently on the financial ratios (Lantto & Sahlström, 2009).

Finally, Nichols & Buerger (2002) proved that German banks grant higher loans to firms which evaluate their assets at the fair value. On the same wavelength, Zülch & Burghardt (2010) presented findings from a German perspective. These concluded that small and medium – sized businesses which prepare their financial statements in accordance with IAS/IFRS have a better evaluation from the financial institutions.

2.4. Hypotheses development

Based on the studies that are mentioned above and taking into account studies that investigate the certain issue from a Greek perspective, we formulate the research hypothesis as follows.

First of all, a survey showed that the executives of Greek companies had not fully mastered the IAS/IFRS and one of two executives had only theoretical Knowledge to the new object (Grant Thornton & Economic University of Athens, 2003). This was later confirmed by the difficulties encountered by companies in implementing the IAS/IFRS (Grant Thornton, 2006). From the first application of IAS/IFRS in Greece in 2005, it has been passed about six years, which is time enough for professional accountants to have the greatest possible information on various procedures followed by the IAS/IFRS, even for the executives of the accounting department of business that do not apply IAS/IFRS. Additionally one of the common practices of Greek enterprises is the accounting outsourcing. It would therefore be
useful to examine the type of working relationship of accountants (wage earner or no) with the familiarity level of revaluation procedures of fixed assets at fair value.

**H1: The type of the working relationship of the chief accountants and their level of familiarity with the revaluation procedures of fixed assets at fair value under IAS/IFRS are related**

Some of studies that are presented above find that revaluations of tangible fixed assets are associated directly with the level of ‘Total Liabilities to Equity’ ratio. This ratio is considered to be a rule of thumb for judging how an entity manages its borrowings (Myers, 1977). Indeed, the average ratio of textile industry in Greece in 2008 was 1.54 (Association of Greek knitwear and clothing businesses (SEPEE), 2008). While, the average ratio of all Greek firms which were granted loans during 2008 was 1.55 (Bank of Greece, 2009). Therefore, the average ‘Total Liabilities to Equity’ ratio of textile industry has a little deviation from the average one of all Greek businesses. The aim of the following hypothesis is to confirm or to reject the generally accepted view which supports that the revaluation of tangible fixed assets at fair value reduces ‘Total Liabilities to Equity’ ratio and thus strengthening financial position of the company.

**H2: The level of ‘Total Liabilities to Equity’ ratio or ‘Total Debt to Equity’ ratio and a possible revaluation of tangible fixed at fair value with a view to strengthening the financial position are related**

The fair presentation of financial statements enhances the use of fair value in the valuation of tangible fixed assets in relation to the historical cost (Herrmann et al., 2006). Also, many firms revalue their fixed assets for the purpose of improving access to bank loans (Brown et al., 1992), (Whittred & Chan, 1992) and (Missonier-Piera, 2007). Additionally, a survey indicates that Germany banks assess more preferably the SMEs which present their financial statements according to IFRS / IAS for granting them loans (Zülch & Burghardt, 2010). While, other findings from another study also in Germany indicate that the banks would provide much larger loans to companies which evaluate their assets at fair value rather than historical cost. This means that financial creditors prefer the revaluation of assets (Nichols & Buerger,
As a result, the below hypothesis is to confirm or to reject the relationship between the fair presentation of tangible fixed assets derived from revaluation at fair value and the prospect of improving borrowing from banks

**H3: The fair presentation of tangible fixed assets derived from revaluation at fair value and the prospect of improving borrowing from banks are related**

The economic recession in Greece affects seriously the survival of companies. There are studies that argue that the policy followed, called as "internal devaluation" or "competitive disinflation" is a process of successive reduction of wages and prices of products. These reductions will strengthen the competitiveness of the country and will increase net exports (Labor Institute GSEE-ADEDY, 2010). This fact seems to be verified by the exports of the period of January - February 2011 which have increased by 20.2% (Greek National Statistical Authority, 2011). In addition, the Greek exports of textile industry are remarkable in comparison with total Greek exports. As it is analyzed in the above section, according to Missonier-Piera, 2007, the revaluations of tangible fixed assets are related with an increase in exports.

**H4: The level of exports of textile industries of the regional unit of Thessaloniki and a possible future increase of their exports as a result of the revaluation of tangible fixed at fair value are related**

According to Greek accounting legislation, the revalued amount of land and buildings is the less between the amount resulted from value-based rates posed by specific laws and amount based on the objective value settled by Law 1249/1982 (Presidential Degree 1152, 2008). It is clear that the principal of prudence is implemented for choosing the revalued amount. Moreover, Herrmann et al. (2006) argue that the historical cost method of valuation does not represent the value of assets in cases where changes in market prices differ from those represented in the Financial Statements. A study conducted by Grant Thornton (2006) concluded that the first reason for the increase in equity of Greek listed firms after the first application of IAS/IFRS was the revaluation at fair value. This proves that there is a difference between the valuation of tangible fixed assets at fair value with respect to that shown
in the accounting books. Consequently, the fifth research hypothesis will determine whether there is a link between the difference of the valuation of tangible fixed assets at fair value with the book value and the representativeness of the revalued amount of buildings and land to in accordance with Greek legislation.

**H5: The difference between the valuation of tangible fixed assets at fair value with the book value and the representativeness of the revalued amount of buildings and land in accordance with Greek legislation are related**

### 3. RESEARCH METHODOLOGY

#### 3.1. Data collection and questionnaire construction

First of all, primary data extracted by the formulation of a questionnaire will used for elaborating the research hypotheses. These data will be taken through the process of polling. More precisely, the mean of data collection is the method of structured non-disguised telephone interview. The structured format has been standardized questions and answers which makes it easy to complete and to draw the necessary conclusions. Instead, the semi-structured or unstructured interview offers greater flexibility but it is difficult to interpret their findings. This direct form was chosen because it is essential for maximum participation of interviewees and for their knowing the purpose and the object of the research. On the other hand, the disguised interview includes questions with standardized stimuli for revealing interviewees’ opinions, which was not an appropriate type of interview for the form of the research followed by this study (Stathakopoulos, 2001).

The method of collecting data is by phone because it gives the opportunity of directly oversighting the process of collecting primary data. Direct supervision ensures the minimum number of unanswered questions of the structured interview and the possibility of explaining the questions that are potential vague to the participants in relation to the postal method. Additionally, the telephone method of data collection is accomplished faster than those of postal and personal method. (Stathakopoulos, 2001).
The type of the characteristics that are measured determines the measurement scale (Chalikias, 2010). In this study, the scale of measurement as applied to the structured interview is ordinal scale. This scale classifies variables in a row which means that the variables can range from the smallest to largest and vice versa. By this way, it is ensured the determination of the preferred category of interviewees, but not specified how much better it is than some of the other (Tsantas et al., 1999). As a result, this measurement scale leads to variable values that can only be ranked and not be removed or divided between them (Chalikias, 2010). The researcher can choose between different types of questions. The choice should not be random. Each type of questions corresponds to the special needs of research (Javeau, 2000). The questions of this investigation are fixed - alternatives, since the answers are structured in advance, as it is mentioned above (Paraskevopoulos, 1993b).

A 5 – point Likert scale is used mostly for the answers to the questionnaire. That is because the purpose of the research is to capture the perceptions of the respondents on issues arising from the revaluation of tangible fixed at fair value. The possible answers are the following five and their scoring of the attitude is 1= ‘Disagree’, 2= ‘Slightly Disagree’, 3= Neither Agree / Nor Disagree, 4= ‘Slightly Agree’, 5= ‘Agree’. The answers based on 5-point Likert scale have the following important characteristics. First, they are balanced because they have the same number of negative and positive responses and second they have odd number of categories which means that a neutral point exists. Moreover, dichotomous answers are avoided for covering as many as possible answers from participants in the research. Lastly, the Likert scale of the responses that are described above are reversed for the avoidance of responding by momentum (Stathakopoulos, 2001).

The structure of the questionnaire, which is the collection instrument of primary research data, is divided into four (4) parts. The first part consists of three (3) questions related to various items of business information, which are necessary to answer the research hypotheses. The second part consists of one (1) question and relates to the revaluation of fixed assets in accordance with Greek law. The third part also consists of one (1) question about the familiarity of the process of revaluation of fixed assets at fair value. Finally, the fourth part consists of five (5) questions about the impact of the revaluation of tangible fixed assets at fair value. The measurement scale, that is used, is ordinal and all variables are qualitative (Tsantas et al., 1999).
3.2 Target population and sample collection

After determining the type of research, the research questions, the research design and the instrument to be used for the collection of primary data, the selection of participants is followed. The participants who will be the primary source of data are called population and they are all potential participants in the research who meet specific properties and characteristics (Stathakopoulos, 2001). The entire group, to which the researchers are aiming to generalize their findings, is called target population. But the entire group, from which we draw our sample, is called statistical population. Therefore the target population may have greater range than the statistical population (Paraskevopoulos, 1993b). The target population is defined by four components which are the point, the sampling unit, the extent and the time (Stathakopoulos, 2001). Respectively, in this research, the target population is the Greek textile enterprises which are small and medium-sized according to European Directive 2003/361/EC, export products, keep accounting books category C according to Greek legislation, apply the Greek Accounting Standards and as well as they are located in the region of Thessaloniki in May 2011.

The statistical population of the survey is derived from the Register of Exporters of Commerce and Industry Chamber of Thessaloniki. The firms that meet the characteristics of this research as they are developed above are sixty-seven (67). Indeed, in cases where the statistical population for the collection of primary data is small, it is followed an exhaustive approach, which means collection of data from all members of the statistical population (Stathakopoulos, 2001). So, in this case it followed an exhaustive approach to the collection of data. From telephone contacts of sixty-seven (67) companies, forty-eight (48) companies have agreed to participate in the research. As a result, the 71.64% of the statistical population answered the questions. The persons, who answered the questions, are the heads of the accounting department of the businesses and they answered all the questions.

3.3 Statistical Analysis

The statistical analysis of this survey is based on three pillars. The first one is the descriptive analysis of data, the second one is the inferential analysis and the third
one is the exploratory factor analysis. All analyses are conducted by the statistical software package called SPSS.

More precisely, descriptive statistics includes methods for organizing, simplifying and summarizing the data. It is therefore necessary to find processes by which the results can be organized and presented in a simple and understandable way. This is the goal of descriptive statistics indicators, namely to provide methods that simplify and facilitate the organization and presentation of results (Chalikias, 2010).

In this study, the method of the frequency distributions is implemented which is one of the most known methods for presenting data. The frequency distributions can be structured either as tables or as graphs. In both cases, the goal is to give a complete picture of the distribution of data on the scale of measurement. Depending on the category of data (quantitative or qualitative), it is used different forms of these distributions (histograms or bar charts, respectively) (Stathakopoulos, 2001).

Another method of descriptive statistics is the measures of central tendency whose purpose is to define a statistic size that can be used to represent a data set. To achieve this goal three commonly measures of central tendency is used, which are the mean, median and mode (Gnardellis, 2006). In addition, the method of measures of variability give a picture of how concentrated is the observations in a dataset. The main measures of dispersion are the standard deviation and the variance (Gnardellis, 2006). But the calculation of measures of central tendency and variance is not used for qualitative data. Only quantitative data are suitable for the descriptive statistical measures (Chalkos, 2006). In this study the primary data is qualitative, as it is mentioned previously. Therefore, descriptive statistical measures are not used, but a diagrammatic presentation of answers (bar charts) is delivered.

On the other hand, the process of inferential analysis starts from the observations, immediately after it poses the research hypotheses and it draws general conclusions about populations by using samples. The hypothesis testing is an important part of inferential statistics and a very useful tool for researchers, since it allows them to verify the validity of their theory. Generally speaking, the inferential statistics includes techniques that allow analysis of such data to make it possible to extract useful and general conclusions about populations based on information collected from the samples (Paraskevopoulos, 1993a).

However, it is obvious that regardless of whether a sample is too representative, it cannot provide a faithful representation of the population. So, there
will always be a discrepancy, or in other words an error rate among the statistical index obtained from the sample and the corresponding parameter of the population. This error rate is called sampling error and it is one of the main problems that is faced by the researchers when they try to draw general conclusions about populations from samples.

For testing the research hypotheses, the process of cross – tabs is implemented which provides Test of Independence, Symmetric and Directional measures. Through the calculation of Pearson Chi – Square and of Kendall’s tau, it is analyzed the independence and the correlation between the variables that consist each hypothesis. The above indicators are selected because the measurement scale is ordinal, the primary data are qualitative and the variables are not categorized between independent and dependent ones. Kendall’s tau-b is appropriate for symmetric tables, while Kendall’s Tau-c is used for non-symmetric tables (Dimitriadis, 2010). Furthermore, Kendall’s tau is a non – parametric measure of correlation for ordinal variables, as it is not applied the condition of normality of the variables (Tsantas et al., 1999). Also, the approach of distribution of Kendall Tau from normal distribution is better than that of the coefficient r of Spearman, if verified the null hypothesis of independence between variables. This fact is explained because the Kendall Tau coefficient tends to the normal distribution relatively quickly compared with the coefficient r of Spearman (Xekalaki, 2001). The values of Kendall’s tau-b and tau-c are between -1 and 1. Their sign reveals the direction and their absolute value reveals the intensity of the relationship between the variables, with higher values indicating a strong relationship and vice versa and zero value indicating no relationship (Dimitriadis, 2010).

At this point, it should be mentioned that each question corresponds to a variable, as it is indicated in Appendix A. The research hypotheses are derived by combining two variables (questions). Therefore the first research hypothesis (H1) consists of the variables V1 and V5. The second research hypothesis (H2) is composed of the variables V3 and V9. The third research hypothesis (H3) consists of the variables V6 and V8. The fourth research hypothesis (H4) is formed by the variables V2 and V7. The fifth research hypothesis (H5) consists of the variables V4 and V10. Moreover, the significance level is defined to 5%.

Finally, the exploratory factor analysis explores the relationship between a set of variables. It is considered as a process for creating theory, since it leads to the
creation of factors or components. Factor analysis is a useful instrument in data analysis since it groups the variables by creating a few factors which can be used as new variables in other statistics tests. As a result, the variables of each factor are more correlated themselves in relation with those that belongs to another factor. In this study, the Kaiser – Meyer – Olkin Measure of Sampling Adequacy (KMO) is calculated which reveals whether the primary data are suitable for factor analysis. After, the Measures of Sampling Adequacy of each variable is calculated for improving the KMO indicator. If components are extracted from factor analysis, reliability analysis of these components will follow by using the indicator of Cronbach’s Alpha (Dimitriadis, 2010).

4. RESULTS AND DISCUSSION

4.1 Descriptive analysis

The descriptive analysis of this study is presented according to the structure of the questionnaire, which means that the answers to each question is analysed separately. From the answers to the first question, it is clearly that a large part of the companies has a self-employed chief accountant (outsourcing). The frequency of these companies is twenty nine (29), accounting for 60.40%. While, the remaining nineteen (19) companies, accounting for 39.60%, reported that they employ chief accountants. These figures verify the fact that Greek SMEs prefer to corporate with self-employed chief accountants instead of employing them.

In the second question, the respondents were asked to choose one of the four scales which are arranged in ascending order and depict the percentage of exports in total sales. It is apparent that nearly half of firms’ (21 out of 48, accounting for 43.80%) exports are up to 25% of total sales. The firms whose exports range from 26% to 50% are almost the fourth of participants (11 out of 48, with percentage of 22.90%). It is outstanding that the firms whose exports range from 0% to 50% are exactly the two thirds of participants (32 out of 48, with percentage of 66.70%). The companies which export from 51% to 75% of total sales are seven (7) of the forty-eight (48), accounting for 14.60%. Finally, nine (9) of the forty-eight (48) companies, accounting for 18.80%, export from 76% to 100% of total sales.
The third question asked the companies to declare their amount of ratio "Total Liabilities to Equity" for the year 2008 according to the threshold of 1.54. Twenty-two (22) of the forty-eight (48) entities, percentage of 41.70%, have that ratio less than or equal to the threshold of 1.54. In contrast, the other twenty-six (28) of the forty-eight (48) companies, percentage of 58.30%, have their ratios greater than the threshold of 1.54. The difference between companies that belong to the two categories is small as it is shown by the frequencies of responses.

The purpose of the fourth question is to express the perception of respondents on whether they consider representative the valuation of buildings and land after the revaluation based on Greek legislation. Only two (2) of forty-eight (48) companies, accounting for 4.20%, agree with question, while seven (7) from forty-eight (48) firms, accounting for 14.6%, slightly agree. Seven (7) of forty-eight (48) companies, percentage of 14.60%, indicate a neutral position by selecting the answer ‘neither agree / nor disagree’. Fifteen (15) of forty-eight (48) participants, percentage of 31.30%, slightly disagree. Finally, The majority of respondents which is seventeen (17) of forty-eight (48), percentage of 35.40%, disagree with the question. It is worth noting that two thirds of participants (32 out of 48, with percentage of 66.70%) disagree or slightly disagree. These results prove that the majority of companies consider that the revaluation of buildings and land according to Greek legislation is not quite representative and so they are in alignment with the existing view in the literature.

The fifth question asked chief accountants to indicate the degree of familiarity and knowledge of procedures for revaluation of tangible fixed assets at fair value under IFRS / IAS. Nine (9) of forty-eight (48) participants, percentage of 18.80%, consider themselves to be very familiar. The majority of the chief accountants, which is eighteen (18) of forty-eight (48) with a percentage of 37.50%, believes that it is familiar with IFRS/IAS. Thirteen (13) of forty-eight (48) participants, percentage of 27.10%, believe that they are enough familiar. Six (6) of forty-eight (48) chief accountants, percentage of 12.50%, respond that they are little familiar. Finally those who declare that it is not familiar are only two (2) of forty-eight (48), with percentage of 4.17%. It should be pointed that 56.30% and 83.30% of the chief accountants are very familiar or familiar and very familiar of familiar or enough familiar respectively. The above figures reveal that the Greek executive accountants are now far more
educated and familiar with the procedures of IFRS/IAS in relation to the first compulsory application of IAS/IFRS in Greece in 2005.

The sixth question asked participants to express their agreement or disagreement with the view that the adoption of the revaluation of tangible fixed at fair value results in fair presentation of financial statements towards their users. Nine (9) of forty-eight (48) responders, percentage of 18.80%, agree with the question. Sixteen (16) from forty-eight (48), percentage of 33.30%, slightly agree while ten (10) from forty-eight (48), percentage of 20.80%, are neutral. Those who slightly disagree are ten (10) of forty-eight (48), percentage of 20.80%, and last those who disagree are only three (3), percentage of 6.30%. Taking into account that the 52.10% of the participants agree or slightly agree, 20.80% are neutral and only 6.30% disagree, it could be concluded that the adoption of the revaluation of tangible fixed at fair value results in fair presentation of financial statements towards their users, which verifies the existing theory.

In the seventh question, the participants were asked to express their disagreement or agreement on whether the revaluation of tangible fixed assets at fair value will increase their exports. Eleven (11) of forty-eight (48) responders, percentage of 22.90%, agree with the question. Seventeen (17) of forty-eight (48), percentage of 35.40%, slightly agree while five (5) from forty-eight (48), percentage of 10.40%, are neutral. Those who slightly disagree are ten (10) of forty-eight (48), percentage of 20.80%, and last those who disagree are only five (5), percentage of 10.40%. It should be mentioned that 58.30% of the participants agree or slightly agree and 10.40% are neutral. These results tend to verify the existing opinion that the revaluation of tangible fixed assets at fair value increase exports.

The goal of the eighth question is to express the perception of respondents on whether the revaluation of tangible fixed assets at fair value would result in easier access of their company to bank lending. Five (5) of forty-eight (48) participants, percentage of 10.40%, agree with the question. Nineteen (19) of forty-eight (48), percentage of 39.60%, slightly agree while thirteen (13) of forty-eight (48), percentage of 27.10%, are neutral. Those who slightly disagree are nine (9) of forty-eight (48), percentage of 18.80%, and last those who disagree are only two (2), percentage of 4.20%. Owing to the fact that 50.00% of the participants agree or slightly agree and only 23.00% slightly disagree or disagree, the above figures tend to
be in alignment with the existing theory that the revaluation of tangible fixed assets at fair value would result in easier access of their company to bank lending.

The objective of the ninth question is to depict the view of the respondents on whether the revaluation of tangible fixed at fair value strengthens the financial position of their business even if it leads to lower profits. Four (4) of forty-eight (48) participants, percentage of 8.30%, agree with the question. Twelve (12) of forty-eight (48), percentage of 25.00%, slightly agree while ten (10) of forty-eight (48), percentage of 20.80%, are neutral. Those who slightly disagree are fifteen (15) of forty-eight (48), percentage of 31.30%, and last those who disagree are seven (7), percentage of 14.60%. Taking into account that 45.90% of the companies disagree or slightly disagree, 33.30% agree or slightly agree and 20.80% are neutral, it is difficult to judge with confidence on the results. Nevertheless, it could be said that the above figures tend to be contrary to the existing theory that the revaluation of tangible fixed at fair value strengthens the financial position of business.

The last question asked participants to appreciate the difference between the valuation of tangible fixed assets at fair value with the current book value. The vast majority of respondents, which is thirty one (31) of forty-eight (48), percentage of 64.60%, declare that fair value is higher than current book value. Ten (10) of forty-eight (48), percentage of 20.80%, consider that fair value is equal to book value, while seven (7) of forty-eight (48), percentage of 14.60%, consider fair value is lower than book value. These results are in alignment with the existing literature that the valuation of tangible fixed assets at fair value is higher than that of book value.

4.2 Test of independence

For the research hypotheses that are presented in section 2.4, Test of independence is conducted and the coefficient of Kendall Tau-b or Tau-c is calculated accordingly. For the Test of independence, the null hypothesis (Ho) is determined, which is that the two variables that consist each hypothesis are independent. The $X^2$ test of independence requires the frequencies of cells to be at least equal to 5. Similarly, the SPSS requires the expected frequencies of cells to be at least equal to 5. An acceptable percentage of cells that have frequencies less than 5 is 25% without significantly decreasing the effectiveness and the reliability of the test. The literature
mentions a more strict condition for the cells with values smaller than 5, which wants all cells have values greater than 5 (Dimitriadis, 2010).

If this assumption is not met, it is used the Fisher's exact test but only for 2X2 tables, while in other cases the adjacent cells should be merged in such a way that ensures physical interpretation of the new categories - cells which erases the above problem. The merge of cells is achieved by recoding one of two qualitative variables in such a way as to have fewer categories. In this study, there are neither 2X2 tables nor the possibility of recording. Consequently, if the above condition is not fulfilled, Monte Carlo simulation is implemented which is appropriate for tables with more than two lines and / or columns. By choosing Monte Carlo, we ask from the SPSS to use the technique of simulation to make the control of regularity. More precisely, it carries 10000 (default) normality tests and for each one calculates the p-value. In the end, it displays the average of these 10000 p-value and a 99% confidence interval for the average of the p-value based apparently on 10000 p-value (Dimiriadis, 2010).

For the first hypothesis (H1), we get the following results. First, the value of Pearson Chi – Square is 11,492 and Asymp.Sig.(2-sided) is 0.022. But, these results are not reliable since 50% of the cells have expected count less than 5. Taking into account that Monte Carlo Sig.(2-sided) is 0.014 which is smaller than 0.05 (significance level), the null hypothesis (Ho) is rejected and so the variables are dependent. In other words, type of the working relationship of the chief accountants and their level of familiarity with the revaluation procedures of fixed assets at fair value under IAS/IFRS are related, which verifies the existing theory. Moreover, the value of Kendall’s tau-c is 0.469 and Monte Carlo Sig. is 0.003 which shows that there is a moderate positive correlation between the two variables. This means that increase in the chief accountants as ‘self - employed’ would result in increase of the level of familiarity with IFRS/IAS and vice versa. Usually, in Greek reality, self- -employed chief accountants are more educated, well informed and flexible that is why they are more preferable than the conservative chief accountants which are employed by Greek businesses. To sum up, there is a moderate positive correlation between the type of the working relationship of the chief accountants and their level of familiarity with the revaluation procedures of fixed assets at fair value under IAS/IFRS.

The results of the second hypothesis (H2) are delivered below. The value of Pearson Chi – Square is 2,067 and Asymp.Sig.(2-sided) is 0.723. But, these results are not reliable since 50% of the cells have expected count less than 5. Taking into
account that Monte Carlo Sig.(2-sided) is 0.746 which is greater than 0.05 (significance level), the null hypothesis (Ho) is acceptable and so the variables are independent. In other words, the level of ‘Total Liabilities to Equity’ ratio or ‘Total Debt to Equity’ ratio and a possible revaluation of tangible fixed at fair value with a view to strengthening the financial position are not related, which does not verify the existing theory. Moreover, the value of Kendall’s tau-c is 0.083, near to zero, and Monte Carlo Sig. is 0.605 which shows that there is no correlation between the two variables.

For the third hypothesis (H3), we present the following results. First, the value of Pearson Chi – Square is 62,285 and Asymp.Sig.(2-sided) is 0.000. But, these results are not reliable since 96.00% of the cells have expected count less than 5. Taking into account that Monte Carlo Sig.(2-sided) is 0.000 which is smaller than 0.05 (significance level), the null hypothesis (Ho) is rejected and so the variables are dependent. In other words, the fair presentation of tangible fixed assets derived from revaluation at fair value and the prospect of improving borrowing from banks are dependent, which verifies the existing theory. Moreover, the value of Kendall’s tau-b is 0.698 and Monte Carlo Sig. is 0.000 which shows that there is a quite strong positive correlation between the two variables. This means that increase in the level of the fair presentation of tangible fixed assets derived from revaluation at fair value would result in increase of borrowing ability from banks and vice versa. To sum up, there is a quite strong positive correlation between the fair presentation of tangible fixed assets derived from revaluation at fair value and the prospect of improving borrowing from banks, which is in alignment with the existing literature.

The results of the fourth hypothesis (H4) are delivered below. First, the value of Pearson Chi – Square is 24,999 and Asymp.Sig.(2-sided) is 0.015. But, these results are not reliable since 95.00% of the cells have expected count less than 5. Taking into account that Monte Carlo Sig.(2-sided) is 0.010 which is smaller than 0.05 (significance level), the null hypothesis (Ho) is rejected and so the variables are dependent. In other words, the level of exports of textile industries of the regional unit of Thessaloniki and a possible future increase of their exports as a result of the revaluation of tangible fixed assets at fair value are dependent, which verifies the existing theory. Moreover, the value of Kendall’s tau-c is -0.470 and Monte Carlo Sig. is 0.000 which shows that there is a moderate negative correlation between the two variables. This means that decrease in the level of exports of textile industries of
the regional unit of Thessaloniki would result in increase in the perception of possible future increase of their exports as a result of the revaluation of tangible fixed assets at fair value and vice versa. That is logical, because firms with low level of exports (up to 25%) strive for expanding their exports contrary to those of high level of exports (75% and over) which are uninterested. To sum up, there is a moderate negative correlation between the level of exports of textile industries of the regional unit of Thessaloniki and a possible future increase of their exports as a result of the revaluation of tangible fixed assets at fair value, which is in alignment with the existing literature.

Finally, the results of the fifth hypothesis (H5) are delivered below. First, the value of Pearson Chi – Square is 29.592 and Asymp.Sig.(2-sided) is 0.000. But, these results are not reliable since 86.70% of the cells have expected count less than 5. Taking into account that Monte Carlo Sig.(2-sided) is 0.000 which is smaller than 0.05 (significance level), the null hypothesis (Ho) is rejected and so the variables are dependent. In other words, the difference between the valuation of tangible fixed assets at fair value with the book value and the representativeness of the revalued amount of buildings and land in accordance with Greek legislation, which verifies the existing theory. Moreover, the value of Kendall’s tau-c is -0.319 and Monte Carlo Sig. is 0.007 which shows that there is a moderate negative correlation between the two variables. This means that increase in the difference between the valuation of tangible fixed assets at fair value with the book value would result in decrease of representativeness of the revalued amount of buildings and land in accordance with Greek legislation and vice versa. To sum up, there is a moderate negative correlation between the fair presentation of tangible fixed assets derived from revaluation at fair value and the prospect of improving borrowing from banks, which is in alignment with the existing literature.

**4.3 Factor analysis**

For factor analysis, the sample should not be smaller than fifty (50) companies and preferably should be larger than one hundred companies. It is generally accepted that each variable should have at least ten (10) companies (Dimitriadis, 2010). Although, our sample is forty eight (48) companies which is slightly below the threshold, factor analysis is conducted whose results are presented below. First, the
KMO is 0.720, which is smaller than 0.8 (accepted level for factor analysis) and sig of Bartlett’s Test of Sphericity is 0.000 which shows that there are variables that are correlated adequately. Despite of the low value of KMO, we continue the process of factor analysis and three components are extracted which explain 37.71%, 17.08%, 13.30% of Variance or cumulatively 66.10% of Variance (Dimitriadis, 2010).

For improving the value of KMO, we take into consideration the value of MSA (Measures of Sampling Adequacy). In the line Anti – Image Correlation of the Anti – image Matrices table, the values, that are diagonally, are those of the indicator MSA for each variable. This measure allows us to examine the appropriateness of each variable separately, in order to use it in our analysis. Values that are close to 1 reveal that the variable is very appropriate, while values that are smaller than 0.5 shows that the variable is not appropriate and so it should be excluded (Dimitriadis, 2010). As a result, in our study we exclude the variables of ‘working_relation’ (MSA= 0.491), ‘exports_to_total_sales’ (MSA=0.356), ‘possible_raise_in_exprots’ (MSA= 0.446) and we restart the process of factor analysis. The new KMO is 0.837, which is larger than 0.8 (accepted level for factor analysis) and sig of Bartlett’s Test of Sphericity is 0.000 which shows that there are variables that are correlated adequately. Now, two components are extracted which explain 51.55% and 15.46% of Variance or cumulatively 67.02% of Variance. For deciding which variables belong to each factor, we take into consideration the value of factor loadings between the two factors and the sample size. As our sample size is small, we consider loadings that are larger than 0.6 to be significant and acceptable (Dimitriadis, 2010). As a result, from Rotated Component Matrix table we can conclude that the first factor consists of six variables which are ‘Fixedassets_greek_law’ (loading= - 0.613), ‘familiarity_with_IFRS_IAS’ (loading=0.791), ‘fair_presentation_of_financial_statement’ (loading= 0.893), ‘borrowing_ability’(loading=0.851), ‘financial_position’ (loading= 0.796) and ‘fairvalue_vs_bookvalue’ (loading= 0.670). The second factor consists of one variable which is ‘total_liabilities_to_equity’ (loading= 0.975).

For testing the reliability of the first factor which contains six variables we calculate the indicator of Cronbach’s Alpha, which tests the internal consistency of each factor. Cronbach’s Alpha is 0.623 which smaller than 0.7 (minimum acceptable value) (Dimitriadis, 2010). Nevertheless, we could accept this value, because the sample size is small which affects negatively the above indicator. As it is shown in the Item-Total Statistics table, we could improve the Cronbach’s Alphla and it will
become 0.869, if we exclude the variable of ‘fixedassets_greek_low’ from the composition of the first factor.

To sum up, the two factors that are extracted from factor analysis could represent two main reasons for the adoption of the revaluation of tangible fixed assets at fair value under IFRS/IAS. The variables that compose these reasons are in accordance with previous studies, as they are presented in section 2. Finally, it should be mentioned that both KMO and Cronbach’s Alpha are affected by the sample size. In other words, large samples tend to increase the above indicators and vice versa (Dimitriadis, 2010).

5. CONCLUSIONS

The findings of this study are derived from the analysis of questionnaires. The respondents are the heads of accounting departments of Greek SMESs in textile industry which are located in region of Thessaloniki and do not apply IFRS/IAS. The statistical analysis of primary data yields the conclusions of this study. These conclusions try to respond the overall issue which deals with the anticipated effects of implementing the accounting principle of fair value in tangible fixed assets of Greek SMEs in textile industry which are located in region of Thessaloniki and do not apply IFRS/IAS.

First, the majority of businesses prefer to corporate with self-employed senior accountants, who are generally familiar with the processes of the revaluation of tangible fixed assets at fair value under IFRS/IAS. On the other hand, the moderate negative correlation between the type of the working relationship and the level of familiarity proves that ‘employee’ accountants are less familiar. To overcome this problem, training programmes and educational seminars in the procedures of IFRS/IAS for ‘employee’ accountants are required. Taking into consideration the two above parameters, it could be said that a potential adoption of fair value in tangible fixed assets would be a smooth process.

Furthermore, the majority of companies that are surveyed consider that the revaluation of land and buildings according to Greek legislation is not representative. Moreover, the majority believes that fair value is greater than book value. The intensity of the correlation between the two above findings is moderate positive.
Consequently, the chief accountants are in favor of fair value, they recognize its significance and so they are willing to adopt the revaluation process based on IFRS/IAS. It should be pointed that for this conclusion, it is not taking into account any implementation costs.

Another conclusion is that a possible revaluation of tangible fixed assets at fair value will improve access to new capital markets. That is because; fair value secures the fair presentation of financial statements towards the users and especially the credit institutions. Also, there is a strong positive correlation between the fair presentation of financial statements and the borrowing ability. This is very important in a constantly changing global financial market, since it secures access to cheap capital markets. Parallel to this, banks are more willing to grant loans with looser conditions and lower interest rates to firms that reflect in their financial statements its real financial position and performance.

Moreover, this paper proves that the revaluation of tangible fixed assets at fair value results in increase of exports. That is very beneficial particularly for those Greek SMEs which do not export or have low level of exports since by this way, they have the opportunity to find new markets, to increase their revenues, to get out from their isolation and so to enhance their competitiveness not only in EU but also globally. The understandability of Greek SMEs’ financial statements would enhance the view on their financial position and performance by potential foreign customers or clients. On the other hand, this study finds that there is not relationship between ‘Total Liabilities to Equity’ ratio or ‘Total Debt to Equity’ ratio and the revaluation of tangible fixed at fair value with a view to strengthening the financial position.

Summarizing the above conclusions, it could be said that head accountants of Greek SMEs are familiar with IFRS/IAS, in favor of fair value and opposed to current Greek legislation of revaluation of taxable fixed assets. Consequently, a possible adoption of fair value in tangible fixed assets would be a smooth process. Parallel to this, the revaluation at fair value increases SMEs’ exports and borrowing ability as well as enhance their access to financial markets. As a result, Greek SMEs could take advantage of changing the process of revaluation of tangible fixed assets at fair value. That is very important for their survival since now Greek economy is in recession, banks face liquidity problems and global funds are unwilling to invest in Greek companies.
Furthermore, these conclusions reveal that Greek Authorities should reform the existing old-fashioned and conservative accounting and taxation system and promote the implementation of IFRS for SMEs. This would help in the creation of a competitive and creative tax system which attracts investors. Consequently, a fair value-oriented tax system would be more beneficial for both Greek companies and further Greek economy. But, a supervisory authority should be established for securing the objective application of fair value, which eliminates any initiatives for manipulation. Apart from the above role, it should provide continuing education on the proper application of the new valuation rules not only for head accountants but also for the employees of the Ministry of Finance.

The fact itself that this study investigates how SMEs that do not apply the IFRS / IAS will react in potential changes that would come from the revaluation of tangible fixed at fair value is a limitation of this study. As a result, another study could compare how the firms, which have already applied IFRS/IAS, would face the same research questions with those which have not applied them yet. Additionally, the size of the statistical population is small, sixty-seven (67) businesses, which arises from the research limitation to participate only textile SMEs which are located in the regional section of the Thessaloniki. Perhaps, a future research could be more extended including the textile industries of the Region of Central Macedonia but also of other geographical areas such as the geographic area of Northern or Southern Greece. Last, another limitation is the sample size which is small. A larger sample size could enhance the reliability and the validity of this study.
References


Grant Thornton & Economic University of Athens (2003). *Research on how ready is the Greek companies to apply IFRS/IAS.* Available at: http://www.grant-thornton.gr/0fls/c1.asp?catid = 111 & subid = 231 & photoid = 53 & l = 3


APPENDICES

APPENDIX A

Questionnaire

1. What is your working relation with the firm? (V1)
   □ Employee  □ No Employee

2. What is the percentage of your exports to total sales? (V2)
   □ Up to 25%  □ from 26% to 50%  □ from 51% to 75%  □ from 76% to 100%

3. The average ratio of ‘Total Liabilities to Equity’ or ‘Total Debt to Equity’ of Greek companies in textile industry in 2008 was 1.54. Which was your firm’s ratio in 2008? (V3)
   □ Lower or equal to 1.54  □ Higher than 1.54

4. Do you believe that the value of buildings and land, which is recorded in your financial statements after the revaluation according to the Greek legislation, is representative? (V4)
   □ Agree  □ Slightly Agree  □ Neither Agree/ Nor Disagree
   □ Slightly Disagree  □ Disagree

5. How familiar are you with the procedures of revaluation of tangible fixed assets at fair value under IFRS / IAS? (V5)
   □ Very familiar  □ Familiar  □ Enough familiar
   □ Little familiar  □ No familiar

6. Do you believe that the adoption of the revaluation of tangible fixed at fair value results in fair presentation of your financial statements towards their users? (V6)
   □ Agree  □ Slightly Agree  □ Neither Agree/ Nor Disagree
   □ Slightly Disagree  □ Disagree
7. Do you believe that the revaluation of your tangible fixed assets at fair value improves the view of the existing and potential foreign customers derived from your Financial Statements about your firm’s perspectives, thus increasing your sales to them? (V7)

- Disagree
- Slightly Disagree
- Neither Agree/ Nor Disagree
- Slightly Agree
- Agree

8. Do you believe that the revaluation of your tangible fixed assets at fair value would result in easier access of your company to bank lending? (V8)

- Agree
- Slightly Agree
- Neither Agree/ Nor Disagree
- Slightly Disagree
- Disagree

9. Do you believe that the revaluation of your tangible fixed assets at fair value is effective when it strengthens the financial position of your business even if it leads to lower profits? (V9)

- Disagree
- Slightly Disagree
- Neither Agree/ Nor Disagree
- Slightly Agree
- Agree

10. What is your assessment of the difference between the valuation of tangible assets of your company at fair value and their current book value? (V10)

- Fair value is lower than book value
- Fair value is equal to book value
- Fair value is higher than book value
APPENDIX B
Surveyed Companies

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Industry/Department</th>
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