Analysis of the impact of first-time mandatory IFRS adoption on financial statements: The case study of the listed hotels in Turkey

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Abstract: This study aims to explore the impact of first-time IFRS adoption on the selected financial ratios of the hotels listed in ISE in Turkey. The selected liquidity, solvency, and profitability ratios were used. Both non-parametric Wilcoxon signed-rank test and paired-samples t-test have been applied to test the impact of IFRS adoption. The results show that the transition to IFRS does not influence the financial ratios of listed hotels in Turkey. Accordingly, it sheds light into whether or not transition to IFRS influences the financial performance of the hotel industry in an emerging country. In addition, this study provides better understanding of financial reporting theory and IFRS practices in hospitality sector. This study also provides useful information to the decision-makers such as hotel managers, accountants, investors from other emerging economies, and practitioners who are currently evaluating the merits of applying IFRS. To the best of our knowledge, there is no study investigating the quantitative impact IFRS transition in the hospitality industry in general and hotels in particular. Thus, the present study is expected to fill this gap.

Keywords: first-time mandatory IFRS, IFRS adoption, financial statements, financial ratios

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1. Introduction

In 2002, the European Union (EU) Parliament approved a regulation (Regulation (EC) 1606/2002) that mandates all companies registered in the EU stock markets to adopt International Financial Reporting Standards (IFRS) in preparing consolidated and stand-alone financial statements commencing after 1 January 2005 (Delvaille *et al.*, 2005; Soderstrom & Sun, 2007; Aharony *et al.*, 2010; Moscariello *et al.*, 2014). The adoption of IFRS has been an important development not only in the EU member countries but also in other non-EU countries such as Turkey, Australia, New Zealand, and China. To illustrate, Turkey, which is one of the largest emerging economies among the non-EU countries, has ongoing negotiations to access the EU since October 2005 (Çelik & Ecer, 2009). In this regard, Turkey needs to apply IFRS in order to be consistent with the EU legislation. Parallel to this development, the adoption of IAS/IFRS which had been optional starting from 2003 has become mandatory since 2005 for all listed companies in İstanbul Stock Exchange (ISE) in Turkey (Balsari & Varan, 2014; Şenyiğit, 2014).

The mandatory adoption of IFRS has received considerable research interest and there have been a growing number of studies conducted to explore the impact of mandatory/voluntary IFRS adoption on financial statements; account numbers, net income, and financial ratios, in the EU and other countries (e.g. ; Clarkson *et al.*, 2011; Kabir *et al.*, 2010; Sahut *et al.*, 2011; Kim, 2013; Istrate, 2014; Grabinski *et al.*, 2014; Lueg *et al.*, 2014). On one hand, there are streams of research that investigate the impact of mandatory/voluntary adoption of IFRS on the financial statements (e.g. Aharony *et al.*, 2010; Sahut *et al.*, 2011; Cordazzo, 2013). On the other hand, some of the studies explored the value relevance of IFRS adoption as compared to local GAAP (e.g. Kabir *et al.*, 2010; Wan Ismail *et al.*, 2013). Some of the studies exploring the impact of IFRS adoption focus on a single country (e.g. Callao *et al.*, 2007; Haller *et al.*, 2009; Lin *et al.*, 2012; Lueg *et al.*, 2014), while some of them have international focus (e.g. Delvaille *et al.*, 2005; Gaston *et al.*, 2010; Moscarielloa *et al.*, 2014; Haller & Wehrfritz, 2014). There are two streams of research having international focus. One research stream focuses on regional country groupings (e.g. Delvaille *et al.*, 2005; Callao *et al.*, 2009; Aharony *et al.*, 2010), while the other one focuses on comparative groupings (Gaston *et al.*, 2010; Moscarielloa *et al.*, 2014).

The current study aims to explore the impact of IFRS adoption on the selected financial ratios of the first-time IFRS adopting hotels listed in ISE in Turkey. There are several motivations for carrying out this research. These motivations are outlined as follows: (1) A considerable global attention has been taken in the literature regarding the impacts of IFRS adoption. This study is encouraged from this development and it is expected to contribute to the literature on the outcomes of IFRS adoption. (2) Researches related to the impact of adoption of IFRS have

focused largely on the member countries of the EU and other industrialized countries such as Australia and New Zealand (e.g. Trewavas *et al.*, 2012; Gastón *et al.*, 2010). However, there is a very limited number of studies (e.g. Mısırlıoğlu *et al.*, 2013; Terzi *et al.*, 2013) exploring the impact of IFRS adoption in developing countries such as Turkey which have also started to adopt IFRS. Hence, the current study will contribute to this issue. (3) Research related to the impact of adoption of IFRS has focused largely on the total sample of firms listed in the stock markets of the EU and other parts of the world (e.g. Aisbitt, 2006; Aubert & Grudnitski, 2011; Hellman, 2011; Trewavas *et al.*, 2012; Gastón *et al.*, 2010; Fitó *et al.*, 2013). Similarly, the studies investigating the impact of IFRS in Turkey have focused either on the whole sample of firms (except financial institutions) listed in ISE (e.g. Mısırlıoğlu *et al.*, 2013) or only on particular sectors such as manufacturing (e.g. Terzi *et al.*, 2013). However, the impacts of IFRS adoption on the financial statements of service firms in general and hotels in particular are likely to be different from the ones on the financial statements of manufacturing firms. For example, the non-current assets of manufacturing firms include machinery and equipment which depreciate fast and which may experience significant decreases in value. On the other hand, the non-current assets of service firms such as hotels do not encompass these types of assets and they are mainly composed of building and land which do not depreciate as fast as machinery and equipment and which do not experience such significant decreases in value. Just because of this reason, transition to IFRS that has brought new applications such as fair value adjustment and asset impairments may have different effect on the property, plant and equipment, total non-current assets, and equity of hotels when compared to manufacturing companies. To the best of our knowledge, there is no study investigating the quantitative impact IFRS transition in the hospitality industry in general and hotels in particular. Thus, the present study is expected to fill this gap and provide additional and comparable evidence to the results drawn in the other studies. Additionally, the results of the present study are expected to be useful for the users of the financial statements of the hotels such as creditors, managers, and the regulatory authorities. The present study mainly shows that transition to IFRS does not influence the financial ratios of listed hotels in Turkey.

The remainder of this article is organized as follows: Section 2 presents the literature review related to the impact of IFRS adoption. Section 3 gives detailed information regarding the differences between previous accounting standards and IFRS. Research methodology is given in Section 4. The results and conclusions are given in Section 5 and Section 6, respectively.

2. Literature review on the quantitative impact of IFRS adoption

In recent years, IFRS adoption has been an important issue in financial reporting, having global consequences (Kabir *et al.*, 2010). Parallel to this, the adoption of IFRS has triggered the empirical research to explore the impact of the change in the accounting regime on the financial statements both in Europe and other parts of the world. Previous literature on the impact of IFRS adoption is twofold. On one hand, there is a stream of research that investigate the impact of mandatory/voluntary adoption of IFRS on the financial statements, account numbers, and the financial ratios (e.g. Aharony *et al.*, 2010; Sahut *et al.*, 2011; Mısırlıoğlu *et al.* 2013; Cordazzo, 2013). On the other hand, some of the studies explored the value relevance of IFRS adoption as compared to local GAAP (e.g. Kabir *et al.*, 2010; Wan Ismail *et al.*, 2013). Some of the studies studying the impact of IFRS adoption focus on a single country (e.g. Callao *et al.*, 2007; Haller *et al.*, 2009; Lin *et al.*, 2012; Lueg *et al.*, 2014), while some of them have international focus (e.g. Delvaille *et al.*, 2005; Gaston *et al.*, 2010; Moscarielloa *et al.*, 2014, 2014; Haller & Wehrfritz, 2014). There are two streams of research having international focus. One research stream focuses on regional country groupings (e.g. Delvaille *et al.*, 2005; Callao *et al.*, 2009; Aharony *et al.*, 2010), while another one focuses on comparative groupings (e.g. Gaston *et al.*, 2010; Moscarielloa *et al.*, 2014). In the current study's context, we focus the literature review on the studies that have investigated the impacts of IFRS adoption on the account numbers and financial ratios. To the best of our knowledge, there is no study investigating the impact of IFRS adoption particularly in hotels. Therefore, the following literature review is based the studies focusing either on the total sample of firms including hotels or specific sectors such as manufacturing. In this regard, the literature review progresses as follows:

Haller *et al.* (2009) studied the effects of first-time mandatory IFRS adoption on equity and net income of 103 publicly traded companies in Germany. The results reveal statistically significant increases in the equity and net income after IFRS are adopted. Fitó *et al.* (2013) studied the impact of IFRS adoption on the main accounting numbers and ratios in Spain. The results demonstrate that the non-current assets, equity, reserves, and long-term liabilities changed significantly after the implementation of new IFRS-based standards. Callao *et al.* (2007) explored, by studying IBEX-35 companies in Spain, whether there are significant differences in the accounting numbers presented in the consolidated financial statements and financial ratios under Spanish accounting standards and IFRS. According to the results, IFRS adoption has significant effects in debtors, cash and cash equivalents, equity, long-term and total liabilities in the balance sheet. In the income statements, on the other hand, significant differences were found in the operating and extraordinary income.

In another study, Jermakowicz (2004) investigated the impact of mandatory application of IFRS on the consolidated financial statements of listed BEL-20 companies in Belgium. The findings of the study revealed that the application of IFRS caused significant changes in the equity and net income reported in companies' consolidated financial statements. Aisbitt (2006), on the other hand, examined the impact of transition from the UK GAAP to IFRS on the equity of companies that formed the UK's FTSE 100 index. The findings of that study did not yield overall effect on equity. Lueg *et al.* (2014) explored the impact of mandatory IFRS adoption on the financial ratios of the listed companies in the UK. According to the findings of that study; operating income margin, return on invested capital, and current ratio are some of the financial ratios affected by the adoption of IFRS.

Callao *et al.* (2009), conducted an international study and investigated the quantitative impact of IFRS on financial reporting of 11 European countries and evaluate if this impact is relevant in relation to the traditional accounting system in which each country is classified, either the Anglo-Saxon or the Continental-European accounting system. The results of that study revealed that the impact of IFRS on financial statements of European firms is not related to traditional accounting systems. The results also demonstrated that there are significant differences among the countries in all variables except inventories and returns. Similarly, Ferrer *et al.* (2008) explored the impact of IFRS adoption on the financial information reported by firms listed in 11 UE countries. The results demonstrated that the adoption of IFRS has a significant impact in Spain, France, Ireland, Sweden and UK on such accounting figures as fixed and current assets, short-term and total liabilities and net income. In another study having international focus, Gaston *et al.* (2010) examined the impact of first-time mandatory IFRS adoption on the account numbers and selected financial ratios of listed firms in the UK and Spain. The results reveal increases in fixed and total assets, long-term liabilities, short-term liabilities and indebtedness and decreases in current assets, current ratio and solvency for Spanish firms. For the UK firms, on the other hand, the results demonstrated statistically significant increases in fixed and total assets, long-term liabilities, short-term liabilities, operating income, net income, indebtedness and return on equity and decreases in current assets, equity, and solvency.

Outside the EU, Kabir *et al.* (2010) examined the impact of mandatory IFRS adoption on the account numbers and earnings quality using the firms in New Zealand Stock Exchange for 2002-2009. The results demonstrated that total assets, total liabilities, and net profit were significantly higher under IFRS when compared to local GAAP. In another study conducted in New Zealand, Stent *et al.* (2010) analyzed the impact of mandatory IFRS adoption on the consolidated financial statements and ratios using 56 listed firms during 2005 through 2008. The elements

of financial statements most affected by IFRS are liabilities and equity. The IFRS adoption also influenced such ratios as return on assets, return on equity, and asset turnover. In another developing country, Turkey, Mısrlıoğlu *et al.* (2013) explored how mandatory transition to IFRS has changed measurement of accounts and disclosures in the consolidated financial statements of firms listed in İstanbul Stock Exchange (ISE). The authors also studied the factors that affected the overall measurement change. While the results found significant changes on some disclosure items, they revealed that there is little significant impact of transition to IFRS on the balance sheet. The findings of the study further demonstrated that the firm-specific factors do not have any impact on the change in financial ratios. According to the results, among the firm-specific factors only "gearing" had impact on the change in long-term debt to equity ratio.

3. Differences between PAS (Previous Accounting Standards) and IFRS

Before implementing IFRS on a mandatory basis, all listed firms in ISE had to prepare their financial statements in compliance with the first set of financial accounting standards that were developed in January 1989 by the CMB to be in effect on or after January 1, 1989 (CMB, 1989). For the purpose of the current study, the first set of accounting standards developed by the CMB is named Previous Accounting Standards (PAS). There are key differences between PAS and IFRS/IAS in relation to measurement of some financial statement items such as financial instruments, inventories, property, plant & equipment, intangible assets, provisions, and employee benefits. Some differences also exist in relation to treatment/classification of such items as extraordinary income and expenses, changes in foreign exchange rates, leases, and related party transactions (CMB, 1989, XI/1, XI/5; CMB, 2003, XI/25). However, some of the differences such as the ones concerning construction contracts are not applicable to the hotels. Therefore, they are omitted in this study. In addition to this, as pinpointed below, adjusted figures of the income statement items are not available for the listed firms in Turkey. Because of this reason, the differences between PAS and IFRS which are expected to impact income statement items are also omitted. The discussions concerning the differences between PAS and IFRS presented below are based on the serial publications of the CMB (CMB, 1989, XI/1 and XI/5; CMB, 2003, XI/25) as well as the previous research (e.g. Simga-Mugan & Hosal-Akman, 2005; Terzi *et al.*, 2013; Mısırlıoğlu *et al.*, 2013).

3.1. Differences between PAS and IFRS which are considered to affect property, plant & equipment, intangible assets, and investment property.
In compliance with taxation laws, the impairments of tangible and intangible assets are not allowed under PAS. According to IAS 36, on the other hand, impairment tests are required in case net recoverable values of the assets are less than book

values. Once the impairment test is applied, property, plant & equipment and intangible assets are expected to decrease.

Another new application which is likely to diminish intangible assets is related to the treatment of research expenditures. While research expenditures can be recognized as intangible assets under PAS, they are separated from the assets and reported as expenses under IAS 38. Thus, transition to IAS 38 is expected to decrease intangible assets. According to PAS, tangible and intangible assets are measured with historical costs. However, according to IAS 16 for property, plant and equipment and IAS 38 for intangible assets, assets can be measured with fair values if value of the assets increases at material level.

Under PAS, investment property is not separated from property, plant & equipment and it is measured with its acquisition cost. In compliance with IAS 40, on the other hand, investment property is classified as a separate account from property, plant & equipment. Thus, this new application is expected to result in a decrease in property, plant & equipment and an increase in investment properties. Property, plant & equipment are also expected to increase as a result of a move to a new application regarding the treatment of financial leases. This is because while financial leases are not reported as assets under PAS, a property subject to a financial lease should be recognized as an asset in compliance with IAS 17.

Based on the above discussions, it can be concluded that: (1) IAS 40 is expected to increase investment property and decrease property, plant and equipment. (2) IAS 36 is expected to decrease property, plant and equipment and intangible assets. (3) IAS 38 is expected to increase or decrease intangible assets. (4) IAS 16 and 17 is expected to increase property, plant and equipment.

3.2. Differences between PAS and IFRS which are considered to affect current and non-current trade and/or other receivables, trade and/or payables, receivables/payables from/to related parties.
According to IAS 24, receivables/payables from/to related parties have to be classified in separate accounts. This reclassification requirement, therefore, is expected to decrease trade and/or other receivables/payables and increase receivables/payables from/to related parties. Another accounting standard which is likely to decrease trade payables is the adoption of IAS 21. Restatement of foreign trade payables at sell rates under new application will lead to a decrease in trade payables.

Consequently, the IAS 24 and 21 are expected to reduce trade and/or other payables. The IAS 24 is also expected to lead to a fall in trade receivables and an increase in receivables/payables from/to related parties.

3.3. Differences between PAS and IFRS which are considered to impact financial instruments

Revaluation of financial instruments on the basis of the fair value in line with IAS 39 is expected to increase or decrease current and non-current financial assets and liabilities. In addition to this, the impairment test that should be applied within the scope of IAS 39 will decrease the financial assets. On the other hand, in compliance with IAS 21, the foreign financial liabilities must be valued at buy rates rather than sell rates. Hence, financial liabilities are expected to decrease as a result of this application.

3.4. Differences between PAS and IFRS which are considered to affect inventories

Under PAS, inventories are valued at cost. According to IAS 2, however, inventories should be valued at lower of historical cost or replacement cost (LCM). Valuation of inventories at lower replacement cost will lead to a decrease in inventories. On the other hand, LIFO method can be used under PAS if specific conditions are met. However, LIFO is prohibited under IFRS. In this case, switching from LIFO to FIFO or average-cost in the transition period will result in an increase in inventories.

3.5. Differences between PAS and IFRS which are considered to affect deferred tax assets and deferred tax liabilities

Before IFRS were adopted, only current income tax liability is reported in the financial statements. In compliance with IAS 12, however, deferred tax liabilities as well as deferred tax assets should also be reported in addition to current tax liabilities. Therefore, the application of IAS 12 is expected to increase deferred tax assets and/or deferred tax liabilities.

3.6. Differences between PAS and IFRS which are considered to impact total current assets, total non-current assets, and total assets

As outlined above, transition to IFRS is likely to impact some of the current assets. The current asset items which are expected to change are: (1) Financial assets (IAS 21 and 39). (2) Inventories (IAS 2), and (3) Deferred tax assets (IAS 12). While some of these new application are expected to increase or decrease the current asset items (IAS 2 and 21), some of them have mixed effects (IAS 39).

Some of the current asset items, on the other hand, are influenced because of reclassification (IAS 24). However, this application is not expected to have any impact on the total amount of current assets because while it decreases one current asset item, it increases the other one by the same amount. As explained in section 4.1, while the IAS 38 and 17 are expected to increase total non-current assets, the IAS 36 is expected to decrease them. The IAS 40, on the other hand, is not expected to have any impact on total non-current assets.

Therefore, transition to IFRS is expected to have mixed effects on both total current and non-current assets. Parallel to the changes in total current and non-current assets, total assets may also increase or decrease depending on the magnitude of the change.

3.7. Differences between PAS and IFRS which are considered to impact total current and non-current provisions
Recognition of provisions and contingent liabilities is limited under PAS. According to IAS 37, on the other hand, provisions are recognized if certain conditions are met. Transition to IFRS, therefore, results in an increase in total provisions.

3.8. Differences between PAS and IFRS which are considered to affect total short-term liabilities, total long-term liabilities, and total liabilities
As it is the case for the total assets, transition to IFRS tends to have mixed effects on total liabilities. This is due to the fact that whereas some of the new applications are expected to increase several liability accounts, some of them tend to decrease others. One of the differences between PAS and IFRS that is expected to increase liabilities is related to IAS 12 which requires reporting of deferred tax liabilities. The other difference which tends to increase liabilities is in relation to the treatment of financial leases in compliance with IAS 17. Another difference which is expected to lead to an increase in liabilities is the treatment of provisions under IAS 37.

On the contrary, regarding the IAS 19 and 21, total liabilities are expected to decrease. Firstly, discounting of employment benefits in line with IAS 19 is likely to result in lower liabilities to be reported in the statement of financial position (balance sheet). Secondly, restatement of foreign liabilities at buy rates in compliance with IAS 21 tends to decrease foreign liabilities.

On the other hand, valuation of financial liabilities at fair value in conjunction with IAS 39 is likely to lead to an increase or a decrease in financial liabilities.

3.9. Differences between PAS and IFRS which are considered to affect equity
As stated above, impairment tests are required according to IAS 36 and 39. In this case, the impairment losses would decrease equity. Reporting of higher provisions through loss under IAS 37 is also expected to lead to a decrease in equity. Possible impairment of inventories at lower replacement cost through loss under IAS 2 is another new application which is likely to decrease equity.

The new application which is expected to lead to an increase in equity is in relation to the treatment of financial instruments. De-recognition of financial instruments through profit under IAS 39 is expected to lead to an increase in equity. The

valuation of foreign liabilities at buy rates under IAS 21 is another application which is expected to result in a gain which will in turn increase equity. Discounting of employee benefits under IAS 19 which will result in lower provision loss is also expected to lead to an increase in equity.

On the other hand, the recording of deferred tax assets or liabilities through deferred tax expenses and/or revenues under IAS 12 is expected to have mixed effects on equity.

In summary, while some of the new applications are expected to increase/decrease equity, some of them are expected to have mixed effects.

3.10. Differences between PAS and IFRS considered to impact financial ratios
As explained above, the expected impact of IFRS on the total current assets, total non-current assets, total current liabilities, total long-term liabilities, total liabilities, and total equity is inconclusive. Therefore, it is expected that the ratios may not change because of the offsetting impacts of the mutual effects.

4. Research methodology

4.1. The selection of case studies

In order to explore the first-time impact of mandatory IFRS transition, comparable data is required. According to IFRS 1 "First-Time Adoption of IFRS", first set of IFRS-based financial statements should comprise comparative figures. In this regard, the statements of financial position to be disclosed in 2005 in Turkey should be compared with the statements of financial position of 2004 which have been adjusted according to IFRS (CMB, 2003, XI/25). However, comparative figures for income statements, cash flow statements, and statements of changes in retained earnings are not reported in the financial statements of 2005 (CMB, 2003, XI/25). Therefore, comparable data for the statements of financial position is only available under both the local accounting standards and the IFRS for the year, 2004.

The statements of financial position prepared under PAS are obtained from the 2004 financial statements. The statements of financial position adjusted according to IFRS, on the other hand, are extracted from the comparative figures reported in 2005. It is important to emphasize that the comparative figures for income statements are not reported in the financial statements of 2005. Because of this reason, the current study focuses only the statements of financial position of 2004 prepared according to both PAS and IFRS. These data have been downloaded from the website ISE. In fact, there are 8 hotels listed in ISE. Of those, 1 hotel's adjusted financial statements are not available. Therefore, the financial statements of 7

hotels are explored in this study. In other words, a total of 7 hotels listed in ISE in Turkey are selected as case studies. The brief information regarding the hotels can be given as follows (www.borsaistanbul.com):

Altın Yunus Resort & Thermal Hotel, located in Çeşme, is a subsidiary of Yaşar Holding. It was founded in 1974. The amount of total assets recorded on the balanced sheet prepared at the end of 2005 is 74.236.163 TL (Turkish Lira). *Marmaris Altınyunus Turistik Tesisler A.Ş.* is a subsidiary of the Koç Group. It was established in 1986. In 2005, it reported total assets of 54.351.834 TL. *Marmaris Marti Otel İşletmeleri A.Ş* is listed in Borsa İstanbul since 1990. The amount of total assets reported in 2005 is 124.886.130 TL. *Metemtur Otelcilik ve Turizm İşletmeleri A.Ş.* was established in 1985. The amount of total assets reported in 2005 is 24.059.193 TL. In addition, *Petrokent Turizm A.Ş., Net Turizm Ticaret Ve Sanayi A.Ş., and Tek-Art İnşaat Ticaret Turizm Sanayi Ve Yatirimlar A.Ş.* are also case hotels having total assets of 30.179.201 TL, 246.017.016 TL, and 46.584.031 TL, respectively. In this regard, it is concluded that the size of the case hotels differs from each other.

Although the number of case studies is likely to be small in this study, it is possible to obtain powerful results with a single case study or very small sample size. There is not any theoretical minimum sample size to be needed for the population that is normally distributed. Similarly, Wilcoxon signed rank test can also be applied for the population that is not normally distributed. This is because the validity is closely related to the selection of the appropriate method by considering the distribution of sample data (Lowry, 2010).

4. 2. Study variables

In this study, the analysis of the impact of first-time IFRS adoption refers to the account numbers in the statement of financial position and selected liquidity and solvency ratios that can be calculated using the statements of financial position. The overview of the statements of financial position reveals that the hotels did not report financial lease liability, current tax assets, non-current receivables/payables from/to related parties before and after IFRS. Therefore, although these variables are also expected to be influenced by IFRS, they are not analyzed in this study. As stated above, the adjusted income statements are not reported by the case hotels. Therefore, the current study does not explore the impact of IFRS transition on the income statement. It is also important to emphasize that current ratio, acid-test ratio, cash flow liquidity ratio, debt ratio, shareholder equity ratio, debt-to-equity ratio, tangible fixed assets to total assets, return on total assets, and return on equity have mainly been used to determine the effect of IFRS transition on liquidity, solvency, and profitability of case hotels.

4.3. Data analysis

As Appendix 1 portrays, the data are not normally distributed for majority of the variables. These variables can be seen in the Panel A of Appendix 2. This is due to the fact that, the skewness and kurtosis values for the distributions of these variables are higher than the threshold values of 1 and 3 respectively (Bulmer, 1979; Balanda & MacGillivray, 1988). Additionally, Kolgomarov-Smirnov and Shapiro-Wilk tests results reveal that these variables are significant at the level of $p<0.1$. This means that, the sample data for these variables are not normally distributed, are leptokurtic, and are positively skewed (Lueg *et al.*, 2014). On the other hand, for the rest of the variables as Panel B of Appendix 2 shows, the data are normally distributed.

In order to analyze the data that does not show normal distribution, the non-parametric Wilcoxon signed-rank test has been applied. On the other hand, the paired-samples t-test has been used for the data that show normal distribution. For the variables that display non-normal distribution, median differences have also been calculated because the median is a better indicator of central tendency than the mean when data is not normally distributed (Stent *et al.*, 2010; Lueg *et al.*, 2014). On the other hand, mean differences have been computed to support the t-test results.

5. Interpretation of the results

Appendix 2 demonstrates the Wilcoxon signed-rank test and t-test results. According to the t-test results presented in Appendix 2, the mean value of total property, plant & equipment under IFRS is not statistically different from the mean value under PAS despite the fact that the average mean value under IFRS has decreased by 14% when compared to PAS. As has been proposed before, the IAS 40 and 36 are expected to lead to decreases in property, plant & equipment, while the IAS 17 is expected to lead to an increase. Apparently, the IAS 40 and IAS 17 do not contribute to this decrease because the investment property does not change as opposed to our expectations. Additionally, the hotels do not report any finance lease liability before and after IFRS adoption. This finding is not in line with the results of one of the very few studies (Mısırlıoğlu *et al.*, 2013) conducted in Turkey which shows that financial lease liabilities increased significantly as a result of transition to IAS 17. In fact, coming up with this difference is not surprising because Mısırlıoğlu *et al.* (2013) state that manufacturing firms are dominant in the leasing group. As a result, the decrease in property, plant & equipment (which is not statistically significant) can be attributed to the first-time impairment test applied in line with the IAS 36.

In regard to the total intangible assets, the median value under IFRS has decreased by 42% when compared to the median under PAS. According to the Wilcoxon signed-rank test results, this decrease is also statistically significant at $p<0.05$. Since total intangible assets have fallen down, it seems that these assets have not been revaluated at higher fair values in compliance with IAS 38. Additionally, the detailed analysis of the statements of financial position of the case hotels reveals that there is no reclassification from the intangible assets to goodwill. The analysis of the statements of financial position also demonstrates that there is no research costs in the statements of financial position prepared under PAS. In fact, this can be due to the fact that service companies such as hotels do not engage in new product development activities as manufacturing firms do. In this case, it is obvious that the intangible assets have not been changed by any reclassification effect. Thus, the decrease in the intangible assets could be attributed to the application of impairment test according to IAS 36. This finding is also consistent with the findings of the other studies conducted in Turkey (e.g. Mısırlıoğlu *et al.*, 2013).

Concerning the impact of IAS 24, the Wilcoxon signed-rank test results demonstrate a statistically significant increase in the current payables to related parties at $p<0.10$. This finding is consistent with the findings of Mısırlıoğlu *et al.* (2013). Similar to this, the current receivables from related parties have also increased under IFRS. However, this increase is not statistically significant. In line with increases in current related accounts, there are decreases in other current receivables and other current payables. While the decrease in other current payables is significant at $p<0.05$, the decrease in other current receivables is not. On the other hand, the results do not reveal any change in trade receivables and payables. This means that, the increase in receivables and payables from/to related parties results from reclassification of some of the other receivables and other payables rather than trade receivables and trade payables. However, the IAS 21 has not reflected its expected impact because the results do not demonstrate any change in trade payables.

The results also reveal that the transition to IFRS does not have any statistically significant impact on financial assets and liabilities. The IAS 39 is expected to have mixed effects on the financial assets and liabilities, while IAS 21 is supposed to decrease financial liabilities. For non-current financial liabilities, median differences under PAS and IFRS are zero. On the other hand, although the current/non-current financial assets and current financial liabilities decreased under IFRS, these decreases are statistically not significant. Obviously, the impairment application in compliance with IAS 39 is responsible for the decrease in the non-current financial assets. The current financial liabilities, on the other hand, seem to decrease in relation to IAS 39 and 21.

As Appendix 2 presents, the median value of inventories has increased under IFRS. However, this increase is not statistically significant. This finding is in line with the findings of Terzi *et al.* (2013) which reveal that inventories of manufacturing firms listed in ISE have significantly increased as a result of transition to IFRS. Given this finding, it is apparent that LCM adjustment has not been done by the hotels. In fact, this result might be due to the change in the inventory costing method from LIFO to FIFO or average-cost.

The results further show that the non-current deferred tax assets and current/non-current deferred tax liabilities have increased in relation to IAS 12. However, none of these increases is statistically significant. The analysis of the statements of financial position also reveals that the application of IAS 12 is not uniform across the listed hotels in Turkey.

As a result of transition to IFRS, the median value of total current assets has increased and this increase is significant at $p<0.05$. It seems that the increase in the inventories is responsible for the increase in total current assets. The mean value of total non-current assets has also increased due to the change in non-current deferred tax assets under IFRS. Similarly, the mean value of total assets has also gone up. However, the increases in total non-current assets and total assets are extremely small and they are statistically not significant. Thus, H9 is partly confirmed.

The median value of current provisions has increased under IFRS although there is no change in the value of non-current provisions. However, the increase in the median value of current provisions is not statistically significant.

In relation to the total current liabilities, the mean value has increased as a result of the move to IFRS. Moreover, this increase is significant at $p<0.10$. On the other hand, although the non-current liabilities have increased under IFRS, this increase is not statistically significant. The current liability accounts which have increased under IFRS are provisions, payables to related parties, and deferred tax liabilities. However, among these accounts, only payables to related parties have revealed statistically significant increase. Considering the fact that the increase in the payables to related parties has resulted from the reclassification effect, the IAS 37 and 12 seem to have overall increasing impact of total current liabilities although they do not show statistically significant impact individually. On the other hand, the increase in the non-current liabilities, although it is not statistically significant, can be attributed to the insignificant increase in deferred tax liabilities. Parallel to the increase in total current and non-current liabilities, the mean and median value of total liabilities have also gone up. The change in total liabilities, however, is not statistically significant. This outcome is parallel to the ones found by Mısırlıoğlu *et al.* (2013).

The results further reveal that there is a slight insignificant increase in total equity as a result of a move to IFRS. As stated above, the application of IAS 36 has resulted in a statistically significant decrease in the intangible assets. Transition to IAS 36 has also decreased property, plant & equipment although this decrease is not statistically significant. On the other hand, the IAS 39 seems to be responsible for the decrease in financial assets. In this case, it can be concluded that the IAS 36 and 39 have negatively influenced equity, though this overall effect is statistically not significant. The increase in current provisions as a result of application of IAS 37 can be seen as the other factor which has negatively affected equity. The IAS 39 is also responsible for the decrease in financial liabilities which is supposed to have the positive impact on equity. Obviously, the mixed effects of IFRS have not resulted in any statistically significant change in equity.

As explained before, both mean and median values of total current assets and total current liabilities have significantly increased under IFRS. As a result of this, the current ratio has slightly increased. This slight increase, however, is not statistically significant. On the other hand, the cash & cash equivalents is not influenced at all under IFRS. The results regarding these accounts are not reported in Appendix 2 because they are not among the research variables in this study. Since the cash & cash equivalents have not changed while the total current liabilities have gone up, the acid-test ratio has fallen down. However, this decrease is statistically not significant. While these findings are in line with the ones found by other studies conducted in Turkey (e.g. Alkan & Doğan, 2012; Mısırlıoğlu *et al.*, 2013), they are opposite to some others (see Terzi et al, 2013).

Although it is not statistically significant, percentage mean and median change in total equity is higher than percentage change in liabilities. Therefore, the ratio of shareholders' equity to total liabilities has increased. However, the change in this ratio is extremely insignificant. This result is not consistent with the findings of Çelik *et al.* (2007) and Terzi *et al.* (2013) who found that transition to IFRS has significantly changed total debt to equity ratio of listed manufacturing firms in Turkey. While the ratio of total current liabilities to total liabilities & equity has increased under IFRS, ratio of total non-current liabilities to total liabilities & equity has decreased. None of these changes, however, is statistically significant. This finding is in line with the results found by Agca and Aktaş (2007) who explored the impact of IFRS adoption on the financial ratios of listed firms (except financial institutions) in Turkey. The results additionally demonstrate no statistically significant change in stockholders' equity ratio which is in line with the findings of Mısırlıoğlu *et al.* (2013). The results further reveal that there is no statistically significant change in debt ratio under IFRS. To sum up, the transition to IFRS does not influence the financial ratios of the case hotels that are listed in ISE even though their institutional contexts (e.g. size, auditors) differ from each other.

6. Conclusions

In this study, we explored the impact of IFRS on the statements of financial position and selected financial ratios of the hotels listed in ISE. According to the results, the IAS 36 and 24 have displayed their expected impacts significantly. However, since the IAS 24 has a reclassification effect, it has not altered total figures of assets and/or liabilities. On the other hand, whereas the IAS 37, 39, 12, and 21 have reflected their expected impacts, the changes they have resulted in are not statistically significant. On the contrary, the other standards such as IAS 40 and 17 have not yielded any change in the accounts in the expected direction. The results also reveal the IAS 36 is responsible for the statistically significant decrease in intangible assets. This is similar to results found by Mısırloğlu *et al.* (2013) who investigated the impact of IFRS on the account numbers of the full sample of listed firms in ISE. This means that, the IAS 36 has a similar effect on intangible assets of the hotels as well as of the other firms operating in the other sectors in Turkey.

On the other hand, a move to IFRS has a significant impact on property, plant & equipment. This finding is in line with the ones found in the other studies conducted in Turkey in order to explore the impact of IFRS adoption either on the financial statements of the full sample of firms or the manufacturing firms listed in ISE (Mısırlıoğlu *et al.*, 2013; Terzi *et al.*, 2013). These important results suggest that transition to IAS 36 and 40 do not have any significant impact on property, plant & equipment of hotels. Another important conclusion that can be derived from the current study is that, while the IAS I7 influences the property, plant & equipment and finance lease liabilities of manufacturing firms (see Mısırlıoğlu *et al.*, 2013), it does not reflect its impact for the hotels. This is due to the fact that the service firms such as hotels do not engage in financial leases as manufacturing firms do.

The findings also reveal that the overall impact of the IAS 37 and 12 result in a statistically significant change in total current liabilities. According to the results, there is a statistically significant increase in total current assets as well. However, despite the statistically significant increase in total current assets and liabilities, IFRS in general do not have any statistically significant influence on total assets, total non-current liabilities, total liabilities, and equity of the hotels. This important conclusion coupled with the parallel findings of Mısırlıoğlu *et al.* (2013), who found the same results for the total sample of listed firms including hotels, conveys an important message to managers of the hotels as well as the other policy makers such as the standard-setters and users of financial information. This message implies that transition to IFRS results in a relatively little or no change in the financial information regarding financial position of the hotels. Parallel to these, the results do not demonstrate any statistically significant impact on the selected financial ratios of the hotels despite the fact these ratios have been changed

slightly. Especially, the findings concerning the current ratio and stockholders equity ratio are parallel to the ones found by Mısırlıoğlu *et al.* (2013). This important finding suggests IFRS adoption does not change liquidity and solvency of the hotels. Based on these outcomes, the stakeholders such as investors and creditors should understand that their evaluations regarding the financial position and debt-paying ability of the hotels will not change after mandatory IFRS adoption when compared to pre-IFRS period. However, they should not ignore the fact that the adoption of universally accepted accounting principles such as IFRS can improve reliability of the financial statements although it yields limited benefits in terms of providing more useful information. In addition to these, the managers of the hotels should not come up with the conclusion that it is not necessary to use IFRS because their adoption provides limited benefits. Instead, they should keep in mind that the IFRS adoption can make the financial statements more comparable and understandable in the global arena.

Our results should be interpreted considering the following limitations: First, the current study focuses on a single country. Therefore, due to the specific characteristics of Turkish accounting tradition, the results cannot be generalized to the hospitality sector. Thus, it is recommended that future research focus on the hotels in the other tax-oriented emerging countries as well as the EU in order to find out comparable and generalizable results. Second, the current study does not evaluate the impact of IFRS on the income statement line items and financial ratios calculated using income statement figures. This is due to the fact that the listed firms in Turkey were not required to report the adjusted income statements in the transition period. Third, the current study focuses on the transition period in order to measure the impact of first-time mandatory IFRS adoption. This is, however, exposed to the adaptation problems in the transition period. Thus, future studies should take into account the financial statements prepared after 2005 in order to see whether the impacts of IFRS are different from the ones in the transition period.

Despite these limitations, this study provides insight into which particular standard affects the statements of financial position of the hotels. Additionally, it sheds light into whether or not transition to IFRS influences the statement of financial position items and selected financial ratios of hotels in an emerging country such as Turkey. The current study also provides useful information to the decision-makers such as hotel managers, owners and investors who are currently evaluating the merits of applying IFRS for the hotels.

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Appendix 1. Distribution of the data pertinent to the variables

Variable	Panel A: Distribution of data related to the variables under PAS				Panel B: Distribution of data related to the variables under IFRS			
	Skewness	Kurtosis	P value (Sig.)		Skewness	Kurtosis	P value (sig.)	
			Kolgomarov-Smirnov	Shapiro-Wilk			Kolgomarov-Smirnov	Shapiro-Wilk
Inventories	2.636	6.958	0.000	0.000	2.636	6.960	0.000	0.000
Current deferred tax liabilities	1.757	2.342	0.000	0.000	2.646	7.000	0.000	0.000
Non-current deferred tax liabilities	2.646	7.000	0.000	0.000	1.542	1.164	0.004	0.003
Current financial liabilities	1.118	0.067	0.200	0.083	2.406	5.951	0.014	0.000
Non-current financial liabilities	2.560	6.632	0.001	0.000	2.560	6.632	0.001	0.000
Property. plant and equipment	0.126	-2.129	0.200	0.345	0.828	-0.635	0.200	0.387
Intangible assets	2.223	4.955	0.003	0.001	1.072	-0.904	0.039	0.018
Current trade receivables	2.244	5.464	0.004	0.004	2.243	5.462	0.004	0.004
Non-current trade receivables	2.579	6.724	0.000	0.000	2.577	6.718	0.000	0.000
Current trade payables	-0.375	-2.483	0.136	0.040	-0.373	-2.482	0.139	0.040
Current receivables from related parties	1.135	0.155	0.162	0.074	2.558	6.636	0.000	0.000
Non-current receivables from related parties	2.646	7.000	0.000	0.000	2.646	7.000	0.000	0.000
Current and non-current payables to related parties	2.309	5.391	0.002	0.000	2.310	5.393	0.002	0.000
Investment properties	2.646	7.000	0.000	0.000	2.646	7.000	0.000	0.000
Current provisions	2.587	6.756	0.000	0.000	2.550	6.584	0.002	0.000
Non-current provisions	0.504	0.251	0.200	0.710	0.058	-2.312	0.200	0.136
Total current assets	2.501	6.382	0.003	0.000	2.502	6.392	0.003	0.000
Total non-current assets	1.123	0.646	0.200	0.325	1.079	0.389	0.200	0.286
Total assets	1.644	2.711	0.200	0.087	1.603	2.486	0.200	0.085
Total current liabilities	1.059	-0.225	0.200	0.168	1.065	-0.219	0.200	0.161
Total non-current liabilities	2.554	6.601	0.001	0.000	2.566	6.658	0.001	0.000
Other Current Receivables	2.630	6.932	0.000	0.000	2.035	4.415	0.193	0.013
Other current assets	2.375	5.819	0.024	0.001	0.357	-1.816	0.200	0.194

Variable	Panel A: Distribution of data related to the variables under PAS				Panel B: Distribution of data related to the variables under IFRS			
	Skewness	Kurtosis	P value (Sig.)		Skewness	Kurtosis	P value (sig.)	
			Kolgomarov-Smirnov	Shapiro-Wilk			Kolgomarov-Smirnov	Shapiro-Wilk
Non-current financial assets	2.645	6.998	0.000	0.000	2.646	6.999	0.000	0.000
Current deferred tax liability	1.757	2.342	0.000	0.001	2.646	7.000	0.000	0.000
Non-current deferred tax assets	2.646	7.000	0.000	0.000	1.298	-0.414	0.000	0.001
Other current liabilities	1.826	3.384	0.057	0.010	2.615	6.877	0.000	0.000
Other non-current liabilities	2.646	7.000	0.000	0.000	2.646	7.000	0.000	0.000
Total Shareholders' equity	-0.121	-1.527	0.200	0.642	0.005	-1.402	0.200	0.550
Other non-current assets	1.676	2.132	0.034	0.006	2.546	6.556	0.003	0.000
Total liabilities	2.345	5.593	0.000	0.000	2.359	5.668	0.000	0.000
Total liabilities and equity	1.644	2.711	0.200	0.087	1.603	2.486	0.200	0.085
Current ratio	2.369	5.767	0.034	0.001	1.430	1.250	0.090	0.042
Acid-test ratio	2.420	5.952	0.003	0.000	1.702	2.080	0.001	0.003
Cash flow liquidity ratio	1.587	1.348	0.001	0.002	1.379	0.104	0.001	0.002
Debt Ratio	0.377	-0.251	0.200	0.782	0.340	-0.529	0.200	0.805
Stockholders Equity Ratio	-1.414	2.610	0.193	0.186	-1.335	2.262	0.200	0.269
Ratio of Current Liabilities to Total Liabilities+Stockholders' Equity	0.960	0.781	0.200	0.375	1.265	1.809	0.200	0.219
Ratio of Long Term Liabilities to Total Liabilities+Stockholders' Equity	1.216	-0.008	0.101	0.039	1.337	0.546	0.093	0.035
Ratio of Stockholders' Equity to Total Liabilities	1.631	2.045	0.040	0.024	1.648	2.074	0.017	0.020

Appendix 2. Wilcoxon signed-rank test and paired-samples t-test results

					Panel A: Variables for which the data do not demonstrate normal distribution			
Variable	Median-PAS	Median-IFRS	Median difference (%)	Mean-PAS	Mean-IFRS	Mean difference (%)	t-value	Z-value
Current receivables from related parties	336521	380610	13.101	446158.14	2283983.43	411.922		-1.604
Current deferred tax liabilities	21026	125649	497.589	31442.14	125564.86	299.352		-1.447
Non-current deferred tax liabilities	0	496687	-	208149.57	349489.00	67.903		-0.180
Current financial liabilities	2803798	871332	-68.923	1773492.29	1037305.29	-41.511		-1.461
Total liabilities	6640618	7393303	5.888	25241755.43	25283337	0.164		-0.944
Non-current financial liabilities	540195	540195	0.000	14940067.71	14936978.14	-0.021		-1.000
Intangible assets	230253	133472	-42.032	51092168.29	43925689.14	-14.027		-2.023**
Current trade receivable	1619676	1619676	0.000	2105081.29	2105605.43	0.025		-1.604
Non-current trade receivable	2797	2797	0.000	9502.43	9475.29	-0.286		-0.447
Current payables to related parties	205350	207220	0.911	3050662.43	3080872.14	0.990		1.826*
Investment properties	47863140	47571766	-0.609	6837591.43	6795980.86	-0.609		-1.000
Current provisions	28015	80401	186.993	341693.71	375603.43	9.924		-0.338
Total current assets	6054968	6145209	1.490	14096621.43	14164970.57	0.485		-1.892**
Total non-current liabilities	2457916	2457917	0.000	15656203.86	15671008.29	0.095		-0.405
Other Current Receivables	35279	56233	59.395	1961918.14	113990.43	-94.190		-1.214
Non-current financial assets	26269	26269	0.000	11638578.86	11601254.86	-0.321		-0.447
Non-current deferred tax assets	1360161	3049901	124.231	388617.43	871400.43	124.231		0.317
Other current liabilities	392759	224222	-42.911	4101844.57	830867.57	-79.744		-1.992**
Current ratio	0.93200	0.94600	1.502	4.19743	2.53786	-39.538		-0.674
Acid-test ratio	0.66600	0.65900	-1.051	3.84843	2.17900	-43.380		-1.461
Cash flow liquidity ratio	0.05800	0.05800	0.000	1.38171	0.86057	-37.717		-1.342
Ratio of Stockholders' Equity to Total Liabilities	2.60300	2.78600	7.030	6.86857	6.78514	-1.215		-0.730
Ratio of property. plant and equipment to total assets	0.83500	0.84300	0.958	0.77071	1.97686	156.499		-0.734

	Panel A: Variables for which the data do not demonstrate normal distribution							
Variable	Median-PAS	Median-IFRS	Median difference (%)	Mean-PAS	Mean-IFRS	Mean difference (%)	t-value	Z-value
	Panel B: Variables for which the data demonstrate normal distribution							
Current financial liabilities	1104384.00	0.00	-100.000	1773492.29	1037305.29	-41.511	1.350	
Property. plant and equipment	48606232.00	34698196.00	-28.614	51092168.29	43925689.14	-14.027	1.062	
Current trade payables	3051746.00	3051746.00	0.000	2193548.43	2197290.29	0.171	-1.029	
Non-current provisions	411063.00	188064.00	-54.249	352547.86	236390.43	-32.948	1.196	
Total non-current assets	51563993.00	51563994.00	0.000	66439660	66635137.29	0.294	-0.257	
Total assets	58232919.00	58232919.00	0.000	80536281.43	80800107.86	0.328	-0.365	
Total current liabilities	6497759.00	6494943.00	-0.043	9585551.57	9612328.71	0.279	-1.999[*]	
Total Shareholders' equity	55790375.00	55790375.00	0.000	46967882	47187994.86	0.469	-0.274	
Total liabilities and equity	58232919.00	58232919.00	0.000	80536281.43	80800107.86	0.328	-0.365	
Debt Ratio	0.27400	0.26100	-4.745	0.24014	0.24529	2.145	-0.688	
Stockholders Equity Ratio	0.72200	0.73600	1.939	0.72171	0.71671	-0.693	0.658	
Ratio of current liabilities to Total Liabilities+Stockholders' Equity	0.11900	0.11900	0.000	0.12157	0.12700	4.467	-0.911	
Ratio of Long Term Liabilities to Total Liabilities+Stockholders' Equity	0.03300	0.03300	0.000	0.11729	0.11586	-1.219	0.329	

*p<0.1
**p<0.05
***p<0.01