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Transition From GAAP to IFRS: An Evidence from UK

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Abstract

Owing to its favourable and unfavourable aspects like two sides of a coin, IFRS has drawn the attention of all those who are interested in this field of study. This paper is an attempt to examine the effect of transition to IFRS on key financial ratios and for this we have selected financial statements of 52 sampled companies from UK transitioning to GAAP. The results reveal that on adoption of IFRS, the key financial ratios have witnessed same differences but these are not significant across the board. Similarly, the prominent financial statement items which have seen significant affects include debt, total assets, sales, net-profit, interest, capital employed and earnings before tax. The findings furnish some noticeable policy implications.

Keywords: *IFRS, Key financial ratios, Accounting standards, UK GAAP.*

Introduction

In the era of globalization where global economies are passing through sea changes, International Financial Reporting Standards (IFRS) have become the need of the hour. Global economic changes have come up with the trend of transnational corporations. They have raised the demand for uniform reporting standards across the globe. Moreover, the significance of accounting has also increased with the passage of time from a mere fiscal tool for authorities and financial institutions to an important tool for a wide variety of economic agents, due to the expansion of the capital transactions and the dispersion of economies.

International Financial Reporting Standards (IFRS) have come up with a lot of promises not only for the corporate world but for the world as a whole. Promising nature of this new policy change can be adjudged by rapid adoption of these standards across the globe. Currently, more than 113 countries require IFRS convergence whereas a number of others have cleared their intention to adopt it from a future date, e.g., Canada and India from the year 2011.

Europe is the hub of developed economies and any change in European economic environment affects the global economy significantly. Europe took a welcome step and made IFRS mandatory for European countries in the year 2005. This propelled us to make a comprehensive study of UK, one of the most developed and IFRS integrated country of Europe. We examined the effect of transition in UK from GAAP to IFRS on key financial ratios and financial statement items of selected

sector companies. Our study reveals, causes and effects in financial reporting of the companies in UK switching from GAAP to IFRS. This study will act as a mirror for the countries, planning to adopt these standards in their accounting system in near future.

Review of Literature

This section briefly reviews more recent empirical studies conducted to examine the impact of IFRS on key financial aspects emanating from the financial statements of the companies. Wong and Wong (2005)[1] examined to explore the impact of not amortizing goodwill and identifiable intangible assets with indefinite lives on some commonly used valuation multiples of New Zealand listed companies. Results indicated that these have a significant downward effect on the EV/EBIT and PE multiples. Hope et al. (2006)[2] investigated the importance of IFRS in the context of global accounting standards harmonization and to know what institutional factors influence countries' decision to voluntarily adopt IFRS. This study discerned a significant negative association between the adoption of IFRS and investor protection.

Lantto (2007)[3] examined whether IFRS improved the usefulness of accounting information in a code-law country that has a strong system of legal enforcement and high quality domestic accounting standards. The results of this study indicated that IFRS have improved the relevance of accounting information in Finland, but they also highlighted the concern about the reliability of those financial statement items that are prepared using judgment. Capkun et al. (2008)[4] analyzed the impact of mandatory change in financial reporting standards in European Union and found that the transition from local GAAP to IFRS had a small but statistically significant impact on total assets, equity, total liabilities and among assets the most pronounced impact on intangible assets and property, plant and equipment. It was examined by Ball (2008)[5] whether an investor got benefit from implementing IFRS or it is just like a mirror which makes him "far from reality". In case of direct benefit, IFRS offer increased comparability and hence reduced information costs and information risk to investors. And in case of indirect benefit, IFRS lead to a reduction in firm's cost of equity capital, the researcher observed.

Christensen et al. (2008)[6] studied how accounting quality is affected by the adoption of IFRS for two groups of firms, those that perceive net benefits of IFRS and those that have no incentive to adopt and are forced to comply. The result was that accounting quality does not always improve with IFRS adoption. The result suggested that mandatory IFRS will not improve accounting quality for firms that have no incentive to adopt and the current focus on accounting standard quality might not always yield higher accounting quality.

Daske et al. (2008)[7] analyzed the effect on market liquidity and cost of capital in 26 countries using a large sample of 3100 firms that are mandated to adopt IFRS. It was found that on an average, market liquidity increased around the time of the introduction of IFRS. A study has been made by Horton and Serafeim (2008)[8] to examine whether there is market reaction to and value-relevance of information contained in the mandatory transitional documents required by IFRS. It was found

that there were significant negative abnormal returns and positive trading activity for firms reporting a negative reconciliation adjustment on UK GAAP earnings. Pickering et al. (2008)[9] analyzed the views of preparers of financial reports on the costs and benefits of making the transition from Australian GAAP to Australian equivalents of IFRS. The finding of this report revealed that preparers perceived that a major difficulty of implementation was the uncertainty regarding interpretation of the standards and complexity of the standards themselves. This resulted in increase in time and cost spent in discussion with auditors.

Tsalavoutal et al. (2008)[10] examined the change in the relationship between market value and reported figures before and after the adoption of IFRS by Greek listed companies. As per the findings of this study there was no statistically significant change in the value relevance of book value of shareholders' equity and N/P after tax, after the adoption of IFRS. Callao et al. (2009)[11] tried to ascertain the quantitative impact of International Financial Reporting Standards (IFRS) on financial reporting of European countries and evaluate if this impact is connected with the traditional accounting system in which each country is classified, either the Anglo-Saxon or the continental-European accounting system. The results of the study show that the first application of IFRS has different effects on the financial reporting among countries. Lantto and Sahlstrom (2009)[12] studied the impact of IFRS on continental European country (Finland) and the result of the study highlighted that the adoption of IFRS changes the magnitude of key accounting ratios. Stent et al. (2010)[13] assessed the effect of New Zealand IFRS on the financial statements of first time adoption of NZ IFRS and concluded that 87 % of the firms are affected by NZ IFRS.

Statement of the Problem

A new concept always comprises favourable and unfavourable aspects like two sides of a coin. Same is true with IFRS which, being a new concept is globally a topic of current debate. It comprises both opportunities and challenges in its implementation. There are several studies on IFRS, but the work on measurement of impact of adoption of IFRS on financial statements is very scanty. The present paper is an attempt to find out the effect of transition to IFRS on key financial ratios and on key financial statement items. The main problems discussed in this paper are as follows:

1. How will IFRS affect the financial statements prepared under UK GAAP?
2. How financial statement items will be affected by transition to IFRS?
3. How did key accounting ratios change due to implementation of IFRS?

Research Objectives

For finding answers to the above mentioned questions, we have defined some objectives of this study, which are given below:

1. To examine the comparative features of financial statements based on UK GAAP and on IFRS.
2. To bring out how the transition from UK GAAP to IFRS affected the entities' reported financial position and financial performance as measured through key ratios.

Hypotheses

For achieving the above objectives, the study attempted to test the following broad hypotheses:

1. That there is no significant difference between UK GAAP and IFRS based accounting ratios for the same fiscal year.
2. That there is no significant difference between financial statement items based on UK GAAP and IFRS for a fiscal year.

Research Methodology

The present study is based on secondary data on selected variables sourced from the published annual reports. Only such companies are purposively selected as have prepared their annual reports on the basis of UK GAAP and IFRS. Our sample comprises 52 companies covering important sectors like information technology, energy, basic materials, industrial units, health care, non-cyclical consumer goods, media & publishing and telecommunication services. For analyzing the data, some appropriate statistical techniques are applied with the help of SPSS 13.0 software. Important among these techniques are mean, median, mode, skewness, kurtosis, Wilcoxon signed test and sign rank test. The results drawn through these ratios comprise the matter for discussion in the text of this paper.

Results and Discussions

Table 1 presents the summary of statistics such as mean, median, SD, skewness, kurtosis and minimum and maximum values for twelve key financial ratios. Ratios are calculated for the same year when firms converted their financial statements from UK GAAP to IFRS. The table presents 12 selected ratios based on UK GAAP and on IFRS and the differences between the two sets of ratios. The table reveals that the means of current ratio (CR), quick ratio (QR), proprietary ratio, return on capital employed (ROCE),return on investment (ROI) and total asset turnover (TAT) ratios are positively affected by implementation of IFRS. Apart from this, the means of debt-equity, gross profit (G/P), net profit (N/P), return on equity (ROE), interest coverage and working capital turnover ratios are adversely affected by the implementation of IFRS. As the results of skewness and kurtosis lend credence to the fact that the distribution is not normal, the further analysis has been relied on the use of median. Wilcoxon signed rank test and sign test have been used for further analysis of the data and testing of the hypotheses.

Table 2 reveals the results of analysis presented as the difference between twelve ratios based on UK GAAP and on IFRS and the level of significance in these differences. Wilcoxon signed rank test has rendered significant differences in the case of G/P ratio and ROI, while no significant differences have appeared in the case of the remaining 10 ratios. However, the results of sign test are slightly different from those of the Wilcoxon signed rank test. According to the former, the significant difference between IFRS and UK GAAPs based calculations has been found only with respect to ROI, while the difference with regard to G/P ratio is statistically insignificant. Succinctly, it can be deduced from these results that notwithstanding the differences across all the ratios, the significant differences have been obtained

only in the case of G/P ratio and ROI.

Table 3 presents the median values of income statement and balance sheet items calculated under UK GAAP and IFRS. In addition, the table reports the differences between these financial statement items and the statistical significance of the differences. Both Wilcoxon signed rank test and sign rank test have revealed significant differences in the case of debt, total assets, sales, net profit and capital employed. Wilcoxon signed rank test also presents the significant differences in interest item and earning before tax, while no significant differences have worked out in these items by sign rank test. Concisely, these results disclose that despite visible differences across all the financial statement items, the significant differences have been obtained only in the case of debt, total assets, sales, net profit, capital employed, interest and earning before tax.

Table 4 classifies the companies in various categories based on positive and negative percentage change in the value of equity. As this table illustrates, IFRS effected equity of all sampled companies (52), some positively and others negatively. According to this table, majority of companies (32) have shown positive percentage change in the value of equity. It is inferred that transition to IFRS improves the value of equity. This table also reveals that maximum number of companies fall in the category of under 5 percent change in the value of equity. In this category, 15 companies underwent positive impact and only 6 companies discerned the negative impact. There are only 4 companies in the category of 200-1500 percent positive change whereas the same category with negative change has no company. An approximately equal number of companies fall in 5-200 percent change category. In this category, 13 companies are with positive change, while 14 revealed negative change.

Table 5 gives us an idea about all those companies whose capital employed is affected due to convergence with IFRS. The table reveals that convergence with IFRS affected capital employed of all sampled companies, except one. This table also supports the results given in Table 4. As per the table, maximum number of companies have fallen in the same category of change (0-5%) as they did in the case of equity change. So, it can be affirmed that with introduction of the emerging concept of IFRS in accounting, capital employed and equity got better off in terms of values. According to the table, only 1 company has shown extremely negative effect on capital employed (100-300% change). The positive effect of transition to IFRS on the value of capital employed has been found in the range of 5-100 percent for 24 companies. On the other hand, in the range of this percentage change in negative side there are only 5 companies.

Table 6 presents the degree of percentage change in the value of total assets. As per the table, IFRS affected total assets of 50 companies out of 52 sampled companies. This table reveals that 41 companies out of 50 have registered positive percentage change in the value of total assets and only 9 companies revealed negative percentage change. This table also supports the results of Table 4 and Table 5 as 26 companies fell in the category of 0-5 percent change, while only 4 companies discerned negative percentage change. While 13 companies are positioned under

the category of 5-30 percent positive change, only 5 companies are positioned under negative percentage change. Only two companies have fallen in the positive change bracket of 30-100 percent and leaving no space for negative change in the value of total assets under the same category.

Table 7 reveals the percentage change in the value of net profits of the companies. This table presents that 51 of the sampled companies have registered positive or negative impact on net profits on transition to IFRS. Positive effect due to transition to IFRS is noticed in the case of 37 companies, while companies with negative effect are only 14. A cursory glance brings forth that maximum concentration of the companies whose profits are positively or negatively affected fall in the ranges of up to 5 percent (8 positive and 6 negative) and 30-100 percent change (10 positive and 4 negative). As many as 5 companies have registered more than 200 percent positive change, but no company has resulted in negative change in net profits beyond this percentage. In short it can be noted that the incidence of change in profits affected by IFRS has been higher on positive than on negative side.

Summary

This paper has examined the impact of convergence with IFRS on key financial ratios and financial statement items of selected UK GAAP based companies. The results have shown that IFRS adoption has affected all companies in one way or the other. The results indicate that the impact is very material for some companies for various key financial ratios like Debt/Equity, Proprietary, G/P, N/P, ROI, Interest Coverage and Working Capital Turnover ratios. Similarly the effects have been noted with respect to the key financial statement items, while no prominent effect has been found in the case of Liquidity Ratios, G/P ratio, and Turnover Ratios but the ROE and Coverage Ratios were relegated to considerable decrease. The prominent positive effects are revealed in the case of leverage ratios and profitability ratios. To some extent our results are consistent with Lantto and Sahlstrom (2009) that current ratios are not significantly affected and gearing ratio resulted in positive change in terms of the value of median. Similarly, as in our study, they have shown that financial statement items such as debt, total assets, sales and net profit are significantly affected due to adoption of IFRS. The results of the present study are also consistent with the study of Stent et al. (2010) which revealed that due to transition to IFRS in New Zealand, there were significant differences in total assets, liabilities, net profit and assets turnover. The results of this study indicate important policy implications not only for the companies going to converge their accounts with IFRS, but also for the accounting profession and the investors' community at large.

References

Wong, J. and Wong, N. (2005), "The Impact of Not Amortizing Intangible Assets on Valuation Multiples", *Pacific Accounting Review*, Vol. 17, No. 1, pp. 79-93.

Hope, O.k., Jin, J. and Kang, T. (2006), "Empirical Evidence on Jurisdictions that Adopt IFRS", available at http://ssrn.com/abstract=751264, Retrieved on 7 August, 2010.

Lantto, A.M. (2007), "Does IFRS Improve The Usefulness of Accounting Information in A Code-Law Country?", available at: http://ssrn.com/abstract=905218, Retrieved on 10 August, 2010.

Capkun, V., Jeny, A.C., Jeanjean, T. and Weiss, L.A. (2008), "Earning Management and Value Relevance

during the Mandatory Transition from Local GAAP to IFRS in Europe", available at: http://ssrn.com/abstract=1125716, Retrieved on 5 August, 2010.

Ball, R. (2008), "What is The Actual Economic Role of Financial Reporting?" available at: http://ssrn.com/abstract=1091538, Retrieved on 12 August, 2010.

Christensen, H. B., Lee, E. and Walker, M. (2008), "Incentives or Standards: What Determines Accounting Quality Changes around IFRS Adoption", *financial accounting and reporting section*, available at: http://ssrn.com/abstract=1013054, Retrieved on 20 August, 2010.

Daske, H., Hail, L., Christian and Verdi, R. S. (2008), "Mandatory IFRS Reporting Around the World: Early Evidence on the Economic Consequences", *ECGI - Finance* Working Paper No. 198/2008, Chicago GSB Research Paper No. 12.

Horton, J., Serafeim, G. and Serafeim, I. (2008), "Does Mandatory IFRS Adoption Improve the Information Environment?", Harvard Business School Working Paper No. 1264101, available at: http://ssrn.com/abstract=1264101, Retrieved on 7 August, 2010.

Pickering J., Aisbitt S., Gray S.J. and Morris R. (2008) "The Costs and Benefits of IFRS from a Corporate Perspective: Evidence from the Implementation Experience in Australia" 50th Annual Meeting Academy of International Business (AIB), Milan, Italy, 3rd July 2008.

Tsalavoutal, L., Andre P. and Evans, L. (2008), "Transition to IFRS and Value Relevance in A Small but Developed Market: A Look at Greek Evidence", available at: http://ssrn.com /abstract = 1286474, Retrieved on 15 August, 2010.

Callao, S., Ferrer, C., Jarne, J. I., and Lainez, J. A. (2009), "The Impact of IFRS on the European Union: Is It related to the Accounting Tradition of the Countries?" *Journal of Applied Accounting Research*, Vol. 10, Issue 1, pp. 33-35.

Lantto, A.M. and Sahlström, P. (2009), "Impact of International Financial Reporting Standard Adoption on Key Financial Ratios", *Accounting and Finance*, Vol. 49, pp. 341–361.

Stent,W., Bradbury M. and Hooks, J. (2010), "IFRS in New Zealand: Effects on Financial Statements and Ratios", *Pacific accounting Review*, Vol. 22, No. 2, pp. 92-107.

Table – 1 Descriptive Statistics of Financial Ratios

Ratios based on UK GAAP	*Mean*	*Median*	*SD*	*Skewness*	*Kurtosis*	*Minimum*	*Maximum*
CR	1.669	1.339	1.877	5.425	34.573	0.403	13.731
QR	1.362	0.985	1.869	5.740	37.409	0.000	13.599
DEBT/EQUITY	1.017	0.336	3.753	5.943	39.333	-2.384	25.872
PROPRIETARY	0.415	0.498	0.330	-1.893	5.752	-1.002	0.906
G/P	30.103	28.704	24.960	0.459	-0.362	-14.158	94.683
N/P	-1.852	3.738	43.501	-6.068	40.439	-290.039	54.231
ROCE	0.134	0.079	0.299	2.157	12.283	-0.760	1.607
ROE	0.092	0.068	0.300	0.487	3.689	-0.760	1.121
ROI	0.035	0.035	0.125	-2.841	14.941	-0.626	0.283
Interest coverage	16.164	5.108	125.230	-0.593	17.568	-580.333	542.000
WCT	36.424	0.174	237.517	6.963	48.645	-27.122	1662.331
TAT	0.707	0.221	1.230	2.343	4.832	0.000	5.062
Ratios based on IFRS							
CR	1.693	1.363	1.876	5.160	31.959	0.329	13.532
QR	1.382	0.950	1.850	5.627	36.277	0.000	13.402

Ratios based on UK GAAP	*Mean*	*Median*	*SD*	*Skewness*	*Kurtosis*	*Minimum*	*Maximum*
DEBT/EQUITY	-0.060	0.241	4.156	-6.755	47.788	-28.872	3.937
PROPRIETARY	6.710	0.539	14.646	2.418	4.920	-0.018	56.252
G/P	23.929	16.160	26.669	0.760	-0.221	-21.086	94.683
N/P	-3.229	1.360	53.159	-3.306	19.587	-292.070	153.518
ROCE	0.156	0.073	0.672	4.243	24.815	-1.257	4.114
ROE	0.060	0.067	0.338	-0.830	6.303	-1.199	1.178
ROI	1.537	0.083	3.108	1.914	3.420	-3.000	12.471
Interest coverage	15.969	2.792	129.200	-0.633	16.000	-583.833	533.000
WCT	36.310	0.017	253.318	6.974	48.757	-77.385	1771.314
TAT	0.848	0.341	1.236	2.149	4.151	0.000	5.000
Difference between IFRS and UK GAAP based ratio							
CR	0.023	0.000	0.180	2.004	6.688	-0.332	0.756
QR	0.020	0.000	0.130	0.838	3.179	-0.331	0.472
DEBT/EQUITY	-1.077	0.002	5.477	-4.878	24.667	-32.263	2.491
PROPRIETARY	6.167	0.003	14.611	2.439	5.025	-0.530	55.651
G/P	-5.220	0.000	13.958	-2.429	5.495	-56.844	13.568
N/P	-1.376	0.001	30.128	0.192	20.061	-141.232	144.980
ROCE	0.022	0.002	0.753	1.876	17.530	-2.864	3.843
ROE	-0.032	-0.001	0.315	-1.763	9.285	-1.417	0.799
ROI	1.503	0.017	3.088	1.942	3.501	-2.834	12.439
Interest coverage	-0.618	-0.217	7.575	-0.140	5.462	-28.729	23.898
WCT	-0.107	0.000	24.167	-0.160	14.509	-91.585	108.983
TAT	0.132	0.000	0.441	3.386	12.598	-0.262	2.318

CR (Current Ratio), QR (Quick Ratio), G/P (Gross Profit Ratio), N/P (Net Profit Ratio), ROCE (Return on Capital Employed), ROE (Return on Equity), ROI (Return on Investment), WCT (Working Capital Turnover Ratio), TAT (Total Asset Turnover Ratio).

Table – 2: Comparative Analysis of Ratios Based on Median

Ratios	*UK*	*IFRS*	*Difference*	*p1*	*p2*
CR	1.538	1.585	0.000	0.933	0.766
QR	1.126	1.166	0.000	0.414	1.000
DEBT/EQUITY	0.209	0.340	0.002	0.537	0.302
PROPRIETARY	0.505	0.498	0.003	0.186	0.480
G/P	30.300	30.582	0.000	0.021*	0.248
N/P	2.775	4.137	0.001	0.754	0.888
ROCE	0.052	0.071	0.002	0.978	0.779
ROE	0.051	0.068	-0.001	0.719	0.890
ROI	0.025	0.036	0.017	0.000*	0.002*
Interest coverage	5.065	5.804	-0.217	0.375	0.651
WCT	0.174	0.100	0.000	0.875	0.868
TAT	0.244	0.233	0.000	0.986	0.123

* indicate significant at 5% level.p1, probability of Wilcoxon signed-rank statistics; p2, probability of sign rank statistics; CR (current ratio), QR (quick ratio), G/P (gross profit ratio), N/P (net profit ratio), ROCE (return on capital employed), ROE (return on equity), ROI (return on investment), WCT (working capital turnover ratios), TAT (total asset turnover ratio).

Table -3: Comparative Analyses of Financial Statement Items Based on Median

Financial Statement items	*Uk*	*IFRS*	*Difference*	*p1*	*p2*
Current assets	48449.5	48881.5	0	0.325	0.458
Current liabilities	31211.5	34665.5	0	0.114	1.000
Quick assets	42800	42800	0	0.982	1.000
Debt	7831	17405	1753	0.000*	0.000*
Equity	30570	32202.5	141	0.799	0.332
Total assets	106147.5	108385	1918	0.000*	0.000*
Working capital	5448.5	5285.5	0	0.600	0.766
Gross profit	30592	30828	0	0.601	0.503
Sales	189403	163374	334.5	0.004*	0.004*
Net profit	2302	4330	0	0.006*	0.012*
Interest	1092	1198	1527	0.004*	0.054
Capital employed	45201	60763	167.5	0.000*	0.001*
EBT	3656	6207	0	0.006*	0.037
Cost of goods sold	21497.5	20012	0	0.163	0.049

* indicate significant at 5% level.p1, probability of Wilcoxon signed-rank statistics; p2, probability of sign rank statistics;

Table - 4: Positive and Negative Percentage Change in the Value of Equity

Classes (percentage)	*No. of Companies (Positive change)*	*No. of Companies (Negative change)*
0-5	15	6
5-10	5	2
10-30	5	6
30-100	1	5
100-200	2	1
200-1500	4	0

Table -5: Positive and Negative Percentage Change in the Value of Capital Employed

Classes (percentage)	*No. of Companies (Positive change)*	*No. of Companies (Negative change)*
0-5	13	8
5-10	9	2
10-30	8	1
30-100	7	2
100-300	0	1

Table-6: Positive and Negative Percentage Change in the Value of Total Assets

Classes (percentage)	*No. of Companies (Positive change)*	*No. of Companies (Negative change)*
0-5	26	4
5-10	10	3
10-30	3	2
30-100	2	0

Table – 7: Positive and Negative Percentage Change in the Value of Net Profit

Classes (percentage)	*No. of Companies (Positive change)*	*No. of Companies (Negative change)*
0-5	8	6
5-10	1	2
10-30	7	0
30-100	10	4
100-200	4	2
200-500	4	0
500-2000	1	0

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