

**THE ECONOMIC CONSEQUENCES OF IFRS ADOPTION:
EVIDENCE FROM NEW ZEALAND**

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Noor Houqe, Reza Monem & Tony van Zijl

Correspondence to: Noor Houqe
Email: Noor.Houqe @vuw.ac.nz

*Centre for Accounting, Governance and Taxation Research
School of Accounting and Commercial Law
Victoria University of Wellington
PO Box 600, Wellington, NEW ZEALAND*

Tel: + 64 4 463 5078
Fax: + 64 4 463 5076
Website: <http://www.victoria.ac.nz/sacl/cagtr/>

The Economic Consequences of IFRS Adoption: Evidence from New Zealand

Nurul Houqe
School of Accounting & Commercial Law
Victoria Business School
Victoria University of Wellington

Reza Monem
Griffith Business School
Griffith University, Australia

Tony van Zijl
School of Accounting & Commercial Law
Victoria Business School
Victoria University of Wellington

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The Economic Consequences of IFRS adoption: Evidence from New Zealand

Abstract

This paper investigates the economic consequences of adoption of IFRS for reporting by New Zealand listed companies as indicated by the effect on the cost of equity capital. We analyze a sample of 290 firm year observations on New Zealand listed companies over the periods 1998-2002 and 2009-2013. First, we estimate the cost of equity capital by use of the modified price-earnings-growth (modified-PEG) ratio model. We then regress this estimated cost of equity on a set of firm-specific variables likely to determine a firm's cost of equity. The effect of IFRS adoption on the cost of equity is captured by a dummy variable and we include year-effects to control for variation in the underlying risk-free rate (including inflation) across time. We find that there is a significant negative association between IFRS adoption and the cost of equity capital. These results are robust to several variations in model specification and sample composition.

This is the first study to provide empirical evidence on the impact of adoption of IFRS on the cost of equity capital of New Zealand companies and is also motivated by the recent mixed evidence on the adoption of IFRS.

Keywords: IFRS adoption; Economic consequences, New Zealand; Cost of equity capital.

The Economic Consequences of IFRS adoption: Evidence from New Zealand

1. Introduction

This study investigates the economic consequences of adoption of International Financial Reporting Standards (IFRS) for reporting by New Zealand listed companies as indicated by the impact on the cost of equity capital.¹ The introduction of IFRS has many potential benefits. Such benefits include cross-border comparability of financial reports, increased reporting transparency, decreased information costs, reduced information asymmetry and consequent reduction in the cost of capital (Ball, 2006; Horton, Serafeim and Serafeim, 2008; Leuz and Verracchia, 2000; DeFond, Hu, Hung and Li, 2010).² With increasing globalisation, it is becoming more important for entities to present their financial results in a consistent and comparable manner. IFRS provide a uniform set of accounting standards which all entities adopting IFRS must comply with. Around 135 countries now require, permit the use of, or have a policy of convergence with IFRS. These include the countries of the European Union, Australia, South Africa, Singapore, Hong Kong, and New Zealand, and it seems certain that the number of countries adopting IFRS will continue to rise during the coming years.

The IASB aims to develop IFRS to provide “... a single set of high quality, understandable, enforceable, and globally accepted financial reporting standards, based on clearly articulated principles”³ for the preparation of “... financial statements that provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions”⁴. The New Zealand

¹ Throughout this paper, the term “IFRS” is used to refer to the complete set of International Accounting Standards, IFRS, and the interpretations of the standards.

² Leuz & Verracchia (2000) and Horton *et al.*, (2008) have demonstrated, through a test on information asymmetry, that IFRS adoption improves the quality of disclosures, resulting in reduced cost of capital.

³ Para 6(b) *Preface to IFRSs*, IASB 2015.

⁴ Para 9, IAS 1 *Presentation of Financial Statements*, IASB 2015.

Accounting Standards Review Board approved the adoption of New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) as the standards under which reporting listed companies must prepare their financial statements. This was mandatory for accounting periods beginning on or after 1 January 2007 but entities had the option of adopting early from 2005.

Proponents of IFRS argue that by adopting a common set of accounting standards, the comparability of financial statements worldwide should improve facilitating cross-border capital flows and therefore improving liquidity. Also, imposition of the disclosure requirements of IFRS should improve the information quality of companies, particularly those domiciled in countries where lower standards of disclosure were required under national generally accepted accounting principles (GAAP). With reduced information asymmetry, investors are better able to monitor managerial behaviour and thus demand a lower premium for risk. If these arguments hold, mandatory IFRS adoption should have a favourable impact on the cost of equity capital (Lee, Walker and Christensen, 2008, p.5).

The quality of financial reporting is influenced not just by accounting standards but also by firm- and country-level investor protection (Leuz, Dhanajay and Wysocki, 2003). In a country with strong investor protection, such as New Zealand, strong investor protection is a sufficient condition to provide more comparable and comprehensive information (Hope, Jin and Kang, 2006). Hence, the incremental investment required by firms in implementing the IFRS would be minimal. This indirectly should increase the net benefit from IFRS adoption.

Although IFRS adoption has been mandatory in New Zealand since 2007 and early adoption was allowed from 2005, companies may differ in their costs of compliance with IFRS requirements and the degree to which they are dependent on new equity financing. “Despite mandatory adoption, companies with little to gain from IFRS may choose to take advantage of entrenched flexibility in IFRS implementation and ‘box-tick’ their way through the process

with a minimum degree of compliance. On the other hand, some companies, with relatively high reliance on the stock market as a source of finance and relatively lower costs of compliance with IFRS disclosure requirements, may choose to comply willingly with IFRS” (Lee et al., 2008, p.5). Thus in New Zealand, we would expect to see the greatest impact of IFRS adoption on companies where equity financing dominates.

This is the first study to provide empirical evidence on the impact of the introduction of IFRS on the cost of equity capital of New Zealand companies. This study is motivated by the recent mixed evidence on the adoption of IFRS. Advocates of IFRS underline the higher quality and improved comparability from application of the standards while critics of IFRS question the superiority of the standards (Barth, Landsman and Lang, 2008). Moreover, concerns have been raised regarding cross-country studies of IFRS adoption. As Miller (2004) notes, cross-country studies can suffer from limited sample sizes that do not accurately represent a country’s corporate sector, display endogeneity of variables at the country level, and may omit strongly correlated variables. Miller (2004) calls for accounting research to be conducted at a country-specific or region-specific level that provides a more focused investigation. Miller (2004, p. 266) argues that a “more focused approach would free authors from needing variables available across a wide range of countries, allowing variables to be designed that more cleanly capture the construct being measured”. The criticism of the cross-country research approach made by Miller (2004) is one of the key motivations for the conduct of the present study research at a country-specific level. This study is also motivated by prior research highlighting that “the benefits of IFRS adoption may come from other sources such as the enhanced comparability of financial statements of NZ companies with those in other parts of the world, lower cost of capital, and the global understanding of reporting under IFRS” (Kabir, Laswad and Islam, 2010, p. 355).

Using a sample of 290 firm year observations on New Zealand listed companies over the period 1998-2002 and 2009-2013 respectively, we find that there is a significant negative association between IFRS adoption and the cost of equity capital. The results highlight the importance of IFRS adoption as a vehicle by which New Zealand has been able to make its capital markets more attractive to investors.

The rest of the paper is organized as follows. Section 2 begins with estimation of the ex-ante cost of equity capital. Section 3 sets out the theoretical framework and hypothesis development. Section 4 describes the research design. Section 5 reports the sample selection procedure and the results of the study, including a number of robustness tests. Section 6 provides the conclusion.

2. Estimating the cost of equity capital

To estimate the cost of equity capital, we utilize the modified price-earnings-growth (modified-PEG) ratio model as proposed by Easton (2004). The modification of the standard PEG ratio model involves the inclusion of one-year-ahead forecast dividend per share in the model. Botosan and Plumlee (2005)⁵ conclude that the estimates from the modified-PEG ratio model provides the best measure of the cost of equity capital in a strong investor protection country like the USA because it dominates the other alternatives in the sense that it is consistently and predictably related to various risk measures such as information risk, leverage risk, residual risk, market risk, and growth. Thus, given that New Zealand has strong investor protection, we use the modified-PEG ratio model. The model can be stated as:

$$K_e = (eps_{t+2} - eps_{t+1} + K_e * Div_{t+1}) / P_t \dots\dots\dots (1)$$

⁵ Botosan and Plumlee (2005) also report that the dividend discount method, introduced in Botosan and Plumlee (2002), is another appropriate measure of the *ex ante* cost of equity capital. However, the necessary data is not available for New Zealand companies.

where K_e is the cost of equity capital, eps_{t+1} is the one-year ahead forecast earnings per share, eps_{t+2} is the two-year ahead forecast earnings per share, Div_{t+1} is the one year ahead forecast dividend, and P_t is the fiscal year-end price per share.

3. Theoretical framework and hypothesis development

Kirvogorsky, Chang and Black, (2010) observe that there is a high cost associated with the adoption of IFRS. However, Bradbury and van Zijl (2006) suggest that firm size is an important factor impacting on IFRS adoption. This is due to larger firms having greater ability to absorb the costs of adoption and because the various advantages of IFRS adoption would outweigh the disadvantages. Several studies (e.g., Dumontier and Raffournier, 1998; Affes and Callimaci, 2007) have observed a positive relationship between firm size and early IFRS adoption. While the initial cost of implementing IFRS could be significant in terms of staff training and IT support, the conversion could ultimately result in a reduction in the costs of capital and financial reporting (IASB, 2011). It is therefore appropriate to distinguish between firms on the basis of size in investigating the effect of IFRS adoption.

“IFRS adoption has resulted in winners and losers. Rather than portraying IFRS as a uniformly good thing or a uniformly bad thing, it is important to recognize that some firms gain and some firms lose from complex, mandatory accounting changes such as IFRS” (Christensen, Lee and Walker, 2008, p. 375). Trying to determine any general view on what the economic impacts of adopting IFRS is near impossible, because there are so many variations and subtleties within different firms, industries and countries. Further, country-level implementation of IFRS has the potential to redistribute wealth within the country through differential impacts on the cost of capital (Christensen *et al.*, 2008).

Florou and Kosi (2009, p.35) argue that “IFRS can bring benefits to firms and capital providers through improved information quality and enhanced information comparability”. Specifically, it is expected that the cost of capital will be reduced after the adoption of IFRS.

This is because it is likely that there will be greater transparency and comparability of financial information available to those considering providing capital to a firm. This transparency allows better judgments to be made about the firm; in particular, prospective investors can more accurately assess the risk of providing capital. In most cases this would result in a lower estimate of risk and therefore a lower premium being applied in providing capital (Li, 2010).

The reduced cost of capital is probably the most significant impact of IFRS adoption documented in the literature. This is expected as risk is a large factor in the capital market. Capital market participants will have more trust in corporate reporting, when the quality of accounting information is higher, and therefore, will demand lower premium for risk in capital market transactions. Shi and Kim (2007) argue that the IFRS adopters benefit from greater and better disclosures via IFRS by having a lower cost of raising capital from equity markets.

However, Florou and Kosi (2009, p.34-35) place a caveat on this reduced cost of capital when they say “IFRS has positive economic consequences ... but only if the country institutions are strong.” Hail, Leuz and Wysocki (2010, p.386) state that IFRS, due to the “high-quality and more comparable corporate reporting practices”, leads to “greater market liquidity, a lower cost of capital, and a better allocation of capital”. The greater market liquidity is corroborated by Daske, Hail, Leuz and Verdi (2008, p.1085) when they say that “market liquidity increases around the time of the introduction of IFRS”. Within the European Union, Chiapello and Medjad (2008) put this down to increased efficiency within the member economies, due to the greater comparability of financial information across the member countries.

“As a result of the interdependence between accounting standards and the country’s institutional setting and firms’ incentives, the economic consequences of changing accounting systems may vary across countries” (Horton *et al.*, 2008, p. 676). Although the literature is not able to measure precisely what the economic impact of adopting IFRS is, there is a broad

consensus that firm-, industry- and country-specific factors have a strong role in determining the economic impacts of adopting IFRS. The higher the quality and the more comparable accounting standards are, the greater should be the net economic gain.

Based on these arguments, we propose the following research hypothesis:

Hypothesis 1: Cost of equity capital of New Zealand companies is negatively associated with IFRS adoption.

4. Research design

To test the impact of IFRS adoption on the cost of equity capital of New Zealand listed companies, we apply the following regression equation:

$$K_{eit} = \beta_0 + \beta_1 IFRS_{it} + \beta_2 Ln Assets_{it} + \beta_3 MB_{it} + \beta_4 Beta_{it} + Year Effects + e_{it} \quad (2)$$

where:

K_{eit} = is the cost of equity capital for firm i in year t .

$IFRS_{it}$ = takes the value of 1 for firm i for the years 2009 to 2013 and 0 otherwise.

$LnAssets_i$ = natural log of current year total assets for firm i in year t .

MB_{it} = the ratio of the market value of equity to the book value of equity for firm i in year t .

$Beta$ = the systematic risk of firm i in year t .

$Year effects$ = a vector of dummy variables indicating year.

The set of control variables included in Equation (2) have been identified in the prior literature as being relevant to a firm's cost of equity capital. $LnAssets$ is a proxy for firm size (measured as the natural log of current year total assets) and is included because larger firms appear to gain greater advantages from adoption of IFRS and have typically been found to have a lower cost of equity capital, possibly due to lower perceived risk (Botosan and Plumlee, 2005, Bachoo, Tan and Wilson, 2013). Market to book ratio (MB) is a proxy for firm growth and is expected to have a negative relationship with the cost of equity capital. Systematic risk ($Beta$)

is also included in the model following from prior literature (Botosan and Plumlee, 2002, Francis *et al.*, 2004, Azizkhani, Monroe and Shailer, 2010, Artiach and Clarkson, 2011, and Bachoo, Tan and Wilson, 2013). On the basis of the CAPM, beta as the measure of systematic risk, is expected to have a positive relationship with cost of equity capital. Year dummies control for variation in the underlying risk-free rate (including inflation) across time.

5. Sample selection and results

Financial data on the sample firms were collected from the World Scope and I/B/E/S⁶ database for the period 1998-2002 and 2009-2013 and beta was obtained from the Bloomberg database. By taking five years of data up to 2002 and five years from 2009 we abstract from the differential effects of firms early voluntary adoption from 2005 and the later mandatory adoption by other firms from 2007. The sample consists of 29 companies listed on the New Zealand Stock Exchange (NZX). Table 1 Panel A summarises the sample selection procedure. The selection proceeded as follows. First, we excluded mutual funds, financial companies, overseas companies, companies that prepare their financial statements using foreign GAAP, or use foreign currencies, or where accounting standards could not be determined. Second, companies were excluded if there was no analyst following for one and two years ahead or if there was missing data. Finally, we winsorised our sample at 1st and 99th percentiles of the distribution of estimated cost of equity capital. This resulted in a final sample that contains 290 observations on 29 industrial firms.

Table 1 Panel B reports the sample firms.

Table 1 Panel C reports the distribution of sample firms by industry sector and industry cost of capital (pre IFRS (NZ GAAP) vs. post IFRS). The largest concentration of observations

⁶ Data on the sample firms were collected from the World Scope data base (<http://www.worldscope.com>) held at the School of Accounting and Business Information Systems, Australia National University, Canberra, Australia.

was in the consumer and property sector with 50 firms-years followed by energy/energy processing and ports sector with 30 firm-years. The lowest concentration was in Building materials & construction, Forestry & forest products, Investment, Leisure and Tourism, Mining , Other services, and Transport.

[Insert Table 1]

Table 2 Panel A provides descriptive statistics on the cost of equity capital and on all the independent variables. It is evident that the sample firms experienced a lower cost of capital after IFRS adoption (0.0800 vs 0.0931). The mean cost of equity capital for the entire sample is 0.0865. Firm size (*LnAssets*) shows considerable variation with a mean of 5.7181 and standard deviation of 1.6046. The market to book ratio (*MB*) and *Beta* have the means of 1.8044 and 0.8170, respectively.

Table 2 Panel B shows that the cost of equity capital declined after IFRS adoption as the correlation of cost of capital with IFRS adoption is negative ($r = -0.261$) and significant (p -value = 0.001).

[Insert Table 2]

5.1. Main analysis

Table 3 shows the results of estimation of the regression equation for IFRS adoption. Model 1 shows the regression excluding the IFRS indicator. Comparison with Model 2, which includes the IFRS indicator, shows that the adoption of IFRS resulted in a lower cost of equity capital (two tailed p -value <0.000). The coefficient estimate on IFRS at 0.28% is small but in relation to the mean observed cost of capital it is plausible and certainly not trivial.

The control variables all have the expected effects. *LnAssets* has a negative significant coefficient (two tailed p -value <0.001), for both models. The market to book ratio, *MB ratio*, is significant in both sets and has a negative impact on the cost of capital. Systematic risk (*Beta*)

is significant and positive for both sets models, that is, the higher the systematic risk the higher the cost of equity capital.

[Insert Table 3]

The apparent reduced cost of capital following adoption of IFRS is consistent with reduced information risk following IFRS adoption. Reduced information risk presumably resulted from more precise and greater information disclosed in relation to asset and liability valuation, and reporting of earnings and shareholders' equity. For example, some firms reported large increases in liabilities the year after mandatory adoption in 2007 (e.g., Kiwi Income Property Trust, 29% increase). Further, some other firms (e.g., Sky Network) recorded significant changes in equity in 2008 as a consequence of the new reporting standards. Yet other firms recorded large changes in earnings due to changes in accounting standards (e.g., Kiwi Income Property Trust's earnings decreased by 22%). Overall, all such changes as a result of IFRS adoption could be considered to have reduced NZ firms' information risk and thereby investors demanding a lower cost of capital.

5.2 Robustness tests

5.2.1. Alternative measures of the cost of equity capital

The Capital Asset Pricing Model (CAPM) is widely used to estimate the cost of equity capital for investment purposes and for valuation in a regulatory context. The CAPM takes into account the asset's sensitivity to systematic risk, represented by beta, as well as the expected return of the market and the risk free rate of return. From the equity beta, investors can understand that a portfolio of high-beta stocks will move more than the market, and a portfolio of low-beta stocks will move less than the market. For New Zealand listed companies both PricewaterhouseCoopers (PwC) and Bloomberg provide estimates of the cost of equity capital using the CAPM.⁷ To test the robustness of our results using the

⁷ Details of the PwC estimation method are available at:

<http://www.pwc.co.nz/appreciating-value/edition-5-june-2014-survey-of-ipo-activity-in-nz-market/>

Details of the Bloomberg estimation method are available at: <http://www.bloomberg.com/bcause/#home>

modified PEG method of estimation of the cost of equity capital, we re-ran the regression equation (2) using firstly the PwC estimates and secondly the Bloomberg estimates. The results are reported in Table 4 and are qualitatively similar to those obtained using the modified PEG method thus supporting adoption of IFRS being associated with a lower cost of equity capital.

5.2.2. Excluding bottom quartile K_e firms

Dhaliwal *et al.*, (2009) note that firms with a low cost of equity capital are less likely to benefit from a switch to higher quality reporting. We therefore re-estimated regression equation (2) using a sample which excluded the bottom quartile of firms with the lowest cost of equity capital. The results (not reported) are also qualitatively similar to our main results.⁸

6. Conclusions

This study contributes to the debate on the benefits of IFRS adoption by examining the economic consequence of IFRS adoption as indicated by a decrease in the cost of capital of New Zealand listed companies. Using a sample of 290 firm year observations on 29 New Zealand listed companies over the period 1998-2002 and 2009-2013 respectively, we find that there is a significant negative association between IFRS adoption and the cost of equity capital. The results are robust to variations in model specification and sample composition. Our results are consistent with Daske *et al.*, (2008), Armstrong, Barth, Jagolinzer and Riedl (2010), Li (2010), and Palea (2010).

We acknowledge that this study is subject to limitations. First, our sample size is relatively small, which reflects the small size of the NZ corporate sector. Thus, our results are not directly comparable to those in Li (2010). Second, as is common in empirical research, the results are subject to possible bias as a result of omitted unknown but relevant variables.

⁸ The results are available from the corresponding author on request.

Nevertheless, our study provides the first empirical evidence of the impact of IFRS adoption on the cost of equity of New Zealand firms.

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Table 1**Panel A: Sample selection procedure**

	Firms	Firm-years
Firms covered by World scope and I/B/E/S database 1998-2002, 2009-2013	144	
-Financial institutions, funds, overseas companies	38	
-Firms whose financial statements were prepared using foreign GAAP	4	
-Firms whose financial statements are using foreign currency	3	
-Firms whose accounting standards could not be determined	<u>1</u>	<u>(46)</u>
		98
-Firm with missing forecast data		<u>(69)</u>
Study sample	29	290

Panel B: Sample Company

<i>SL No.</i>	<i>Company</i>	<i>SL No.</i>	<i>Company</i>
1	Abano Healthcare Group limited	15	Northland Port Corporation Limited
2	Air NZ Limited	16	NPT Limited
3	Auckland International Airport Limited	17	PGG Wrightstown Limited
4	CDL Investments NZL	18	Property for Industry Limited
5	Colonial Motor Company Limited	19	Restaurant Brands NZ Limited
6	EBOS Group Limited	20	Sanford Ltd
7	Fisher and Paykel Healthcare Corporation Ltd	21	Selags Corporation Limited
8	Goodman Property trust	22	Sky Network Television Limited
9	Horizon Energy Distribution Limited	23	Steel & Tube Holdings Limited
10	Infratil Limited	24	Spark NZ Limited
11	Kirkcaldie & Steins Limited	25	Tenon Limited
12	Kiwi Income Property Trust	26	Tourism Holdings Limited
13	Lyttelton Port Company Limited	27	Trust Power limited
14	NewZealand Oil and Gas Limited	28	Turners Auction Limited
		29	Warehouse Group Limited

Panel C: Sample firm year observations by industries

Industries	Sample firms	Firm years	%	Pre IFRS K_e	Post IFRS K_e
Agriculture	2	20	6.9	0.071	0.070
Building Materials & Construction	1	10	3.4	0.105	0.095
Consumer	5	50	17.3	0.074	0.070
Energy / Energy Processing	3	30	10.3	0.081	0.068
Forestry & Forest Products	1	10	3.4	0.082	0.070
Intermediate durables	2	20	6.9	0.084	0.069
Investment	1	10	3.4	0.170	0.148
Leisure & Tourism	1	10	3.4	0.115	0.092
Media & Communications	2	20	6.9	0.105	0.090
Mining	1	10	3.4	0.094	0.071
Other services	1	10	3.4	0.084	0.069
Ports	3	30	10.3	0.074	0.069
Property	5	50	17.3	0.071	0.064
Transport	1	10	3.4	0.094	0.075
Total (Mean)	29	290	100	0.093	0.080

Table 2**Panel A: Descriptive statistics - (1998-2002) and (2009-2013)**

Variables	All firms year			Post IFRS firm-years			Pre IFRS Firm-years			<i>t</i> -statistics for difference in means
	n	Mean	S.D.	n	Mean	S.D.	n	Mean	S.D.	
K_e	290	0.0865	0.0288	145	0.0800	0.0227	145	0.0931	0.0313	-7.035***
<i>IFRS</i>	290	0.5000	0.5040	145			145			
<i>Ln Assets</i>	290	5.7181	1.6046	145	6.0850	1.5461	145	5.3513	1.6074	3.930***
<i>MB</i>	290	1.8044	1.5329	145	1.3622	0.8353	145	2.2466	1.9489	-3.076***
<i>Beta</i>	290	0.8170	0.4748	145	0.7897	0.3904	145	0.8443	0.4500	-1.140

K_e is the cost of equity of firm i in year t measured by modified-PEG model (Easton, 2004). *IFRS* takes the value of 1 for the years 2009 to 2013 and 0 otherwise. *Ln Assets* is the log of total assets of firm i in year t . *MB* is the market to book ratio of firm i in year t . *Beta* measures the relationship between the volatility of the stock and the volatility of the market for firm i in year t .

***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively.

Panel B: Correlation analysis (1998-2002) and (2009-2013)

Variables	K_e	<i>IFRS</i>	<i>Ln Assets</i>	<i>MB</i>	<i>Beta</i>
K_e	1				
<i>IFRS</i>	-0.261*** (0.001)	1			
<i>Ln Assets</i>	-0.260* (0.030)	0.187** (0.020)	1		
<i>MB</i>	-0.066 (0.421)	0.246*** (0.002)	0.102 (0.213)	1	
<i>Beta</i>	0.950*** (0.000)	-0.032 (0.691)	-0.233*** (0.000)	-0.002 (0.984)	1

Note: p-values are in parenthesis.

K_e is the cost of equity of firm i in year t measured by modified-PEG model (Easton, 2004). *IFRS* takes the value of 1 for the years 2009 to 2013 and 0 otherwise. *Ln Assets* is the log of total assets of firm i in year t . *MB* is the market to book ratio of firm i in year t . *Beta* measures the relationship between the volatility of the stock and the volatility of the market for firm i in year t .

***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 3

Results of multivariate regressions of cost of equity capital on IFRS adoption and other determinants

$$K_{eit} = \beta_0 + \beta_1 IFRS_{it} + \beta_2 Ln Assets_{it} + \beta_3 MB_{it} + \beta_4 Beta_{it} + Year Effects \dots \dots \dots (2)$$

Regressor	Model 1	Model 2
	Estimates (p value)	Estimates (p value)
<i>Intercept</i>	0.1061*** (0.000)	0.1063*** (0.000)
<i>IFRS</i>		-0.0028*** (0.000)
<i>Ln Assets</i>	-0.0034*** (0.001)	-0.0042*** (0.001)
<i>MB</i>	-0.0063*** (0.002)	-0.0073*** (0.010)
<i>Beta</i>	0.0072*** (0.000)	0.0079*** (0.000)
<i>Year Effects</i>	Yes	Yes
Adjusted R²	0.384	0.423
<i>N</i>	290	290

Note: p-values are in parenthesis.

K_e is the cost of equity of firm i in year t measured by modified-PEG model (Easton, 2004). *IFRS* takes the value of 1 for the years 2009 to 2013 and 0 otherwise. *Ln Assets* is the log of total assets of firm i in year t . *MB* is the market to book ratio of firm i in year t . *Beta* measures the relationship between the volatility of the stock and the volatility of the market for firm i in year t . *Year effects* is a vector of dummy variables indicating year.

***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively.

Robustness Tests

Table 4

Results of multivariate regressions of PwC and Bloomberg estimates of the cost of equity capital on IFRS adoption and other determinants

$$PwCK_e = \beta_0 + \beta_1 IFRS + \beta_2 Ln Assets + \beta_3 MB + \beta_4 Beta + Year Effects$$

$$BLOMK_e = \beta_0 + \beta_1 IFRS + \beta_2 Ln Assets + \beta_3 MB + \beta_4 Beta_i + Year Effects$$

Regressor	Model 1	Model 2
	<i>Estimates</i>	<i>Estimates</i>
	<i>(p value)</i>	<i>(p value)</i>
<i>Intercept</i>	0.1601*** (0.000)	0.1064*** (0.000)
<i>IFRS</i>	-0.0016*** (0.000)	-0.0024*** (0.007)
<i>Ln Assets</i>	-0.0042*** (0.001)	-0.0052*** (0.000)
<i>MB</i>	-0.0054*** (0.002)	-0.001 (0.447)
<i>Beta</i>	0.0062*** (0.000)	0.0081*** (0.000)
<i>Year Effects</i>	Yes	Yes
<i>Adjusted R²</i>	0.426	0.44
<i>N</i>	290	290

Note: p-values are in parenthesis.

$PwCK_e$ is the cost of equity of firm i in year t measured by Price Waterhouse Coopers, $BLOMK_e$ is the cost of equity of firm i in year t measured by Bloomberg. $IFRS$ takes the value of 1 for the years 2009 to 2013 and 0 otherwise. $Ln Assets$ is the log of total assets of firm i in year t . MB is the market to book ratio of firm i in year t . $Beta$ measures the relationship between the volatility of the stock and the volatility of the market for firm i in year t . $Year effects$ is a vector of dummy variables indicating year.

***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively.