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An Examination Of The Effect On Debt/Equity Ratios With The Adoption Of IAS 19: Employee Benefits

Barbara Lynch*

A number of countries have adopted the International Financial Reporting Standards (IFRS) as a means of harmonising financial statements. .This paper examines the effect of the adoption of IFRS, relating to post employment benefits and its effects on debt/equity ratios. The adoption of the IFRS resulted in most companies reporting a substantial increase in liabilities, a decrease in shareholders' equity and a corresponding increase in debt/equity ratios.

Keywords: International Financial Reporting Standards, Post Employment Benefits.

Field of Research: Accounting

1. Introduction

This case study will examine the 2005 annual reports of a number of Australian and United Kingdom (UK) companies to determine the effect of the International Financial Reporting Standards (IFRS) on accounting for post employment benefits. The extent of disclosure will be considered as well as the degree of variation in the extent of disclosures. The accounting treatment for a post-employment benefit plan will be determined according to whether the plan is a defined contribution or a defined benefit plan (Deloitte 2005).

Australia and the UK have been selected for comparison because both countries have a long tradition of established stock exchanges and large public companies with widespread share ownership, and also have similar accounting professions and legal systems (Parker and Morris 2001). Both countries share the 1 January 2005 deadline for IFRS compliance, and all reporting entities in Australia and listed entities in the UK are required to ensure that from that date, their financial reporting practices comply with IFRS, which will result in changes in accounting practices in both countries. In the UK the equivalent IFRS is FRS 17 *Accounting for Retirement Benefits,* and in Australia the equivalent IFRS is AASB119 *Employee Benefits*.

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*Associate Lecturer, School of Accounting, Economics & Finance, Faculty of Business & Law, Deakin University, Warrnambool, Victoria, 3280, Australia. Email: barbara.lynch@deakin.edu.au

The process for the adoption of the IFRS by Australia was set in motion in 2002, when the Financial Reporting Council (FRC), the body responsible for the Australian accounting standard setting process, announced it had formalised its support for the adoption of the IFRS. Since then, the Australian Accounting Standards Board (AASB) has been implementing Australia's convergence to IFRS. The (FRC) expects that one of the advantages of adopting the IFRS will mean an increased ability to compare financial statements and reduce the costs of raising capital across borders. Although their adoption will not affect the cash flows or performance of the relevant companies, it may perhaps affect a company's capacity to allocate dividends and may also affect company share prices.

2. Literature Review

Harmonisation is defined as a process by which accounting moves away from a total diversity of practice (Roberts, Weetman and Gordon, 2005). Research suggests a number of benefits associated with harmonisation, such as the cost savings achieved by avoiding translation of accounting information (Brown and Tarca, 2001), a lower cost of capital for firms (Saudagaran and Meek 1997; Choi and Mueller 1992), and there is also evidence indicating that harmonisation is preferred by multinational corporations and major public auditing firms (Cook, 1989 and Choi and Levich, 1990).
Other research however, suggests that firms may have suboptimal financial reporting if faced with regulations that are not appropriate for their particular situation (Rahman, Perera and Ganesh, 2002). To date, substantial resources have been spent in attempts to increase harmonisation, in spite of the associated political and bureaucratic costs (Roberts, Salter and Kantor 1996; Brown and Tarca 2001).

3. Background

Australia

As the former colonial power in Australia, there are historical, economic, legal and cultural links between the UK and Australia, and as such, the UK has had a major influence on Australian accounting. Nair and Frank (1980) and Nobes and Parker (2004:66) classified them in the same group based on their financial reporting practices. Eddie (2005) also grouped Australia with the UK, however there is some evidence to suggest that the last twenty to thirty years has seen Australian accountants as moving away from the UK and towards the United States (Parker and Morris, 2001). Like the UK, Australia was also a founding member of the IASC, and Australian Generally Accepted Accounting Principles (GAAP) has tended not to diverge too far from US GAAP and UK GAAP (Nobes and Parker 2004).

The Australian Accounting Standards Board (AASB), Public Sector Accounting Standards Board (PSASB), Certified Practicing Accountants (CPA) Australia, The Institute of Chartered Accountants in Australia (ICAA), and the Group of 100 (a body comprising the chief financial offices or Australia's largest corporations) have supported the general principle of internationalisation of financial reporting requirements (Brown and Tarca 2001)[i]

UK

Major influences on UK corporate reporting have been company law and accounting standards. Gray (1988) classified UK accounting as displaying strong flexibility, strong optimism and strong transparency. Together with Australia and other countries, the UK was one of the founding members of the International Accounting Standards Committee (IASC). The aim of the IASC was 'to formulate and publish in the public interest accounting standards to be observed in the presentation of financial statements and to promote their worldwide acceptance and observance' (IASC 1992)[ii]

Nobes and Parker (2004) suggest that harmonisation is associated with transnational legislation originating from the European Union (EU)[iii], which itself was based on the philosophy of bringing about a closer union among the people of Europe (Roberts et al. 2005). These member states have increasingly influenced UK reporting practices, prior to which there was minimal direct foreign influence on financial reporting practices (Nobes and Parker 2004:140). In 2000, the EU proposed that all listed EU countries should be required to adopt International Accounting Standards (IAS) in preparing their consolidated financial statements. The objective was to ensure that published financial reports were of a high quality and a high degree of consistency was achieved (European Financial Reporting Advisory Group 2005: 2) Since 2002, the Accounting Standards Board (ASB) been preparing for the convergence of UK and International Financial Reporting Standards (Nobes and Parker 2004:147). The ASB's standards are known as Financial Reporting Standards (FRSs).

4. Adoption of IFRS

Wyatt, 1989, Meek and Saudagaran (1990) suggest that the adoption of IFRS will bring a number of benefits including the enabling of cross border comparisons between countries, reducing financial reporting costs for multi-national companies and the reduction of financial analysis costs, which will facilitate greater opportunities for investors to diversify and allow developing economies to attract foreign capital.

Credibility is given to the concept of international standards by the decision of more than 90 countries to use IFRS by 2005 (Tweedie 2004), however it remains to be seen whether its implementation will be relatively smooth, and how much time and resources will be invested in order to make the change. It is expected that the long-term benefits of reducing cost of consolidating the financial statements of overseas subsidiaries and having access to a greater pool of investors should be immediately apparent.

5. Employment Benefits

Post employment benefits are governed by IAS 19 *Employee Benefits*, the objective of which is to prescribe the accounting polices and disclosure practices for employee benefits, which are defined as all forms of consideration given by an enterprise in exchange for service rendered by employees. The principle underlying the requirements of the Standard is that the cost of providing employee benefits should

be recognised in the period in which the benefit is earned by the employee, rather than when it is paid or payable (IASB 2005).

Employee benefits such as wages and sick leave, profit sharing and bonus payments, post employment benefit plans, termination benefits and other long term benefits such as long service leave are covered by IAS 19, and the accounting for post employment benefit plans will be determined according to whether the plan is a defined contribution[iv] or a defined benefit plan[v]. The cost to be recognised by the company with a defined contribution plan is the contribution payable in exchange for services rendered by the employee during that period, while for defined benefit plan the accounting issues are more complicated, since the benefits to be paid are in the future, and are difficult to equate to current dollars. IAS 19 mandates that the amount recognised in the balance sheet should be the present value of the defined benefit obligation adjusted for unrecognised actuarial gains and losses and unrecognised past service cost, and reduced by the fair value of plan assets at the balance sheet date.

IAS 19 specifies that in the long term, actuarial gains and losses may offset one another and, as a result, such gains and losses are not required to be recognised immediately, however if the accumulated unrecognised actuarial gains and losses exceed 10% of the greater of the defined benefit obligation or the fair value of plan assets, a portion of that net gain or loss is required to be recognised immediately.

Accounting for defined benefit plans is therefore more complex since, under a defined benefit plan, the amount of benefit paid to an employee is pre-specified as a function of final salary and period of employment, and the employer bears the risk that these promised benefits will cost more than expected (actuarial risk) and the risk that invested plan assets will generate insufficient returns (investment risk).of the uncertainty associated with measuring accrued benefits and the issue of how superannuation expense should be measured and the extent to which superannuation plan assets and liabilities should be reflected in employers' accounts (Ang, Gallery and Sidhu 2000). In contrast, with a defined contribution plan, the sponsoring employer's obligation is limited to an agreed contribution rate and is therefore discharged when periodic contributions are made to the plan. The employee's benefits in the defined contribution plans are made up of contributions and investment earnings therein, so the employees bear the actuarial and investment risk.

Until the introduction of FRS 17, the standards in the UK in the 1990's in relation to post employment benefits, were in substantial disharmony with the IAS (Weetman 1998 cited in Nobes and Parker 2004), however the principal requirements of FRS 17 *Retirement Benefits* are similar to those of IAS 19 *Employee Benefits*, with the most significant difference being in the treatment of actuarial gains and losses, resulting in an expected increase in the volatility in pension funds and significant changes to debt/equity ratios. The impact of IAS 19 is therefore expected to be substantial.

As a result of the adoption of IAS 19, it is expected that companies in Australia will bring new superannuation liabilities onto their balance sheets, since, prior to the adoption of IAS 19, Australian companies were only required to provide disclosures

for the accrued benefits, the net market value of the plan assets and the difference between the two preceding items and vested benefits in relation to these defined benefit plans. It is therefore expected that the adoption of IAS 19 will result in a significant change in Australian accounting practices.

6. Hypothesis

With the adoption of the IFRS by Australia and the UK, it is expected that some companies in these countries will see an increase in debt to equity ratios and it is also expected that new liabilities will be brought onto company balance sheets.

7. Methodology

The annual reports of 15 Australian companies listed on the Australian Stock Exchange (ASX) and 15 UK entities (with the exception of the Bank of England) listed on London Stock Exchange (LSE) were selected for examination with the purpose of evaluating the effect of the IFRS adoption on accounting for post employment benefits (Appendix 1).

8. Results

8.1 Australian companies

Tables 1 and 2 set out the financial disclosures provided
Out of a total of 15 Australian company reports, only five provided details of the financial effect of the transition to IFRS, while 10 out of 15 Australian companies made no financial disclosure in regard to the effect of IFRS on post employment benefit plans. Other than Namoi Cotton Co-operative Ltd, who stated that they do not sponsor any defined benefit plan, it can be concluded that the effects of transition are not material for these 10 companies. Disclosures of accounting practices varied, with some companies explicitly disclosed the impact of IAS. The details are set out below:

8.1.1 BHP Billiton Ltd

This company is listed in both Australia and the UK, which means there are unique IFRS issues for the company. The company's 2005 annual report contains several pages of FRS 17 disclosures in relation to post employment benefits, and states that although FRS 17 disclosures are not required under Australian GAAP, they may be of interest to all shareholders. The report also states that there is a risk that IFRS as endorsed by the European Commission (EC) at 30 June may not be consistent with IFRS applicable in Australia and also that the AASB has approved IFRS based standards some of which mandate particular policies that are optional (and not applied uniformly by other entities) in the UK, there is therefore significant uncertainty as to the ultimate impact of IFRS on the Group's financial statements.

8.1.2 CSL Ltd

This company states that there would be no material impact on the parent entity's financial statement on the adoption of AASB 119 as well as some financial

disclosures, and it provides a brief statement that there will be possible volatility in future actuarial gains/losses taken to equity as well as details of defined benefit funds sponsored by the CSR group.

8.1.3 Amcor Ltd

This company states that for the financial years ended 30 June 2005, the consolidated entity expects to recognise an increase in defined benefit obligations under Australian International Financial Reporting Standards (AIFRS) of $25.2 million. Due to the amount of defined benefit obligation expense under Australian Generally Accepted Accounting Principles (AGAAP), the impact on net profit under AIFRS for the year ended 30 June 2005 is an increased expense of $10.4 million.

8.1.4 Mayne Group Ltd

This company states that the adjustment required as a result of the introduction of IFRS will result in the Group recognising a defined benefit liability of $1.768 million, a decrease to retained earnings of $1.768 million and a $0.323 million increase to the deferred tax asset. There is a statement that as the plans are closed to new members and do not have significant outstanding balances, no impact is anticipated under IFRS for the recognition of actuarial gains/losses in equity for defined benefits plans.

8.2 UK companies

Tables 1 and 2 set out the financial disclosures provided

8.2.1 Babcock International Group plc

This company states that the introduction of IFRS does not have a significant effect on the 2004/2005 earnings of the company although there is some redistribution between operating profit and interest.

8.2.2 Woolworths Group plc

This company provides a calculation of the Group pension scheme (a funded defined benefit scheme) in accordance with FRS 17.

8.2.3 Kingston Communications plc

This company states that in line with the experience of many other companies, the defined benefits schemes operated by the company are currently in deficit as measured by FRS 17. However, the company states that it views the funding of the schemes from a long term perspective and continues to meet the funding obligations set by qualified actuaries. A reconciliation to balance sheet is provided.

8.2.4 Carclo plc

This company states that they are considering options under IAS 19 to minimise volatility in the group's accounts.

8.2.5 National Grid Transco plc

This company states that the adoption of IFRS will have a significant impact on the Group's reported financial results, initially leading to a higher reported operating profit, profit before tax, profit for the year and earnings per share together with higher reported net assets. A reconciliation of operating profit, profit before tax, profit, earnings per share and net asset from UKGAAP to IFRS is provided.

8.2.6 The Bank of England plc

This company states that there are considerable uncertainties around pension fund valuations, the deficit in the defined benefit scheme has increased on an FRS 17 basis.

8.2.7 Somerfield plc

This company has adopted FRS 17 in full from 25 April 2004.

8.2.8 BT Group plc

This company states that with the adoption of IFRS an additional £75 million charge to operating profit and a net finance income of £198 under IFRS. A pension liability of £4,781 million (£ 3,347 million net of tax) would be recognised, offset by the reversal of provisions and other creditors of £ 44 million, and the pension prepayment on the UK GAAP balance sheet of £ 1,118 million. The tax effect of this reversal is £ 329 million. The net effect is a reduction in shareholders' funds of £ 4,092 million.

8.2.9 J Sainsbury plc and Electrocomponents plc

Both these companies state that they have adopted the transitional disclosure requirements of FRS 17.

Five out of 15 UK companies make no financial disclosure in regard to the effect of IFRS on post employment benefit plans, therefore it is concluded that the effects are not material.

9. Conclusion

Table 3 and Table 4 provide financial effects of the transition to defined benefit fund under the IFRS. It must be noted that the change in debt/equity ratios is only due to the change in a single accounting policy in relation to post employment benefits. Overall effects will depend on adjustments to other accounting policies, however it could be suggested that the effect is merely a change in accounting rather than underlying cash flows or performance nevertheless, there is no doubt there will be more volatility reflected in financial statements.

Three out of five Australian companies had an increase in debt/equity ratios as a result of the transition while nine out of ten UK companies had an increase in

debt/equity ratios. Generally the increase in UK debt/equity ratios was of a greater magnitude than the Australian companies, which could be due to some of the older UK companies having significant pension funds. The newer companies will have smaller pension funds and therefore the transition to IFRS might be expected to have fewer consequences in this regard. Lending contracts contain debt covenants that specify a certain percentage over which a company's debt/equity ratio must not exceed, therefore the increased debt/equity ratios will have implications for debt covenants, and a re-negotiation of debt and sale of assets may be required (Georgiou 2005). It would be useful to widen the sample of companies and also perhaps consider how companies manage this balance sheet volatility. Another avenue for further research would be to consider the IFRS impact on government financial statements.

Table 1
Companies with defined benefit fund IFRS disclosures

	Australia	**UK**
Disclosure provided	Amcor Ltd	Babcock Int. Group plc
	BHP Billiton Ltd	Bank of England
	CSL Ltd	BT Group plc
	CSR Ltd	Carclo plc
	Mayne Group Ltd	Electrocomponents plc
		J Sainsbury plc
		Kingston Com. plc
		National Grid Transco plc
		Somerfield plc
		Woolworths Group plc
No disclosure provided	AVJennings Homes Ltd	Artisan (UK) plc
	Blackmores Ltd	Northgate plc
	Colorado Group Ltd	Patientline plc
	Macquarie Bank Ltd	PayPoint plc
	McPhersons Ltd	Total Systems plc
	Namoi Cotton Co-op Ltd	
	Oakton Ltd	
	Sigma Ltd	
	United Group Ltd	
	Viagold Capital Ltd	

Table 2
Nature of defined benefit fund disclosures

	Australia	**UK**
Financial effects disclosed	Amcor Ltd	Babcock Int. Group plc
	BHP Billiton Ltd	Bank of England
	CSL Ltd	BT Group plc
	CSR Ltd	Carclo plc
	Mayne Group Ltd	Electrocomponents plc
		J Sainsbury plc
		Kingston Com. plc
		National Grid Transco plc
		Somerfield plc
		Woolworths Group plc

Table 3
Financial effect of transition to defined benefit fund IFRS -Australian companies

	% effect on total liabilities	% effect on shareholders' equity	Debt equity ratio before transition	Debt equity ratio after	% change in debt/equity
Amcor Ltd	+4.9	-6.2	1.27	1.42	+11.8
BHP B. Ltd	+7.07	-1.92	1.48	1.62	+9.46
CSL Ltd	-16.7	+2.7	.94	.89	-5.32
CSR Ltd	+1.6	-.7	.44	.45	+2.27
Mayne Ltd	+.09	-.06	.63	.63	-

Table 4

Financial effect of transition to defined benefit fund IFRS -UK companies

	% effect on total liabilities	% effect on shareholders' equity	Debt equity ratio before transition	Debt equity ratio after	% change in debt/equity
Babcock Int G plc	-.23	+.43	1.88	1.86	-1.06
Bank of England	+.98	-12.5	12.86	14.85	+15.47
BT Group plc	+14.72	-86.91	5.9	51.73	+776.8
Carclo plc	+29.58	-35.42	119.7	240	+100.5
Electrocomp. plc	+8.91	-8.74	.98	1.17	+73.47
J Sainsbury plc	+4.8	-7.76	1.6	1.8	+12.5
Kingston Com. plc	+6.24	-8.58	1.37	1.6	+16.69
National Grid plc	+4.08	-55.57	13.62	31.91	+134.30
Somerfield plc	+10	-14.65	1.46	1.9	+30.13
Woolworths Gp.plc	+10.6	-14.67	1.39	1.45	+4.32

References

Accounting Standards Board 2004 "UK Accounting Standards: A Strategy for Convergence with IFRS," Discussion Paper, ASB Publications, London.

Ang, N. Gallery, N and Sidhu, B 2000 "The Incentives of Australian Public Companies Lobbying Against Proposed Superannuation Accounting Standards," *Abacus,* Vol. 36, No. 1. pp.40-70.

Brown, P. and Tarca, A. 2001 "Politics, Processes and the Future of Australian Accounting Standards,". *Abacus*. Vol. 37 No. 3. pp.267-296.

Choi, F.D.S. and Levich, R.M. 1990. The Capital Market Effects of International Accounting Diversity Homewood, Illinois, Dow Jones-Irwin.

Choi, F.D and Mueller, G.G. 1992 International Accounting, 2nd edition, Prentice-Hall.

Cook, A. 1989 "International Business: A Channel for Change in United Kingdom Accounting," In A. Hopwood (ed.), *International Pressure for Accounting Change*, pp. 33-42. London, Prentice Hall International.

Deloitte 2005 “International Accounting Standards IAS 19, Employee Benefits,”[Online]. Available URL address:
http://www.iasplus.com/standard/ias19.htm accessed 28/10/2005

Eddie, I. 2005 “Culture and International Comparative Financial Accounting Research,” *International Accounting: An Asia Pacific Perspective*.

European Financial Reporting Advisory Group 2005 “Achieving Consistent Application of IFRS in the EU:A Discussion Paper,” Issued 27 July 2005

Georgiou, G. 2005 “Investigating Corporate Management Lobbying in the U.K. Accounting Standards-Setting Process: A Multi-Issue/Multi-Period Approach,” *Abacus.* Vol. 41. No. 3. pp. 323-347.

Gray, S.J. 1988 “Towards a theory of cultural influence on the development of accounting systems internationally,” *Abacus,* Vol. 24, No. 1. pp. 1-15

IASC 1992 Constitution of the International Accounting Standards Committee

IASB 2005 IAS 19 Employee Benefits

Klumpes, P.J and Whittington, M. 2003 “Determinants of Actuarial Valuation Method Changes for Pension Funding and Reporting: Evidence from the UK,” *Journal of Business Finance and Accounting* Vol. 30 No. (1) and (2) pp. 175-204.

Martin, I 2001 “FRS 17 – The Implications for Pension Funds,” [Online]. Available URL address: http://www.morganstanley.com/im/uk/views/pdfs/FRS17forPF.pdf accessed 28/10/2005

Meek, G.K and Saudagaran, S.M. 1990 “A Survey of Research on Financial Reporting in a Transnational Context,” *Journal of Accounting Literature*, Vol. 9. pp.127-59.

Nair, R.D and Frank, W.G.1980 “The Impact of Disclosure and Measurement Practices on International Accounting Classifications,” *The Accounting Review*, July.pp.426-450

Nobes, C.and Parker, R. 2004 Comparative International Accounting, Eighth edition. Pearson Education Limited, England.

Parker, R. H. 1994 “Debating a true and fair view in Australia: An exercise in deharmonization?,” *Journal of International Accounting, Auditing and Taxation*. Vol. 3. No. 1. pp.41-69.

Parker, R.H and Morris, R.D 2001 “The Influence of U.S. GAAP on the Harmony of Accounting Measurement Policies of Large Companies in the U.K. and Australia,” *Abacus,* Vol. 37. No. 3. pp.297-328.

Rahman, A. Perera, H. and Ganesh, S. 2002 “Accounting Practice Harmony, Accounting Regulation and Firm Characteristics,” *Abacus*. Vol. 38. No.1. pp.46-77.

Roberts, C. Salter, S.B and Kantor, J. 1996 "The IASC Comparability Project and Current Financial Reporting Reality: An Empirical Study of Reporting in Europe,". *British Accounting Review.* Vol.28. pp. 1-22.

Roberts, C. Weetman, P and Gordon, P 2005 International Financial Reporting A Comparative Approach, Third Edition, Pearson Education England.

Saudagaran, S. M and Meek, G.K 1997"A Review of Research on the Relationship Between International Capital Markets and Financial Reporting by Multinational Firms," *Journal of Accounting Literature*, Vol. 16. pp.127-59.

Tarca, A. 2004 "International Convergence of Accounting Practices: Choosing between IAS and US GAAP," *Journal of International Financial Management and Accounting*. Vol 15. No 1. pp. 60-91.

Tweedie, D. 2004 "Looking ahead at 2004: a global standard-setter's perspective," *Accounting, Auditing and Accountability*. Vol. 12 No.2. pp. 5-7

Waddingham, B. 2005 "FRS 17 Accounting for Retirement Benefits," [Online]. Available URL address:
http://www.barnettwaddingham.co.uk/cms/services/actuarial/accounting/news01023/.
. Accessed 28/10/2005.

Wyatt, A. 1989 "International Accounting Standards: A New Perspective," *Accounting Horizons*, Vol. 3. Issue 3. pp.105-108

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[i] The G100, while generally supporting the IFRS, did not support some specific changes.
[ii] The IASC was later abolished and replaced by the International Accounting Standards Board (IASB).
[iii] The European Union (EU) emerged from the European Communities created by a series of trearies set up to foster industrial and trading partnerships.
[iv] A defined contribution is one in which the contribution is defined and the investment risks are borne by the member.
[v] A defined benefit plan is one in which the benefits payable to the member upon retirement, are defined, and the investment risks are borne by the fund.