



Education + Training

CEO business education and firm financial performance: a case for humility rather than hubris

Margaret Lindorff Elizabeth Prior Jonson

Article information:

To cite this document:

Margaret Lindorff Elizabeth Prior Jonson, (2013), "CEO business education and firm financial performance: a case for humility rather than hubris", Education + Training, Vol. 55 Iss 4/5 pp. 461 - 477

Permanent link to this document:

<http://dx.doi.org/10.1108/00400911311326072>

Downloaded on: 19 February 2015, At: 10:55 (PT)

References: this document contains references to 83 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 508 times since 2013*

Users who downloaded this article also downloaded:

Niamh M. Brennan, John P. Conroy, (2013), "Executive hubris: the case of a bank CEO", Accounting, Auditing & Accountability Journal, Vol. 26 Iss 2 pp. 172-195 <http://dx.doi.org/10.1108/09513571311303701>

Access to this document was granted through an Emerald subscription provided by 602156 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.



CEO business education and firm financial performance: a case for humility rather than hubris

CEO business
education

Margaret Lindorff and Elizabeth Prior Jonson

Department of Management, Monash University, Melbourne, Australia

461

Abstract

Purpose – The purpose of this paper is to examine the relationship between CEO business education and firm financial performance.

Design/methodology/approach – An analysis of the relationship between three-year and five-year shareholder return as measured by dividend and change in share price and CEO educational qualification was performed.

Findings – No relationship was found between CEO MBA, business, or other qualification and firm financial performance.

Research limitations/implications – More research, particularly in the form of multinational longitudinal studies, should be undertaken on the relationship between CEO business and other qualifications and objective outcomes. A limitation of this study is that it was undertaken in one country and measured only firm financial performance.

Practical implications – It is possible that business education has been over-emphasized as a prerequisite to successful management practice. It is also possible that the kind of management education that students have received is no longer appropriate to leadership at CEO level.

Originality/value – Although many have blamed the GFC on business schools, there has been no examination of the relationship between CEO qualifications and firm financial performance in Australia, and little elsewhere. This study therefore fills a research gap.

Keywords MBA, Business schools, Leadership, Firm financial performance, Australia, Master of Business Administration

Paper type Research paper

This paper is the result of the special issue call for papers on the roles and responsibilities of business schools. We are particularly interested in the relationship between the business education of the CEOs of Australia's top 200 companies and their company performance.

In Australia, university business school programmes can be summarized into five groups: undergraduate coursework degrees, MBAs, non-MBA graduate coursework degrees, graduate research degrees and short courses. Specific university education in business began with the establishment of a Department of Economics at the University of Sydney in 1920 (Williams, 2002). In 1924 the University of Melbourne also established a Faculty of Economics, which was later renamed the Faculty of Business and Economics (MacIntyre and Selleck, 2003). The University of Melbourne Business School was established in 1963 and was the first to offer an Australian MBA degree (Williams, 2002). Currently there are approximately 340,500 students enrolled in Australian university management and commerce programmes (DEEWR, 2010), which is 28.5 per cent of all enrolled students, although this number is declining (B-HERT, 2012). Half of these students are from overseas. Within this total number 66 Australian MBA programmes are offered by 37 institutions, and cater to approximately 35,000 students (Good Universities Guide, 2012).

Education is Australia's largest services export, and was valued at \$17.7 billion in 2010 (DFAT, 2012). A rough calculation suggests that overseas business students are



worth over \$2 billion per year to the country. The income generated from international and business student fees is also as critical to the financial viability of their enrolling institutions in Australia as it is internationally (Pfeffer and Fong, 2002), and fees from fee-paying business students are commonly transferred out of business schools and faculties to replace shortfalls elsewhere in university budgets (Clarke, 2008). Disappointing though it may be for international students to have to pay more than the cost of their education, and even if universities are promoting business education to potential students to support their own vested interests, the students and their employing organizations may still be getting value for money if their courses make them better managers than would otherwise be the case. But are they? And are business schools adding value for business and its shareholders? This latter question is the focus of this paper. We acknowledge the shareholder focus of the paper, but, given that one of the criticisms of business education is that it holds this focus (Ghoshal, 2005), it seems appropriate to see if it is successful within this context.

We acknowledge that many academics writing in this area do not see return to shareholders as the most important role of business. Such critics of the shareholder view may see return to shareholders as just one among many responsibilities of a business organization (Evan and Freeman, 1993). This most radical version of stakeholder theory does not give any priority to shareholder interests. More moderate versions of stakeholder theory, including the later Freeman (2009), give a high priority to return to shareholders but demand that this be consistent with satisfying the interests of all other relevant stakeholder groups (a win-win situation for all parties). Other critics of the shareholder approach including Stout (2012) and Lazonick (2009, 2010) suggest the narrow focus on shareholder value has damaged innovation and business development and that a more balanced approach to investing in sustainable business is required.

We fully acknowledge that there are these different views about the appropriate role of management, managers and business education. However, our focus in this paper is on the question of whether CEO education is associated with return to shareholders. We acknowledge that shareholder return is not the only measure of performance. However, "it is the fundamental scorecard for CEOs of public companies. And it is the same scorecard for everyone" (Hansen *et al.*, 2010, p. 107). Within the Australian context it is doubtful whether those businesses who foot the bill for employee MBAs would continue to do so if they believed that business education did not contribute positively to profit. We leave it to other researchers and papers to investigate whether education in general and business education in particular contributes positively to managers' creativity, innovation, environmental responsibility and general social responsibility. Our task in this paper is simply to investigate whether there is a positive correlation between CEO education and medium term return to shareholders.

Criticisms of Australian business education

Despite the large proportion of students who graduate with a business degree Australia has a history of reports criticizing the education of its managers and business leaders. The Karpin (1995) report provided a comprehensive critique of Australian management. It argued that Australian management tended to overrate its performance against international benchmarks, whereas its practices were only slightly above average. Australian management practice was claimed to be deficient in people management, particularly as it related to developing human capital to improve performance and add value. The report also suggested that although individual academics and university departments might be world class and there was a proliferation of institutions offering

management education, there was no world-class management school in Australia, as the leading schools were too small to provide the infrastructure necessary to support quality teaching and research.

The report's policy recommendations highlighted the importance of education in the non-technical areas of management: leading and managing people, communicating, negotiating, resolving conflict, fostering creativity and innovation and managing change. However, its evidence base for these assertions is not clear. It also suggested that Australian business would not be competitively placed unless Australian management education achieved the standards set by global educational leaders, and a world-class business school was required to provide leadership to the rest of the postgraduate management education sector (Karpin, 1995).

At approximately the same time, an OECD (1994) report argued that business may not have attracted the best talent in Australia. It suggested that although the move to decentralized bargaining provided new opportunities for raising workplace productivity, much still depended on improving managerial human resources and bargaining skills.

In 2007, with productivity performance continuing to fall (Green *et al.*, 2009), the Minister for Innovation set up a panel to review the National Innovation System. The panel's report (Cutler, 2008) found that Australian business education continued to lag world's best practice in certain key areas, particularly those concerning people management. It concluded that in an increasingly globalized and competitive business environment Australian business needed increased and expanded competencies in strategy, operations and integration. It also challenged the Australian Business Deans' Council to lead a discussion on "management education and its role more broadly in education, training and innovation" (Cutler, 2008, p. 57).

The Australian Business Deans Council's (2011) proposal to the Department of Education, Employment and Workplace Relations in response to the Cutler Report used a study of Australian management practices in manufacturing firms (Green *et al.*, 2009) to argue there is a positive relationship between good management and productivity. It suggested creating a "national dialogue" between business schools and stakeholders to create a "vision for management education in Australia" and "trials of innovative practices". It also suggested that among the key challenges needing action are improvements in collaboration and networking between educational institutions, business and government agencies and provision of educational programmes to meet the increasing demand for enhanced management, leadership and collaboration skills.

Criticisms of business education

Criticisms of business education have not been limited to Australia, and have seemingly been made for as long as there has been business education. On the supply side, in the USA the Ford Foundation (Gordon and Howell, 1959) and Carnegie Council (Pierson, 1959) reviews accused business schools of being too like trade schools, and offered them grant money to change. In response, business schools focused on teaching the behavioural science elements of business such as economics, statistics and operations research. Perhaps as a consequence the content of many current US MBA courses is strikingly similar (Datar *et al.*, 2010), and the accreditation of MBA curricula and business schools by AMBA (www.mba-world.com/), EQUIS (www.efmd.org) and AACSB (www.aacsb.edu), and through the Bologna process in Europe (Carduso *et al.*, 2008) has led to further worldwide standardization of institutions and programmes (Hall *et al.*, 2012).

A recent theme emanating from within the Academy is that business schools are more about research rigour than practical relevance (e.g. Bennis and O'Toole, 2005;

Blass and Weight, 2005a; Hambrick, 2007; Mintzberg, 2004; Porter and McKibbin, 1988). Mintzberg (2004), for example, argues there is an under-emphasis in MBAs on the art and craft of management involving reflective practice, context and sharing of experiences, and an overemphasis on the “science”, or analysis, dimensions of management. Similarly, Rynes *et al.* (2003) comment that business schools focus too much on abstract theories and do not give enough time to practical skills. Common deficits are suggested to be in critical thinking, reflection and decision making, strategic management, risk and regulation, people management and innovation, creativity, business realities and tradeoffs, organizational politics, integration, awareness of social issues and corporate social responsibility, leadership, communication, reflective skills, adaptability, vision and culture and change management (Almog-Bareket, 2011; Datar *et al.*, 2010; Rubin and Dierdorff, 2009).

MBAs are also suggested to be too “western”, and not transferable to other cultural regions (Blass and Weight, 2005a), and to both ignore the skills needed for early career progression (Benjamin and O’Reilly, 2011) and only be suited to those wishing to undertake a junior management role (Blass and Weight, 2005b). Business school teaching has also been accused of being too focused on shareholder value and organizational performance, and failing to respond to wider society needs (Ferlie *et al.*, 2010; Ghoshal, 2005). Business schools are also held to be responsible for the global financial crisis (Podolny, 2009), with the financial economics which is taught in MBA programmes particularly culpable (Currie *et al.*, 2010).

On the demand side, criticisms include that students lack quality and seek to buy a credential rather than an education (Feldman, 2005; Mintzberg, 2004; Pfeffer, 2005). In an attempt to build their social and cultural capital (prestige) students are believed to engage with the networking and work placement dimensions of their MBA courses, rather than with the academic content (Datar *et al.*, 2010; Mintzberg, 2004). Yet despite the expressed concerns by business school deans and other academics that students now are less devoted to coursework than students in the past (Datar *et al.*, 2010), many business schools emphasize such leisure and networking activities in their MBA brochures and advertising. Moreover, business school rankings such as The Economist Intelligence Unit’s *Which MBA?* include criteria such as “potential to network” in their ranking categories (Bickerstaffe and Ridgers, 2007), thus reinforcing any credential-seeking bias.

Another criticism is that business education is an industry in which business schools, universities, consulting firms and other employers are complicit in promoting the MBA as a premium product (Pfeffer, 2005). Business schools are accused of focusing on achieving higher rankings for themselves by selecting those students whose qualifications and experience on entering a course lead to higher graduating salaries (i.e. they select more experienced students from higher-paying sectors such as finance and consulting who will enter and therefore leave with higher starting salaries) and grooming them for selection interviews (Podolny, 2009). Universities are reproached for using business schools as “cash cows” for their parent university (Masrani *et al.*, 2011). Management education is therefore accused of being “informed by the interests of corporations and of managers rather than those of stakeholders in organizations and wider society” (Grey, 2004, p. 179).

There have also been criticisms with respect to outcomes. Although some have suggested that a MBA degree leads to higher market value capital and an increase in salary and career attainment for graduates (e.g. Baruch, 2009; O’Brien *et al.*, 2010), others (e.g. Pfeffer and Fong, 2002) argue that this effect is exaggerated, and does not

account for those graduates who are unable to find a job. In addition, there is some evidence that there is no relationship between competency development during MBA studies and wage after graduation (Camuffo *et al.*, 2009). Any salary effect may also be largely confined to graduates from particular schools (O'Brien *et al.*, 2010), and, if there is an effect, it may be declining (Connolly, 2003). Moreover, although Hay and Hodgkinson (2005) found that many MBA graduates believe that the MBA had helped their career, this was largely in terms of internal career attainment – that is, achieving one's own perception of career success, perhaps in terms of self-fulfillment, challenge or satisfaction, rather than through achievement of an external position, salary or managerial level.

Similarly, there are criticisms that completion of an MBA does not result in increased skills. For example, Shipper (1999) reports that although possession of a set of management skills is associated with managerial performance, the level of skill in these areas is no different for managers with a MBA and those with another master's degree or an undergraduate degree. Boyatzis and Renio (1989) also found that although graduating MBA students' self-reported skills in some areas are higher than the self-reported skills of beginning MBA students, there is no difference between the groups in many other areas. Similarly, although Boyatzis and Saatcioglu (2008) and Camuffo *et al.* (2009) indicate that MBA students generally report improved competencies from programme start to completion, the absence of a comparison group in both studies means it is not clear if the results reflect a maturation effect which would have been as strong (or stronger) for those who have not undertaken an MBA.

There are also criticisms of programmes based on the failure to find clear relationships between possession of a MBA and the scholastic or intellectual capital (knowledge) which is the core content of many programmes. For example, although Baruch and Leeming (2001) indicate that many graduates believe their MBA studies increase their business understanding, Pfeffer and Fong (2002, p. 80) argue "there is little evidence that mastery of the knowledge acquired in business schools enhances people's careers". Nor does there appear to be a consistent relationship between possession of an MBA or other business degree and the other forms of capital that business schools are now expected to provide their graduates: personal or inner value capital (confidence and self-understanding) intercultural capital (a global mindset), ethical capital, developmental capital (responsiveness to change), collateral capital (creativity), temporal capital (ability to manage time so that performance is enhanced) and the ability to integrate all their capital (Boyatzis and Renio, 1989; Kretovics, 1999).

This may be due to at least three factors. The first is that although some of these forms of capital such as intellectual or social capital may be associated with participation in business school programmes, others may be a consequence of factors which cannot be taught in business school. The second alternative is that their attainment may be due to factors which can be taught, but are not taught by business schools. Thus the course content may need to be changed. The third alternative is that the factors can be taught in business schools, but can also be obtained via other sources, leaving business schools with little unique that they can offer – although this also means that business schools cannot be held solely responsible for the supposed failures of their graduates.

In this paper we are not directly interested in personal capital. Rather, we are interested in a broader area: whether a business degree held by a CEO adds to the value of their employing organization. Many of the criticisms of Australian management provided above highlight the need for increased competitiveness. This requires efficient, profitable corporations. The *MBA Guide* promises that "well-directed MBA programs can improve managerial competence in terms of innovation, flexibility, and

other managerial qualities needed for the contemporary business environment” (Baruch, 2009) – but do they actually translate into the vision, strategic and human resource management which results in corporate growth and wealth creation, a better return to shareholders and international competitiveness?

Internationally, more than half the CEOs of large companies have a MBA (Baruch, 2009). However, there is evidence that there are now significant declines in business school enrolments in Australia (B-HERT, 2012), Europe and the USA (Schlegelmilch and Thomas, 2011), particularly in full-time enrolments in lower-ranked schools (Datar *et al.*, 2010), and consulting and financial firms are increasingly recruiting non-MBA graduates (Datar *et al.*, 2010). Our question is whether a MBA provides employees with a competitive advantage at the most senior level; is there a reason for promoting to organizations the development of their staff through participation in a MBA or other business programme, or the recruitment of executives with a business qualification?

In a recent paper on the 2000 best-performing CEOs in the world Hansen *et al.* (2010) report that those CEOs whom they could identify as having an MBA rank on average 40 places better in terms of shareholder return (country adjusted return, industry adjusted return and change in market capitalization) during tenure than do CEOs without an MBA. On the face of it there seems a case for appointing a CEO with a MBA over a CEO without a MBA. However, it is unclear whether that difference applies only at the “best-performing” level and is statistically significant, or merely a random variation.

We wish to examine this issue further, and review the relationship between CEO qualification and company performance. Our methodology is different, in that it deals only with Australian companies and we will examine one outcome – shareholder return as measured by dividend and change in share price. We acknowledge that shareholder return is not the only measure of performance and certainly ignores the various contributions individuals and companies may make to other stakeholder groups. However shareholder return is a consistent and objective measure of company performance, and firm productivity is used as a desired outcome in the above reviews of Australian management. Additionally, in the modern world CEOs are normally judged in the marketplace on their firm financial performance, and companies that fail seriously on this parameter usually cease to exist or at least cease to exist as independent entities.

We have looked at the company performance over both a three and a five-year period. The five-year period includes the 2008 economic downturn, and is an appropriate indicator of management capability in bad times. The three-year period excludes this downturn, and is an objective indicator of performance in better times.

Method

Measures

Return to shareholders. Data were collected on firm five-year and three-year return to shareholders from the FinAnalysis (Aspect Huntley, 2012) database. The database provided the return for the three and five financial years to 30 June 2011. This information contains both dividend and share price change over the time period.

CEO education. Information on CEO education was collected from company annual reports, company web sites and biographical information available on other web sites.

Company sector for each firm was taken from the FinAnalysis (Aspect Huntley, 2012) database. This measure was criterion scaled for later regression analysis (Beaton, 1969; Gocka, 1973, 1974). In criterion scaling all those in a particular category of the categorical predictor variable are given a score on a new variable which is equivalent to the mean score on the dependent variable of all those in that category. Thus to test the influence of

company sector on firm return a single criterion scaled variable was created with ten groups (one for each category of company sector), and the value for each of those in each category was the mean firm economic return for the entire category. This way the overall effect of industry sector can be determined, whereas with effect or dummy coding only the comparison between different categories of the categorical variable and a nominated comparison category can be assessed (Blair *et al.* 1980).

Sample

The final sample consisted of 183 organizations which were in the ASX200 in May 2012 and had CEO details and return to shareholders recorded for five years. Return to shareholders ranged from -49.2 to 80.8 per cent with a mean return of -2.93 per cent for five years, and -49.8 to 193.5 per cent with a mean return of 12.41 per cent for three years.

The majority (26 per cent) of firms were in the materials sector, with 18 per cent in financials, 15 per cent in industrials, 13 per cent in consumer discretionary, 10 per cent in energy, 6 per cent in health care, 4 per cent in utilities, 3 per cent in consumer staples and 2 per cent in each of information technology and telecommunications sectors. Three-year and five-year returns for each sector are shown in Table I.

Only seven of the CEOs were female. Thirty four had an MBA, 14 an undergraduate arts degree, 55 an undergraduate business degree, 32 an undergraduate engineering degree, eight an undergraduate law degree, 39 an undergraduate science degree and five a medical degree. Three had completed graduate studies in arts or education, seven in business (other than an MBA), ten in engineering, three in law, nine in science and five in another area. Many had more than one qualification. Thirty six had no university degree, and 40 had professional recognition, most frequently in accounting. For further analysis the graduate and undergraduate arts and law ($n = 24$) and graduate and undergraduate engineering, science and medicine ($n = 77$) groups were combined into two new categories. All those with a business qualification ($n = 86$) were also combined for some analyses. Because several CEOs had degrees in more than one discipline area a single variable representing qualification with a category for each discipline area could not be used. Several independent variables were therefore created for analysis, each representing the presence of a particular qualification.

Results

The relationship between CEO qualification and firm performance over five years

A simple scan of the qualifications of the CEOs in the 25 organizations with the poorest return to shareholders over five years showed that three hold an MBA, ten have a

Sector	3-year return	5-year return
Consumer staples ($n = 6$)	7.78	-1.10
Consumer discretionary ($n = 23$)	2.09	-8.40
Energy ($n = 19$)	12.73	5.36
Financials ($n = 33$)	8.87	-10.49
Healthcare ($n = 10$)	21.2	6.03
Industrials ($n = 28$)	16.56	-4.82
IT ($n = 4$)	4.55	-3.80
Materials ($n = 48$)	14.18	-1.04
Telecoms ($n = 4$)	26.18	7.60
Utilities ($n = 8$)	20.24	2.30
Mean	12.41	-2.93

Table I.
Return to shareholders
by industry sector

science, medicine or engineering qualification, two have an arts or law degree and eight have no university qualifications. Ten have some business qualification, including three of the worst-performing six. For the 25 best-performing organizations over five years two of the CEOs hold an MBA, 12 have a science, engineering or medical degree, none have an arts or law degree, and seven have no university degree. Eleven, including five of the top six, have some formal business qualification. There seems no clear association between CEO qualification and firm performance.

A series of ANOVAs showed type of degree had no relationship with firm performance. Those organizations whose CEO had a MBA were no more profitable (mean return = -3.19 per cent) than those whose CEO had another business qualification (mean return = -1.71 per cent) or no business qualification (mean return = -3.45 per cent), $F(2, 181) = 0.17$, $p = 0.84$. Those firms with a CEO with an arts or law degree (mean return = -7.73 per cent) were no more successful than those whose CEOs did not have such a degree (mean return = -2.26 per cent), $F(1, 181) = 1.74$, $p = 0.19$. Similarly, those with a CEO holding an engineering, science or medical degree (mean return = -1.19 per cent), were no more profitable than those whose CEOs did not hold a degree in those areas (mean return = -4.19 per cent), $F(1, 181) = 1.29$, $p = 0.26$, and those organizations whose CEO did not hold a university qualification (mean return = -6.13 per cent) were no worse off than those whose CEOs held a university qualification (mean return = -2.14 per cent), $F(1, 181) = 1.49$, $p = 0.23$.

Comparisons were next made by assessing whether firm performance had been positive ($n = 73$) or negative ($n = 110$) over the five years. A series of χ^2 -tests were undertaken to see if possession of any particular CEO qualification was likely to result in a positive return to the firm. No more CEOs holding a MBA (41.2 per cent) or other business degree (36.5 per cent) than without any sort of business degree (41.2 per cent) had a positive organizational return, $\chi^2(2) = 0.34$, $p = 0.84$. No more CEOs with an arts or law degree than those without an arts or law degree lead their organization to a positive return (25.0 per cent compared to 42.1 per cent), $\chi^2 = 2.55$, $p = 0.12$. No more CEOs with an engineering, science or medicine degree than without such a degree (48.1 per cent compared to 34.0 per cent) lead their organization to a positive return, $\chi^2 = 3.69$, $p = 0.06$. Nor did it help to have any university qualification; those firms with a CEO with a qualification were no more successful in gaining a positive return (41.5 per cent) than those without a qualification (33.3 per cent), $\chi^2 = 0.80$, $p = 0.50$.

To examine the joint effect of qualification and industry sector on firm performance a multiple regression was run using as predictors the presence/absence of an arts/law, business including MBA (combined because of the absence of significant differences in the ANOVAs given above), science/engineering/medicine degree, no degree and a criterion scaled variable indicating company sector. The regression was significant, $R^2 = 0.11$, $F(5, 177) = 4.31$, $p = 0.001$. Results are shown in Table II. The only significant predictor was company sector. An examination of the mean return for each sector showed that firms in the telecommunications, health care and energy sectors performed the best, and those in the consumer discretionary and financial sectors performed worst.

Relationship between CEO qualification and firm performance over three years

A scan of the qualifications of the CEOs in the 25 organizations with the poorest return to shareholders over three years shows that only three hold an MBA, 15 have a science, medicine or engineering qualification, three have an arts or law degree, and ten have no university qualifications. Eight have some business qualification, including two of the

	β	Significance
<i>5 years</i>		
Engineering, science or medicine	-0.09	0.36
Arts or law	-0.06	0.51
Any business qualification	-0.03	0.79
No degree	-0.12	0.27
Sector	0.32	0.00
<i>3 years</i>		
Engineering, science or medicine	-0.06	0.54
Arts or law	-0.05	0.53
Any business qualification	-0.01	0.92
No degree	-0.12	0.58
Sector	0.20	0.01

CEO business education

469

Table II.
Predictors of return to shareholders

worst-performing three. For the 25 best-performing organizations over three years three of the CEOs hold an MBA, 13 have a science, engineering or medical degree, two have an arts or law degree, one has an arts or law degree and seven have no university degree. Nine, including four of the top five, have some formal business qualification. There appears to be no clear association between firm better performance and CEOs MBA or business degree.

A series of ANOVAs also showed type of degree had no relationship with firm performance. Those firms with a CEO with a MBA (mean return = 12.00 per cent) performed no better than those whose CEO had another form of business degree (mean return = 14.11 per cent), or did not have a business degree (mean return = 11.64 per cent), $F(2, 180) = 0.13, p = 0.88$. Those firms with a CEO holding an arts or law degree (mean return = 7.95 per cent) were no more successful than those whose CEO did not hold such a degree (mean return = 13.08 per cent), $F(1, 181) = 0.66, p = 0.42$. Similarly, firms whose CEOs held an engineering, science or medical degree (mean return = 13.66 per cent), were no more successful than those whose CEOs did not have qualifications in these areas (mean return = 11.50 per cent), $F(1, 181) = 0.25, p = 0.62$, and firms who had a CEO without a university qualification (mean return = 9.00 per cent) were no worse off than those who had a CEO with a university qualification (mean return = 13.24 per cent), $F(1, 181) = 0.63, p = 0.43$.

Comparisons were again next made on by assessing whether firm performance had been positive ($n = 128$) or negative ($n = 55$). A series of χ^2 -tests were undertaken to see if possession of any particular CEO qualification was likely to result in a positive return to the firm. An MBA or business degree was again not associated with a positive return; 73.5 per cent of those with a MBA, compared to 73.1 per cent of those with another business degree and 67.0 per cent of those without any business qualification had a positive return to shareholders, $\chi^2(2) = 0.85, p = 0.65$. In all, 75 per cent of CEOs with an arts or law degree lead their organization to a positive return, compared to 69.2 per cent of those without an arts or law degree, $\chi^2 = 0.34, p = 0.64$. No more CEOs with an engineering, science or medicine degree than without such a degree (74.0 per cent compared to 67.0 per cent) lead their organizations to a positive return, $\chi^2 = 1.05, p = 0.33$. However, it does help to have some university qualification. Businesses with a CEO with a university qualification were more likely than businesses whose CEO did not have a university qualification to have a positive organizational return over three years (74.1 per cent compared to 52.8 per cent), $\chi^2 = 6.28, p = 0.02$.

To examine the joint effect of qualification and industry sector on firm performance a multiple regression was run using as predictors the presence/absence of an arts/law, business including MBA (combined because of the absence of significant differences in the ANOVAs given above), or science/engineering/medicine degree, and a criterion scaled variable indicating company sector. The regression was not significant, $R^2 = 0.04$, $F(5, 177) = 1.59$, $p = 0.165$. Results are shown in Table II.

Discussion

The findings suggest that, at least in Australia in the period tested, a CEO's business or other specific education has no effect upon their organization's financial performance. This could suggest several things. The first is that the CEO may have limited influence on company financial performance. Firm success may be due to a good management team, or a knowledgeable Board. It may be due to environmental factors – a mining firm which finds gold, for example, luck (or unexplained factors; see Parnell *et al.*, 2012 for a discussion), or being in the right place at the right time. This view is held by scholars who highlight the romance of leadership – the tendency for observers to over-emphasize the effects of leadership and attributes and behaviours of the leader, and de-emphasize the influence of other factors (Haslam *et al.*, 2010; Meindl *et al.*, 1985). This is an extension of the view that leadership as an attribution based upon descriptions of firm or group performance (e.g. Agle *et al.*, 2006); that is, if a person believes a firm is performing well they are more likely to attribute this to excellent leadership than to other factors, and to report that the leader has positive qualities.

The reliance on attributions is perhaps responsible for the findings in the *Management Matters* (Green *et al.*, 2009) report that was used as an evidence base in Australia's Australian Business Deans Council (2011) proposal. Green *et al.* argued a link between management practices and productivity. They based this upon qualitative interviews with managers in which the managers were asked to respond to questions about management "best practice" in their firm, and correlations of these assessments with measures of productivity. The most likely explanation for the suggested relationship is that those interviewed took their firm's productivity and used it to describe the firm's managerial performance in the same way that organization performance is associated with subsequent perceptions of CEO charisma; that is, high performing firms have a charismatic leader (Agle *et al.*, 2006; Shyns *et al.*, 2007). In this case the high performance of the organization was attributed to good leadership practice. The assessments of management performance are therefore no more than attributions based upon organizational performance. We therefore need more research to determine the link between CEOs and firm performance, and the potential for performance to be attributed to, rather than caused by, leadership behaviours.

If CEO leadership does make a difference to firm financial performance, the second possibility for the lack of a relationship between CEO business education and such performance is that CEO characteristics other than those received solely through a business or other education are associated with such success. Firm performance may either be due to CEO factors which are difficult to develop externally, such as intelligence or personality, or to knowledge or skills which are either not taught in business schools, which are taught without success, or which are available through a business education but are also available from other sources.

This does not mean that an Australian business school education is ineffective in all areas. It may provide graduates with the scholastic or intellectual capital needed for lower level management, the social capital (contacts and networks) which assist in

navigating the career ladder, personal cultural capital (prestige) and inner value capital (confidence and self-understanding), and even market value capital (higher remuneration). It may even provide intercultural capital (a global mindset), ethical capital, and developmental capital (responsiveness to change). But the set of knowledge, skills, and personal characteristics needed for successful firm financial leadership at CEO level may not be those taught or learned only in business schools.

This may be either good or bad news. It is potentially good news for those critics who argue that MBA programmes create a “profit first” mentality and that this is ethically wrong; at least in Australia, they do not appear to have successfully achieved this end. It may be bad news for those who believe that firm financial performance is important, and one which business schools should emphasize and attempt to develop in their students.

A great deal of literature exists on the supposed deficits of business education and the MBA (e.g. Bennis and O’Toole, 2005; Mintzberg, 2004; Pfeffer and Fong, 2002; Pfeffer, 2005). Given that many Australian business schools are accredited through AMBA, EQUIS or AACSB, and that accreditation requires standardization of programmes, such criticisms are as likely to apply to Australian MBAs and business courses as they are to those in other countries. Many of these criticisms are based on the perceived “overly scientific” nature of MBA programmes, and the lack of learning in the softer, “art” elements of management and leadership. It is suggested an “ideal” MBA curriculum contains multidisciplinary integration, experiential learning and soft-skill development, has a global perspective and an information technology focus, and highlights ethics and corporate social responsibility (Navarro, 2008), and that universities should change their current programmes to include these elements (Clinebell and Clinebell, 2008).

However, it is unclear whether this current emphasis on soft skills, ethics and CSR (Schlegelmilch and Thomas, 2011) will result in better financial outcomes for firms. It may be that despite criticisms of business schools being too rigorous, they are teaching the skills (and developing values) most appropriate for entry- (Clinebell and Clinebell, 2008) and middle-level jobs, and overlooking those content areas which are likely to assist CEOs in achieving better firm financial performance. If so, business schools may be losing their relevance; the economy is going through hard times. Will potential CEOs who have the “soft” characteristics now emphasized be selected by Boards and, if they are, be able to successfully steer their firms through difficult times?

With regard to the content of business school programmes, it also needs to be asked whether school programmes should focus on core competencies needed by all who hold managerial roles (as advocated by Rubin and Dierdorff, 2009), or whether such a silver bullet approach is not appropriate. The business environment is complex, as are organizations. The models of organizations taught in business schools cannot reflect the “lived complexities” of management practice (Ford *et al.*, 2010). There is no consensus on the requisite body of knowledge for effective management. Managers also operate at many levels, from supervisory to CEO. Adopting a “core competency” approach may have at least three outcomes. The first is that programmes may be forced to focus on the “lowest common denominator”, and not provide the finely nuanced assistance which one would wish to be provided for participants with different experiences, qualifications, knowledge, skills, achievements, career aspirations, interests and positions. The second is that this approach does not differentiate business school offerings from those of other providers, although the unique location of business schools within university settings should allow high-quality inputs which cannot be duplicated by other providers. For example, business schools could act as “intellectual hubs” with links to other university

social science departments (Samuelson, 2006). The third is that the core competency approach inflates the potential influence of a business school education on business performance. Little is certain. Organizations do not run according to universal laws, and are suffused with context, interpretation, expectation, roles, temporality and relationships (Jelinek *et al.*, 2008). The best we may be able to do is to help students “understand business and society as a complex, dynamic, and interdependent system and to carefully explore theory, [and] use frameworks” (Samuelson, 2006, p. 357). A “core competency” approach, with its implicit assumption of a core body of knowledge, seems antithetical to this.

Moreover, who should make the decision about relevant course content? Whereas some, such as Bennis and O’Toole (2005), Rubin and Dierdorff (2011) advocate business practitioners taking a governance role in deciding business school course content and strategy, others such as Fowler (2005) disagree, suggesting that business involvement in education should be in the nature of a consultancy, in the same way that academics consult to business, as employers do not have sufficient theoretical understanding to determine educational strategy. Similarly, some have suggested that successful managers should be brought in to teach into business schools (Hawawini, 2005) – but is this appropriate? Can they not provide the same knowledge and skills from outside the tertiary education system, leaving the business schools to carve out a niche market in the scientific and theoretical dimensions of business? And do their presence in a university compromise the status of business schools within the university and give them vocational status (Trank and Rynes, 2003)? Such questions are practical, but they are also value-laden. As Grey (2004) suggests, all judgements about what we teach and what is worth studying are based on commitment to a normally unstated set of values.

Another explanation of the failure to find a relationship between firm financial performance and CEO qualification is that, at its core, any educational programme is about changing attitudes. One could argue that the teaching of economics or finance, for example, is about “facts”. But as Kanter (2005) and critical management scholars such as Grey (2004) remind us, students need to be receptive to the ideas promoted. Attitudes are important, as they predict behaviour (see Hart *et al.* 2009, for a meta-analysis of this area). The large amount of literature on attitude change suggests that people seek out, and pay closer attention to, information which confirms existing attitudes, and avoid information which might contradict these attitudes (Hart *et al.*, 2009). The stronger a person’s attitude on an issue, the more likely they are to select attitude-congruent information (Brannon *et al.*, 2007). Business school students are not “blank slates” who absorb and reproduce the information given to them. As Kanter (2005) says, scientific, analytic and econometric theories are difficult – but so are people-oriented practices. Others have complained that MBA students are resistant to learning generic skills (Rubin and Dierdorff, 2009), dislike people-focused coursework (Rynes *et al.*, 2003) and show a decline in engagement in the curricula over time (Datar *et al.*, 2010). This may be because the material presented is not consistent with already-held attitudes about what is important, and the course material is not easy to assimilate into existing cognitive schema. Perhaps it is too much to expect that the material presented in MBA and other business courses will be automatically taken up and influence the life-long behaviours of former graduates.

In addition, business schools do not have a mandate on management and executive education. For example, in the USA approximately \$50 billion per year is spent on employee learning and development, of which approximately one-quarter is dedicated to leadership development (O’Leonard, 2010). Knowledge and skills can be gained

through programmes run by other providers, including professional development programmes within employing organizations. The current findings suggest that a university business education may not be providing a non-substitutable benefit to its graduates. It needs to be asked whether there is value added by a MBA or other business qualification above presentation of the same material in another setting. In most commentaries on MBA and business education little consideration is given to the alternative; that is, that the supposed deficits of MBA programmes may be filled by alternative courses, programmes or development opportunities, and these do not need to be offered by universities.

Conclusion

In this study we found no relationship between CEO education and firm financial performance. Life, learning and business are complicated. It is perhaps not realistic to assume that a business or other educational experience can change the attitudes, values and behaviours of adult students, and provide them with knowledge which is unavailable elsewhere and which will benefit them throughout their careers – just as it is not realistic to blame business school teachings for the global financial crisis or the failure of ethics in business. Perhaps we, as scholars, first need humility, and should acknowledge that no matter how hard we try to teach the “right things” in the “right way” we will not be able to have more than a superficial effect upon the lives and actions of our students. Perhaps we are suffering from a “romance of business school influence” that is similar to the “romance of leadership” mentioned above. We are mostly working in environments in which business schools are seen as “cash cows” for universities (Thomas and Wilson, 2011), and for strategic reasons the potential positive outcomes of business qualifications are heavily marketed. But we know students come to us with different levels of intelligence, motivation, knowledge, skills and experience, and their career paths will be different once they leave. We know that they need to be receptive to our teaching and have a certain level of intelligence in order to learn, and that some want a credential more than they want knowledge. We also know that despite our content knowledge, subject passion and teaching innovations, our students do not learn all that we teach. Perhaps we should therefore turn our hubris into humility, and accept that our influence is limited. For some, the attainment of a business qualification can indicate the attainment of knowledge and skills that will be career- or life-enhancing, or will lead to better managerial performance. It may even lead to actions which benefit society. But we cannot expect this as a consistent set of outcomes from all students. And, as this research shows, at least in Australia there does not appear to be a relationship between CEO business or other education and a firm’s financial performance.

References

- Agle, B.R., Nagarajan, N.J., Sonnenfeld, J.A. and Srinivasan, D. (2006), “Does CEO charisma matter? An empirical analysis of the relationships among organizational performance, environmental uncertainty, and top management team perceptions of CEO charisma”, *Academy of Management Journal*, Vol. 49 No. 1, pp. 161-174.
- Almog-Bareket, G. (2011), “The missing component in MBA programs”, *Management Decision*, Vol. 49 No. 10, pp. 1600-1611.
- Aspect Huntley (2012), FinAnalysis, available at: www.aspecthuntley.com.au (accessed October 4, 2012).
- Australian Business Deans Council (2011), *The Future of Management Education in Australia*, Australian Business Deans Council, available at: www.abdc.edu.au (accessed October 6, 2012).

- Baruch, Y. (2009), "To MBA or not to MBA", *Career Development International*, Vol. 14 No. 4, pp. 388-406.
- Baruch, Y. and Leeming, A. (2001), "The added value of MBA studies – graduates' perceptions", *Personnel Review*, Vol. 30 No. 5, pp. 589-601.
- Beaton, A.E. (1969), "Scaling criterion of questionnaire items", *Socio-Economic Planning Science*, Vol. 2 Nos 2/4, pp. 355-362.
- Benjamin, B. and O'Reilly, C. (2011), "Becoming a leader: early career challenges faced by MBA graduates", *Academy of Management Learning and Education*, Vol. 10 No. 3, pp. 452-472.
- Bennis, W. and O'Toole, J. (2005), "How business schools lost their way", *Harvard Business Review*, Vol. 83 No. 5, pp. 96-104.
- B-HERT (2012), *The Future of Management Education, Business/Higher Education Round Table Report on Consultation Workshops*, B-HERT, available at: www.bhert.com/ (accessed October 6, 2012).
- Blair, R.C., Higgins, J.J. and Smitley, W.D.S. (1980), "On the relative power of the U and Jt-tests", *British Journal of Mathematical and Statistical Psychology*, Vol. 33 No. 1, pp. 114-120.
- Bickerstaffe, G. and Ridgers, B. (2007), "Ranking of business schools", *Journal of Management Development*, Vol. 26 No. 1, pp. 61-66.
- Blass, E. and Weight, P. (2005a), "The MBA is dead – part 1: god save the MBA!", *On The Horizon*, Vol. 13 No. 4, pp. 229-240.
- Blass, E. and Weight, P. (2005b), "The MBA is dead – part 2: long live the MBL!", *On The Horizon*, Vol. 13 No. 4, pp. 241-248.
- Boyatzis, R. and Renio, A. (1989), "Research article: the impact of an MBA program on managerial abilities", *Journal of Management Development*, Vol. 18 No. 5, pp. 25-39.
- Boyatzis, R.E. and Saatcioglu, A. (2008), "A 20-year view of trying to develop emotional, social and cognitive intelligence competencies in graduate management education", *Journal of Management Development*, Vol. 27 No. 1, pp. 92-108.
- Brannon, L.A., Tagler, M.J. and Eagly, A.H. (2007), "The moderating role of attitude strength in selective exposure to information", *Journal of Experimental Social Psychology*, Vol. 43 No. 4, pp. 611-617.
- Camuffo, A., Gerli, F., Borgo, S. and Somia, T. (2009), "The effects of management education on careers and compensation", *Journal of Management Development*, Vol. 28 No. 9, pp. 839-858.
- Carduso, A.R., Portela, M., Sa, C. and And Fernando, A. (2008), "Demand for higher education programs: the impact of the Bologna process", *CESIfo Economic Studies*, Vol. 54 No. 2, pp. 229-247.
- Clarke, T. (2008), "The business schools: 50 years on", *Education + Training*, Vol. 50 No. 1, pp. 52-54.
- Clinebell, S.K. and Clinebell, J.M. (2008), "The tension in business education between academic rigor and real-world relevance: the role of executive professors", *Academy of Management Learning and Education*, Vol. 7 No. 1, pp. 99-107.
- Connolly, M. (2003), "The end of the MBA as we know it?", *Academy of Management Learning and Education*, Vol. 2 No. 4, pp. 365-367.
- Currie, G., Knights, D. and Starkey, K. (2010), "Introduction: a post-crisis critical reflection on business schools", *British Journal of Management*, Vol. 21 No. S1, pp. S1-S5.
- Cutler (2008), *Venturous Australia: Building Strength in Innovation*, Cutler and Company, Melbourne.
- Datar, S.K., Garvin, D.A. and Cullen, P.G. (2010), *Rethinking the MBA: Business Education at a Crossroads*, Harvard Business School Press, Boston, MA.
- DEEWR (2010), "Full year student summary tables", available at: www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/2010StudentFullYear.aspx (accessed October 2, 2012).

- DFAT (2012), "The composition of Australian trade in services", available at: www.dfat.gov.au/trade/negotiations/services/overview_trade_in_services.html
- Evan, W. and Freeman, E. (1993), "A stakeholder theory of the modern corporation: Kantian capitalism", in Beauchamp, W. and Bowie, N. (Eds), *Ethical Theory and Business*, 3rd ed., Prentice Hall, NJ, Upper saddle River New Jersey, pp. 97-105.
- Feldman, D. (2005), "The food's no good and they don't give us enough: reflections on Mintzberg's critique of MBA education", *Academy of Management Learning and Education*, Vol. 4 No. 2, pp. 217-220.
- Ferlie, E., McGivern, G. and De Moraes, A. (2010), "Developing a public interest school of management", *British Journal of Management*, Vol. 21 No. S1, pp. S60-S70.
- Ford, J., Harding, N. and Learmonth, M. (2010), "Who is it that would make business schools more critical? Critical reflections on critical management studies", *British Journal of Management*, Vol. 21 No. S1, pp. S71-S81.
- Fowler, G. (2005), "Never mix business with education", *The Times Educational Supplement*, October 7, p. 4.
- Freeman, E. (2009), "Managing for stakeholders", in Beauchamp, W. and Bowie, N. (Eds), *Ethical Theory and Business*, 8th ed., Pearson, NJ, pp. 56-68.
- Ghoshal, S. (2005), "Bad management theories are destroying good management practices", *Academy of Management Learning and Education*, Vol. 4 No. 1, pp. 75-91.
- Gocka, E.F. (1973), "Stepwise regression for mixed mode predictor variables", *Educational and Psychological Measurement*, Vol. 33 No. 3, pp. 319-325.
- Gocka, E. (1974), "Coding for Correlation and Regression Educational and Psychological measurement", Vol. 34 No. 4, pp. 771-783.
- Good Universities Guide (2012), "The MBA today", available at: www.gooduniguide.com.au/Postgraduate-Students/The-MBA/What-is-an-MBA (accessed October 1, 2012).
- Gordon, R.A. and Howell, J.E. (1959), *Higher Education for Business*, Columbia University Press, New York, NY.
- Green, R., Agarwal, R., Van Reenen, J., Bloom, N., Mathews, J., Boedker, C., Samson, D., Gollan, P., Toner, P., Tan, H., Randhawa, K. and Brown, P. (2009), *Management Matters in Australia – Just how Productive Are We?* Department of Innovation, Industry, Science and Research, Canberra.
- Grey, C. (2004), "Reinventing business schools: the contribution of critical management education", *Academy of Management Learning and Education*, Vol. 3 No. 2, pp. 178-186.
- Hall, R., Agarwal, R. and Green, R. (2012), *The Future of Management Education Scoping Paper*, Australian Business Deans Council, available at: www.abdc.edu.au (accessed October 6, 2012).
- Hambrick, D.C. (2007), "The field of management's devotion to theory: too much of a good thing?", *Academy of Management Journal*, New York, NY, Vol. 50, pp. 1346-1352.
- Hansen, M.T., Ibarra, H. and Peyer, U. (2010), "The Best performing CEO's in the World", *Harvard Business Review*, Vol. 88 Nos 1/2, pp. 104-113.
- Hart, W., Albarraçin, D., Eagly, A.H., Brechan, I., Lindberg, M.J. and Merrill, L. (2009), "Feeling validated versus being correct: a meta-analysis of selective exposure to information", *Psychological Bulletin*, Vol. 135 No. 4, pp. 555-588.
- Haslam, S.A., Reicher, S.D. and Platow, M.J. (2010), *The New Psychology of Leadership*, Identity, Influence and Power, Psychology Press, London.
- Hay, A. and Hodgkinson, M. (2005), "Exploring MBA career success", *Career Development International*, Vol. 11 No. 2, pp. 108-124.

- Hawawini, G. (2005), "The future of business schools", *Journal of Management Development*, Vol. 24 No. 9, pp. 770-782.
- Jelinek, M., Romme, A.G. and Boland, R. (2008), "Organization studies as a science for design: creating collaborative artifacts and research", *Organizational Studies*, Vol. 20 No. 3, pp. 317-329.
- Kanter, R.M. (2005), "What theories do audiences want? Exploring the demand side", *Academy of Management Learning and Education*, Vol. 4 No. 1, pp. 93-95.
- Karpin (1995), "Enterprising nation – report of the industry task force on leadership and management skills, available at: www.voced.edu.au (accessed October 1, 2012).
- Kretovics, M. (1999), "Assessing the MBA: what do students learn?", *Journal of Management Development*, Vol. 18 No. 2, pp. 125-136.
- Lazonick, W. (2009), "The new economy business model and the crisis of US capitalism", *Capitalism and Society*, Vol. 4 No. 2, doi:10.2702/1932-0213.1054, available at: www.bepress.com/cas
- Lazonick, W. (2010), "Innovative business models and varieties of capitalism: financialisation of the US corporation", *Business History Review*, Vol. 84 No. 4, pp. 675-702.
- MacIntyre, S. and Selleck, R. (2003), *A Short History of the University of Melbourne*, Melbourne University Press, Melbourne.
- Masrani, S., Williams, A.P.O. and McKiernan, P. (2011), "Management education in the UK: the roles of the British academy of management and the association of business schools", *British Journal of Management*, Vol. 22, pp. 382-400.
- Meindl, J.R., Ehrlich, S.B. and Dukerich, J.M. (1985), "The romance of leadership", *Administrative Science Quarterly*, Vol. 30 No. 1, pp. 78-102.
- Mintzberg, H. (2004), *Managers Not MBAs*, Prentice Hall, Harlow.
- Navarro, P. (2008), "The MBA core curricula of top-ranked US business schools: a study in failure?", *Academy of Management Learning and Education*, Vol. 7 No. 1, pp. 108-123.
- OECD (1994), *Economic Surveys*, OCED, Paris.
- O'Brien, J.P., Drnevich, P.L., Crook, T.R. and Armstrong, C.E. (2010), "Does business school research add economic value for students?", *Academy of Management Learning and Education*, Vol. 9 No. 4, pp. 638-651.
- O'Leonard, K. (2010), *The Corporate Learning Factbook: Statistics, Benchmarks, and Analysis of the US Corporate Training Market*, Bersin and Associates, available at: www.bersin.com (accessed October 6, 2010).
- Parnell, J.A., Dent, E.B., O'Regan, N. and Hughes, T. (2012), "Managing performance in a volatile environment: contrasting perspectives on luck and causality", *British Journal of Management*, Vol. 23 No. S1, pp. S204-S228.
- Pfeffer, J. (2005), "Mintzberg's unasked question", *Organization Studies*, Vol. 26 No. 7, pp. 1093-1094.
- Pfeffer, J. and Fong, C.T. (2002), "The end of business schools? Less success than meets the eye", *Academy of Management Learning and Education*, Vol. 1 No. 1, pp. 78-95.
- Pierson, F.C. (1959), *The Education of American Businessmen: A Study of University-College Programs in Business Education*, McGraw Hill, New York, NY.
- Podolny, J.M. (2009), "The buck stops (and starts) at business school", *Harvard Business Review*, Vol. 87 No. 6, pp. 62-67.
- Porter, L.W. and McKibbin, L.E. (1988), *Management Education and Development*, McGraw Hill, New York, NY.
- Rubin, R.S. and Dierdorff, E.C. (2009), "How relevant is the MBA? Assessing the alignment of required curricula and required managerial competencies", *Academy of Management Learning and Education*, Vol. 8 No. 2, pp. 208-224.

- Rubin, R.S. and Dierdorff, E.C. (2011), "On the road to Abilene: time to manage agreement about MBA curricular relevance", *Academy of Management Learning and Education*, Vol. 11 No. 1, pp. 148-161.
- Rynes, S.L., Lawson, A.M. and Ilies, R. (2003), "Behavioral coursework in business education: growing evidence of a legitimacy crisis", *Academy of Management Learning and Education*, Vol. 2 No. 3, pp. 269-283.
- Samuelson, J. (2006), "The new rigor: beyond the right answer", *Academy of Management Learning and Education*, Vol. 5 No. 3, pp. 356-365.
- Schlegelmilch, B.B. and Thomas, H. (2011), "The MBA in 2020: will there still be one?", *Journal of Management Development*, Vol. 30 No. 5, pp. 474-482.
- Shipper, F. (1999), "A comparison of managerial skills of middle managers with MBAs, with other masters' and undergraduate degrees ten years after the porter and McKibbin report", *Journal of Managerial Psychology*, Vol. 14 No. 2, pp. 150-163.
- Stout, L. (2012), *The Shareholder Value Myth*, Berrett-Koehler, New York, NY.
- Shyns, B., Felfe, J. and Blank, H. (2007), "Is charisma hyper-romanticism? Empirical evidence from new data and a meta-analysis", *Applied Psychology: An International Review*, Vol. 56 No. 4, pp. 505-527.
- Thomas, H. and Wilson, A.D. (2011), "'Physics envy', cognitive legitimacy or practical relevance: dilemmas in the evolution of management research in the UK", *British Journal of Management*, Vol. 22 No. 4, pp. 443-456.
- Trank, C.Q. and Rynes, S.L. (2003), "Who moved our cheese? Reclaiming professionalism in business education", *Academy of Management Learning and Education*, Vol. 2, pp. 189-205.
- Williams, B. (2002), *Liberal Education and Useful Knowledge: A Brief History of The University of Sydney 1850-2000*, University of Sydney, Sydney.

Further reading

- Adler, N.J. and Harzing, A. (2009), "When knowledge wins: transcending the sense and nonsense of academic rankings", *Academy of Management Learning and Education*, Vol. 8 No. 1, pp. 72-95.
- Business Council of Australia (2011), *Lifting the Quality of Teaching and Learning in Higher Education*, available at: www.bca.com.au/ (accessed October 1, 2012).
- Glasman, L.R. and Albarracin, D. (2006), "Forming attitudes that predict future behaviour: a meta-analysis of the attitude-behavior relation", *Psychological Bulletin*, Vol. 132 No. 6, pp. 778-822.
- Montgomery, D.B. and Ramus, C.A. (2011), "Calibrating MBA job preferences for the 21st century", *Academy of Management Learning and Education*, Vol. 10 No. 1, pp. 9-26.
- Neubaum, D.O., Pagell, M., Drexler, J.A., McKee-Ryan, F.M. and Larson, E. (2009), "Business education and its relationship to student personal moral philosophies and attitudes toward profits: an empirical response to critics", *Academy of Management Learning and Education*, Vol. 8 No. 1, pp. 9-24.

Corresponding author

Margaret Lindorff can be contacted at: Margaret.Lindorff@Monash.edu