Does it Take an Expert to Lead Experts?
An Empirical Study of Business School Deans

Amanda H. Goodall[1]
Warwick Business School
University of Warwick

Abstract

Should knowledge-intensive organizations be led by experts? To explore this, the paper studies the case of the world's leading business schools. It asks the question: are top scholars leading the top schools? A statistically significant correlation is presented. The higher a business school is in a global ranking, the higher the number of life-time citations of the dean. The paper offers a theory to explain this. Interview evidence is also provided.

Key words: Strategic leadership, knowledge-based organizations, upper echelons theory, strategic choice, business schools, citations.

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[1] Address for correspondence: Amanda Goodall, Warwick Business School, University of Warwick, UK CV4 7AL. amanda@amandagoodall.com

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An Empirical Study of Business School Deans

"The standard bearer has to first bear the standard."[2]

Patrick Harker, Dean, the Wharton School.
Interview with author, April 28, 2005

Introduction

This paper presents a new correlation and suggests a theory of strategic leadership that might explain it. The issue explored is: does it matter to the performance of a business school if the dean has been a successful scholar? Scholarship is used here to mean academic research and research-led teaching.

The paper shows that business schools that stand higher in the Financial Times Global MBA ranking have deans with systematically higher levels of life-time citations. There are four possible interdependent explanations for this relationship. First, top business schools are more likely to seek out leaders with a strong publishing record. Second, the best schools may be more attractive to better scholars. Third, the correlation might be a statistical coincidence of this time period. Finally, deans who have been successful scholars may be more likely to make strategic choices that improve the performance of a business school. The paper addresses each of these explanations.

Given the centrality of research performance in most university mission statements, it seems a logical step to turn attention to the research background of their leaders. In the context of business schools particularly, but also of universities, the question of whether it matters if a leader has been a scholar has circulated for a number of years. In principle, every Dean Search committee grapples with this issue. Yet to the author's knowledge there appears to have been no previous empirical research focusing on business schools.

There are two central ideas in this study. First, the focus here is away from the top management team (TMT) and on to individual leaders at the apex. It is argued here that it is acceptable for those at the head of organizations to be viewed differently from the TMT, and, further, that individual leaders may be important to the performance of their organization. Second, business schools are knowledge-intensive organizations, and the leader-characteristic being

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observed in this paper is unambiguously associated with the organizational context. Indeed, scholarship can be seen to be explicitly linked to the core business of a university or business school, which is research and research-led teaching.

The paper tests the cross-section hypothesis that business schools positioned higher in the rankings are led by deans who have been more successful scholars. Using data on the life-time citations of deans, evidence consistent with this hypothesis is found. The paper calculates Spearman's rank and Pearson's correlation coefficients. Interviews with a number of leaders in universities and business schools are also referenced throughout the paper.

Strategic Leader vs. Dominant Coalition

This paper places emphasis on individual leaders, namely, deans of business schools. Most of the recent research on strategic leadership has examined the 'dominant coalition' (Cyert & March, 1963) or the team at the top (D'Aveni, 1990; Finkelstein & Hambrick, 1996; Geletkanycz & Hambrick, 1997; Goll & Rasheed, 2005; Haleblian & Finkelstein, 1993; Hambrick & Mason, 1984; among others). The central focus of observation in these studies has been on the collective impact of the TMT rather than on the actions or influence of the individual CEO (Carpenter, Geletkanycz & Sanders, 2004). Increasingly, however, the TMT is being analytically dismantled, and research is turning to various constituent parts (Arendt et al., 2005; Bertrand & Schoar, 2003; Bigley & Wiersema, 2002; Carpenter & Sanders, 2002; Fenton & Pettigrew, 2005; Hambrick, 1994; Hayward & Hambrick, 1997; Jensen & Zajac, 2004; Lewin & Stephens, 1994; Papadakis & Barwise, 2002; Peterson et al., 2003; Pettigrew, 1992; Pettigrew & Fenton, 2000).

It is a common claim that universities are governed through processes of collegiality and negotiation in a *first among equals* culture (Birnbaum, 1988; Cohen & March, 1974; Rosovsky, 1991). However, this does not mean that leaders have no influence, albeit there may have been differences in levels of executive power, noticeably between presidents in US privates and those in European universities (Rosovsky, 1991).

The decision adopted in this paper to turn attention away from the team and on to individual leaders seems justified. In a university, there is a president or vice chancellor at the top of the institution, but there are also other heads of key strategic units, for example, deans of schools or faculties. These leaders are also decision-makers. It is conventional for deans, and also presidents or vice-chancellors, to each have their own TMTs, but it is normally they who decide which academic administrators are to be included among them. Most university leaders, especially in the US and UK, make their own appointments to provost or pro-vice chancellor, although endorsement from faculty may also be taken into

consideration (Rosovsky, 1991). Similarly, most business school deans appoint their own deputy deans.

It is suggested here that if the appointments into TMT positions are made by the CEO, this act of selection is likely to change the balance of power between the CEO and TMT. If the CEO has appointed those in key senior positions then it could be argued that their potential to influence strategy is enhanced both through selection preferences and loyalty. Thus, although the TMT will be involved in management and the execution of strategic decisions, it is possible that each TMT member has been selected exactly because they share the same strategic choice-outlook as that of the leader.

Adopting this position is not to deny that many strategies will have been generated by members of the top team and also will have emerged from other parts of the organization (Mintzberg, 1994). But it is suggested here that the CEO, in principle, is *more* than a central member of the TMT (Jackson, 92). Finally, it is posited that leadership in terms of strategic choice (Child, 1972, 1997) depends disproportionately upon the individual at the apex.

Amy Gutmann, President of the University of Pennsylvania, said that she practises leadership "in a fuller sense, through collaboration, not by command and rule". However, she is unwavering when asked about her direct input and presidential powers. President Gutmann sets the "overall strategic direction" and, although she states she does not micro-manage, she appoints deans and provosts, who act on her behalf and report directly to her (interviewed April 28, 2005).

Scholarship is not a proxy for either management experience or leadership skills but *in addition to*. Most academics in senior leadership positions within universities have first gained management experience by running research centers or labs, or heading up academic programs. However, a priori, if what really matters in a leader is solely managerial ability, it would not be expected that business schools would be led by successful researchers. Scholarship can be viewed as complementary but also necessary. To acquire any management experience within academe, for example as a head of department, it is usually necessary to be an academic and usually one in a senior position. Thus scholarship is already a prerequisite of leadership in universities. This study argues that the level of scholarship may also affect leadership performance.

Theoretical Background

This paper presents a view of strategic leadership, and explains it within the context of knowledge-intensive organizations. As has been outlined above, the emphasis is on those at the apex. Leadership theories range from being internally located in personality (McAdams, 1992) to the external or

transformational effect leaders may have on followers (Bass, 1985). This paper draws from upper echelons theory to interpret the empirical findings.

Upper echelons (UE) theory examines the characteristics that will predict strategic choice (Child, 1972) and concomitant outcomes (Hambrick & Mason, 1984). The theory proposes that members of the TMT will be influenced in their decision-making by individual and group demographic factors such as age, education, functional track, TMT heterogeneity, socio-economic roots, among others (ibid). Specifically, an executive brings to a situation a set of 'givens' (March and Simon 1958) and values (Hambrick & Mason, 1984) that are expressed through 'bounded rationality' (March & Simon, 1958).

It could be argued that in business schools and universities there is a defining UE characteristic that influences a leader's strategic choice (Child, 1972) and organizational performance. This might be because the leader-characteristic being observed is the same as that which defines the organization's core business. For example, in business schools the core business is research and research-led teaching. The UE characteristic under observation here is scholarship.

The second theoretical approach adopted in this paper pertains to the situation in which leadership is being explained. Business schools and universities are knowledge-intensive organizations (Mintzberg, 1979). Much has been written about managing and leading experts (Quinn, Anderson & Finkelstein, 1996) and professionals (Alvesson, 2004; Fenton & Pettigtrew, 2005; Lowendahl, 1997; Maister, 1993; Mintzberg, Quinn & Ghoshal, 1995). Unlike managing hierarchical structures -- for example in manufacturing firms -- managing in knowledge-intensive organizations is more collective in nature. Lowendahl (1997) argues that when the business of an organization is knowledge-based, and the majority of its employees are experts (for example in consulting firms, law and accounting practices), the task of management can be challenging. Professionals' attention is outward toward the client not inward toward the company. She suggests that good professionals (i.e. those who have excelled in consulting, accounting and so on) are required as managers and leaders. A key reason is that those with an excellent professional reputation (Lowendahl, 1997:56) will be more readily accepted by their peers.

The suggestion in this paper is that the notion that organizations are a reflection of their senior executives (Hambrick & Mason, 1984) may be even more applicable in the context of knowledge-intensive organizations and professional service firms. A key factor in this assertion is the common link between the situation or firm, and the characteristic under observation, scholarship, which is the core business of a university or business school. In summary, the paper argues that in knowledge-intensive organizations it takes an expert to lead experts.

The next section outlines the research process. The empirical results are then presented and, finally, the paper offers potential explanations and theoretical implications.

Research Method

The empirical work in this paper is designed to initiate the process of answering the question: do scholars make better deans of business schools? This paper addresses the first part of the question only: are they currently leading top business schools? Correlations form the central part of the empirical results. However, the theoretical implications, outlined below, are supported by a small number of illustrative statements from qualitative interviews with leaders in universities (interview schedule in Appendix A). One testable proposition is central to the paper.

Hypothesis: There is a positive correlation between the prior research success of a business school's dean and the position of that school in an international ranking.

This study focuses on one variable, namely, the lifetime citations of business school deans. Each leader's citation score is calculated and then used as a measure of how research-active and successful that dean was in his or her academic career. Given the paper's hypothesis, a business school ranking is also required. The one used in this paper is the Global MBA ranking 2005 produced by the Financial Times (FT) newspaper[1].

Financial Times Global MBA Ranking

Media-generated university league tables are ubiquitous and often controversial. They may be useful heuristic devices for students, but as objective tools of assessment of university quality they can be unreliable. The Financial Times produces one of the most consistent rankings of business schools. It has the advantage that the methodology used for assessment remains largely unchanged each year. The FT league table is also chosen here because it is internationally recognised.

The FT ranking began as a European survey of 49 business schools in 1998 and developed into a worldwide league table of 75 schools in 2000. This number was extended to 100 in 2001.

To construct its ranking, the FT assigns 55% of weight to alumni survey returns, relying on criteria such as salary and career progress. Twenty-five percent is put on business school characteristics -- for example, measuring diversity of staff and students, and the extent to which a school is internationally recognized. A final 20% is allocated for research quality; 5% for faculty with PhDs; 5% on the number of doctoral grads taking a faculty position at one of the top 50 schools;

and 10% for the number of faculty who publish articles in 40 named academic journals.

The FT ranks institutions by assigning points; therefore, this can result in two or more institutions being given the same position.

The Collection of Citations Data on Leaders

Citations are references to authors in other academic papers. Citation information used in this study comes from the Institute for Scientific Information (ISI), which is an on-line database comprising the Science Citation Index, Social Science Citation Index and the Arts and Humanities Citation Index.

The disciplinary backgrounds of business school deans are almost exclusively in the social sciences. A small number of deans, however, also publish in science journals. Because of this disciplinary homogeneity across deans, there is no need to normalise citations in the way that would be required for an equivalent citations study of university presidents (who can come from the humanities, the sciences, and the social sciences).

Data on the 100 deans were collected between June and July 2005. Only those deans in post during this period are included. Each dean's lifetime citations were counted by hand. These cover citations to both journal articles and monographs.

The use of bibliographic data for purposes other than information retrieval is still in its infancy[2]. A central problem when assigning citations to authors is nationality. Language biases have been shown to exist within ISI (van Leeuwen et al., 2001), although it is now considered to be less of a problem because most journals publish in English (King, 2004).

Substantial effort for this paper has been made to accurately assign citation numbers to authors' names. However, there may be small counting errors.

Precision may be less crucial than would at first be thought. Two studies that adopted different counting methods, Seng and Willett (1995), who use a very precise method on the one hand, and Oppenheim (1995), who assigned citations more approximately on the other, both report similar results. Finally, it is important to note that citations are not necessarily an exact measure of research success. However, bibliographic data seem a natural measure for the purpose of this paper.

Data on the 100 Business School Deans

The sample in this study includes 99 deans from 100 business schools. The missing dean is from a school based in the United States (US) that was in the

process of making a new appointment. Two schools in the same situation appointed acting-deans who are included in this data set.

Sixty-five of the 100 business schools in the FT MBA ranking are located in North America. Fifty-eight of these are in the US and 7 in Canada. Twenty-six schools are based in European countries. Of these 14 are in the United Kingdom (UK), 3 each in France and Spain, 2 in Ireland and 1 each in Switzerland, Netherlands, Italy and Belgium. Finally, 9 of the 100 schools are spread across the rest of the world. There are 2 schools each in Australia, Hong Kong and Mexico, with one each in Brazil, China, and South Africa.

Only 11 deans in the FT Top-100 are women. Six of these are located in US schools, 3 in the UK, and one each in Canada and Brazil.

With regards to deans' backgrounds, eleven of the 99 have come from the business sector and not from academia, though 2 of the 11 have PhDs. Most of the deans in the sample have had traditional academic careers. Just over a quarter of the deans define themselves as professors of management, business administration, strategy or entrepreneurship. In addition, there are 18 economists, 13 are from finance and 6 from accounting. Marketing professors account for 7, organizational behaviour and industrial relations 6, and finally 7 in operations and information management, operational research and risk management.

The Institute for Scientific Information (ISI) has created a 'Highly Cited' category (ISI HiCi) that identifies the world's top 1% of academic researchers -- approximately 250 people -- in each disciplinary field. There are 21 broad subject areas; 19 are in science subjects, and 2 are in the social sciences, namely 'Economics and Business' and 'Social Sciences - General'. There is currently no HiCi category for the humanities[4].

Of the 99 deans, three are identified by ISI as being Highly Cited -- Kim Clark at Harvard, Patrick Harker at Wharton and Robert Glenn Hubbard of Columbia. Their schools' positions in the FT table are shared first-place (Harvard and Wharton) and third-place (Columbia).

The age of deans may potentially affect their life-time citation score, because those who are older had the greatest opportunity to accrue citations. So, for example, if the deans with low numbers of citations can be shown to be significantly younger than those deans with high life-time scores, age could be influential. However, an inspection of the age profile of deans in the data of this study suggests that there are no major age differences between those with the highest and lowest citation scores.

Results

The individual life-time citation scores of the 99 deans in this study range from 0 - 3378. The mean citation score is 356 and the median score is 99. There are 3 deans with scores over 2500 cites. Twenty deans have a citation score of zero, most of who came to their deanships via management jobs in the business sector.

It is useful to begin by splitting the group of deans in half. Among those who run the world's top-fifty business schools, the mean citation score of the deans is 466 and the median 183. The mean citation score of the next 49 deans is 244 and the median is 45. These data are presented in averages in Figure 1. The bar chart shows that the first 50 deans in the FT Top-100 collectively have just under double the citations of those in the second group.

To test for statistical significance, two checks are applied. The first is a calculation of Spearman's rho. It tests whether the ordering of one variable (the position of a business school) is correlated with the ordering of the second variable (a dean's life-time citations). The highest citation score is ranked 1 and the lowest is ranked 100.

As an alternative, this is followed by a calculation of Pearson's correlation coefficient (r). Each dean's citation score is regressed against the position of their business school to try to establish whether there is a statistically significant relationship between the position of a school in the FT table and the citation score of a dean.

Using these data, Spearman's rho is 0.274. With 100 observations, the associated 5 per cent critical value for a two-tailed test is 0.195, and at 1 per cent it is 0.254. Hence the correlation between leader's rank and school's rank is statistically significant at $p<0.01$.

Using Pearson's coefficient (r), the degree of linear relationship can be examined between the position of a business school and the citation score of a dean. Figure 2 presents a scatter plot showing 99 deans' citation scores plotted against the FT global ranking of business schools. Pearson's r is 0.283. The 1 per cent critical value on a two-tailed test is 0.254, which means, again, that the relationship is statistically significant at $p<0.01$. Conspicuous in Figure 2 are three distinct outliers -- those individuals above 2500 citations. When the same test is applied but this time to a logarithm of the dean's citations Pearson's r is 0.275 which is still significant at $p<0.01$.

The US dominates the FT league table with 58 business schools. Of the top 20 schools, 15 are located there. Fifty-seven US deans are in the sub-sample (as explained above, one school is between appointments). The mean life-time citation score of the US deans is 452. As can be seen in Figure 3 when

Pearson's r is applied to the US group once again the relationship is found. The .1 per cent critical value for 60 observations is 0.408, and Pearson's r for the US deans is 0.427 which is significant at $p<0.001$.

These tests show that there is a statistically significant relationship between the position of a business school in the FT ranking and the life-time citations of its dean. The higher the school is in the league table, the higher the dean's citations. On average, six extra citations gained by the dean equate to one move up the FT ranking for a business school. Equivalently, 600 citations will, at the mean values, move a school from the bottom of the FT Top-100 to close to the top. The relationship holds for the full group of 99 deans and also for the sub-sample of 57 US deans.

Interestingly, when this test is applied to the group 43 non-American institutions only, there is no statistically significant correlation between the rank position of a school and a dean's citation score. This non-US result raises a number of questions. Could it be a reflection of English language bias? Are non-US schools choosing the wrong people to lead them? Or do the top US business schools favour research more than the non US institutions? It is not possible to answer these questions here. But it is possible to isolate a single country from the 99 sample and run the same test to identify whether a similar pattern exists.

After the United States, the UK, at 14, has the second-highest number of business schools in the 2005 FT Top-100 table. The UK seems an appropriate nation to focus on because language parity means that publishing and citations biases may be somewhat minimised. Also, the UK has a potentially useful objective measure of quality, namely the so-called Research Assessment Exercise. The Research Assessment Exercise (RAE) was set up by the UK Government in 1986 to assess, with the aid of expert peer review, the quality and quantity of research being generated in UK universities[3]. The RAE Unit of Assessment (UoA) for business school submissions is 'Business and Management Studies'. The year used in this paper is 2001, which was the last time the RAE assessment panels reported. Each submission is of a whole university department.

Only those units of assessment that achieved a score above 4D in the 2001 RAE are included. RAE UoA scores range from '5A Star' at the very top end with the 'A' signifying that all staff in the field of business in a given university have been submitted for assessment. The scores go down to 1D, at the very lowest level, D signifying that only a small minority of staff have been submitted. The reason in the present study for drawing a line at RAE grade 4 is because a quality threshold allows comparison with schools in the FT Top-100. Of the UK business schools that made it into the FT ranking in the equivalent RAE year of 2001, the lowest RAE grade of a UK school included was 4D.

In 2001 there were 38 units of assessment in Business and Management Studies in UK universities rated 4D and above. Sixteen submissions scored in the 5s, and 22 scored in the 4s. Thirty-six of the 38 business schools are located within comprehensive universities. Only two are stand-alone business schools.

The next step is to test whether a similar correlation exists between the 38 UK business schools (or units of assessment), ranked by their RAE score, and the research history of their deans. The life-time citations of the 38 deans are hand counted. Although the period of analysis is 2001, the citations have been counted up to 2005. This has been done because citations are believed to be a better indicator of research performance over longer periods of time (van Raan, 2003).

The use of RAE scores to rank the position of a school or UoA is potentially clumsy. However, for the purposes of this paper it has been done. The top UK school, London Business School with '5A Star', is ranked 1; the second two schools, Lancaster Business School and Warwick Business School with '5B Star' are ranked 2; and so on down to those schools rated 4D in the RAE, who for this study, have been assigned a ranking position of 9.

The maximum recorded number of life-time citations of a dean in the 38 British sample is 1600 and the minimum is zero. The mean leader-citation score among departments rated in the 5s is 379, and the mean citation score of those in the 4s is 150. This implies that deans running departments in the former group are two-and-a-half times more cited than those in the second column of departments that scored in the 4s.

Figure 4 presents a scatter plot of the 38 UK deans' citation scores plotted against the RAE ranked position of business schools. Pearson's r here is 0.452. The 1 per cent critical value on a two-tailed test for 40 observations is 0.393, which means that this negatively-sloped relationship is statistically significant at $p<0.01$. For this case, an increase of 65 citations obtained by a dean is equal to one move up in the RAE for a unit of assessment.

In summary, this study demonstrates that the higher a business school is in the FT ranking the more likely it is that the lifetime citations of its dean will also be high. This result has also been found for a smaller sample of UK business schools rated by the Research Assessment Exercise. The paper's finding is consistent with those of a previous study where a correlation was found between the citations of presidents of universities and the position of their institutions in a global ranking of the world's top-100 universities (Goodall, 2006). Indeed, the relationship between presidents and the position of their universities is marginally stronger than that between deans and business schools. This may partially be because business schools place a greater emphasis on applied social science.

It is perhaps useful to note that business school rank explains approximately 10% of the variance in leaders' citations. As would be expected, there are other explanatory factors that are not being measured here.

Data Analysis: Four Possible Explanations

These findings reveal that those business schools at the top of the FT-100 ranking are behaving differently from those lower down. Better scholars are leading better business schools. Cross-sectional analyses can be indicative of causality but, of course, they are not sufficient to establish a causal relationship. Nevertheless, the empirical evidence presented here seems interesting and apparently robust. It deserves explanation.

Why are business schools higher in the league table, being led by deans with stronger publication records?

Four interrelated explanations are:

A. Top business schools are more likely to seek out top scholars as deans.
B. The best schools are more attractive to the best scholars.
C. The correlation might be a statistical coincidence of this time period.
D. Deans who have been successful scholars are more likely to make strategic choices that improve the performance of business schools.

Possibility A -- *Top business schools are more likely to seek out top scholars as deans.*

It is likely that an Ivy League university will always appoint a president or dean who has either worked at an Ivy institution or studied at one. In UK universities, there is little movement in vice chancellors between those leading older research universities and those in former polytechnics or newly established universities (Bargh et al., 2000). Who gets appointed may be a factor of the universities that house business schools. For example, business schools within universities that have a strong research focus are more likely to conform to this culture (Bennis & O'Toole, 2005). Similarly, it could be argued that because the leaders of universities who appoint deans are themselves top scholars (Goodall 2006), they appoint other scholars into key leadership positions. In short, like appoints like.

A reason why a high-status institution may want to appoint a researcher is because "a good scholar can command greater respect from his or her academic peers" (Jeremy Knowles, former Dean, Faculty of Arts and Sciences, Harvard, interviewed April 12, 2005). Also, "an appointing board can signal a sound understanding of the culture of a research university by appointing a recognized scholar with administrative ability to a top leadership position", (John Heilbron,

former Vice-Chancellor of the University of California, Berkeley, personal correspondence 2004).

The appointment committee may also choose to send a message to the faculty. "The appointment of a top researcher sends an internal signal to colleagues that research success in the institution is important" (Amy Gutmann, President of the University of Pennsylvania, interviewed April 28, 2005).

Alternatively, the signal may be external in that the dean, president or vice chancellor, fits the institutional mission statement. There may also be advantages in terms of the profile of a leader. "A top Scholar is more likely to be of interest to the media. And a high media profile can be very useful with brand growth, fund raising and alumni relations", (Mary Blair, Director of Fundraising at the London School of Economics, personal correspondence 2005).

Alternatively, the correlation may be explained through unobservable heterogeneity in that research talent is merely a proxy for leadership ability. Universities choose successful scholars because those who are good at research are, perhaps, simply good at everything. Appointment committees may regard those with strong publishing records as having demonstrated high productivity, which is required of a leader.

Possibility B -- *The best schools are more attractive to the best scholars*

This is the idea that candidates who have been successful scholars will be more attracted to higher-status business schools. It offers an explanation that is the mirror image of A in that there is a match between the selector and the selected and that this represents a better investment return. Economists might describe this as a form of rational assortative matching (Becker, 1973).

Possibility C – *The correlation is a statistical coincidence of this time period.*

It is unlikely that the results in this paper occur through statistical coincidence. For instance, the same pattern was found in a previous study on 100 presidents of universities (Goodall, 2006).

Possibility D -- *Deans who have been scholars aid the performance of business schools*

Option D proposes that there may be a link with organizational performance in that those deans with strong publishing records contribute something extra to the role of leader. This hypothesis suggests that business schools perform better if led by a scholar. It may be possible to explain this option by drawing from upper echelons theory (Hambrick & Mason, 1984).

This paper adapts Hambrick and Mason's original UE perspective. It argues that there may be a fundamental UE characteristic in knowledge-intensive organizations. This is not to say that other UE characteristics (for example, age and disciplinary background) are not relevant but that they may be less important characteristics in this context.

UE theory can be adapted here by emphasising two concepts. First, the paper argues that having been a scholar may inform decision-making because the leader has inherent knowledge of the core business. An academic with a strong publishing record understands scholarship. There may be specific cognitive processes through which a scholar's inherent knowledge informs decision-making. One example is in the selection of faculty. A scholar might be a better judge of other scholars. Self-verification theory posits that individuals need their self-view constantly confirmed whether that self-view is positive or negative (Swann, 1990; White & Harkins, 1994). Swann suggests that 'good researchers have positive views of their research capability and weaker researchers have positive views of other talents, such as administration or teaching. So weaker researchers may prefer similar others because they give them verification of their specific self-view, or because they have the same 'shared reality' (Hardin & Higgins, 1996) in that they value the same things' (personal correspondence, June 3, 2005).

Second, it is suggested here that the observable processes or actions take place through inherent preferences which may lead to the prioritization of certain activities over others -- and that this is more likely to lead to successful performance outcomes. It is reasonable to assume that a scholar has prioritized scholarship in his or her own life. Furthermore, once a scholar becomes a leader he or she may continue to prioritize activities related to scholarship, which is the organization's core business. Strategic choices that have been prioritized are more likely to yield successful outcomes (Hickson, Miller & Wilson, 2003). It should be noted that only those business schools or universities that emphasise research and teaching in their mission statements can perhaps be said to rate these activities as core.

In knowledge-intensive organizations and professional service firms, inherent knowledge and inherent preferences are proxied by executives' success in the related field, for example practising law, accounting, consulting or in academe.

How might this explain strategic choice and organizational performance?

It is suggested that inherent preferences, informed through inherent knowledge of the core business, influence strategic choice partly through a process of prioritization of particular observable activities. These activities include t*ime allocation*, *trade-offs, selection* and *signalling.* For example:

1. **Time allocation –** prioritizing academic and research activities, or the core business, above other demands on managerial time.

    - Scholars are more likely to perform a central role in decision-making of faculty appointments and tenure decisions.
    - They are likely to prioritize research and academic funding over other forms of income and expenditure, and will focus heavily on the Research Assessment Exercise (in the UK).

2. **Trade-offs –** trading non-core activities for core activities

    - "The most important part of the job of dean is the recruitment and retention of top faculty. Appointing good staff is the key to sustaining the position of a business school or university." Patrick Harker, Dean, Wharton (interviewed April 29, 2005)

3. **Selection –** faculty appointments

    - "Leaders are the final arbiters of quality. Therefore it is right to expect the standard bearer to first bear the standard." Patrick Harker, Dean, Wharton (interviewed April 29, 2005).

    - "The two most important functions of the position of president are broad direction-setting and imposing standards. It is easier to impose standards if you have first met them yourself." Lawrence Summers, President, Harvard (interviewed May 23, 2005).

    - "The rationale for rating academic excellence very highly is the enormous importance we place on the president having the respect of the faculty. Without that, it is very difficult to lead a research university." Shirley Tilghman, President, Princeton (The Daily Princetonian, October 24, 2005).

    - "A scholar will be better equipped to lead the intellectual direction of a business school or university." Kim Clark, Dean, Harvard Business School (interviewed March 25, 2005).

    - Being a successful scholar may also help in attracting other top faculty to a university.

4. **Signalling –** the symbolic importance of internal and external signalling to stakeholders.

    - The selection of a particular president or vice chancellor is a strategic choice made by those a step back; it is made by governors or board members who may wish to use the appointment of a scholar to signal a

change in strategy. Alternatively, in the case of internal appointments, such as deans, the president or vice chancellor may be making the signalling choice.

In summary, option D draws from upper echelons theory to explain how the characteristic of scholarship might influence a leader's strategic choice. This takes place through the prioritization of core-business activities which, it is suggested, improves performance as determined by the position of the organization in a global league-table (which is externally assigned).

Concluding Comments

This paper is an attempt to explore whether it takes an expert to lead experts. The contribution of the paper is primarily, but not exclusively, empirical. It offers new evidence that the higher a business school is in the FT Top-100 ranking the higher are the lifetime citations of its dean. This correlation is found for the international group of business schools as a whole, for 57 US schools, and for 38 UK university business and management departments in the 2001 Research Assessment Exercise. However, no statistically significant correlation exists for the 43 non-US schools when treated as a sub-sample.

To motivate its conclusions, the paper considers four possible explanations. First, top business schools may be more likely to seek out leaders with a strong publishing record. Second, the best schools may be more attractive to the best scholars. Third, the correlation might be a statistical coincidence of this time period. Finally, deans who have been successful scholars may be more likely to make strategic choices that improve the performance of a business school (and it may be, consistent with explanation 1, that the appointing committees know this).

This final proposition is further developed in the paper by drawing from Hambrick and Mason's (1984) upper echelons theory. The paper argues that within knowledge-intensive organizations there may be a defining UE characteristic -- the expert ability of the leader -- that influences a leader's strategic choice and impacts upon organizational performance. The paper describes the processes through which, drawing on their inherent knowledge and inherent preferences, a leader's research background may inform his or her role as leader. These processes include t*ime allocation*, *trade-offs, selection* and *signalling.*

This argument does not mean that management ability is irrelevant. The paper suggests that the appointment of someone who is a scholar and who also has management and leadership experience creates the conditions favourable to successful organizational outcomes. In the words of a former UK university vice chancellor, 'what matters is scholarship not just management -- we should take management for granted'[5].

In conclusion, the paper provides what may be some of the first formal evidence that top business schools systematically appoint experts as their leaders. A concentration on the leader as opposed to the top management team has been unfashionable in recent years. The analysis attempts to shift the focus back on to those at the apex of their organizations. It argues, within the context of a specific form of knowledge-intensive organization, that this can be justified empirically and theoretically.

FIGURE 1.

Business School Deans' Life-time Citations in FT Top 100 ranking

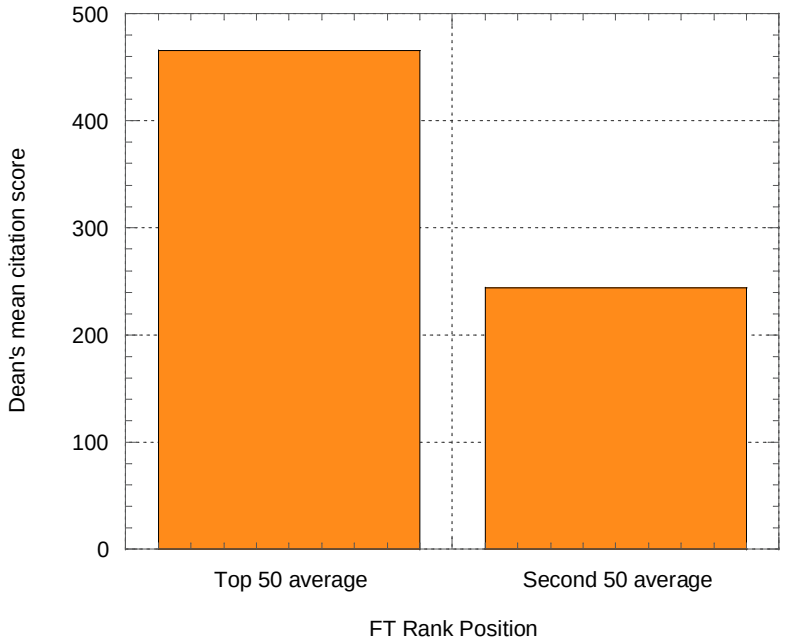


FIGURE 2.

Business School Deans from FT Top 100 (p<0.01)

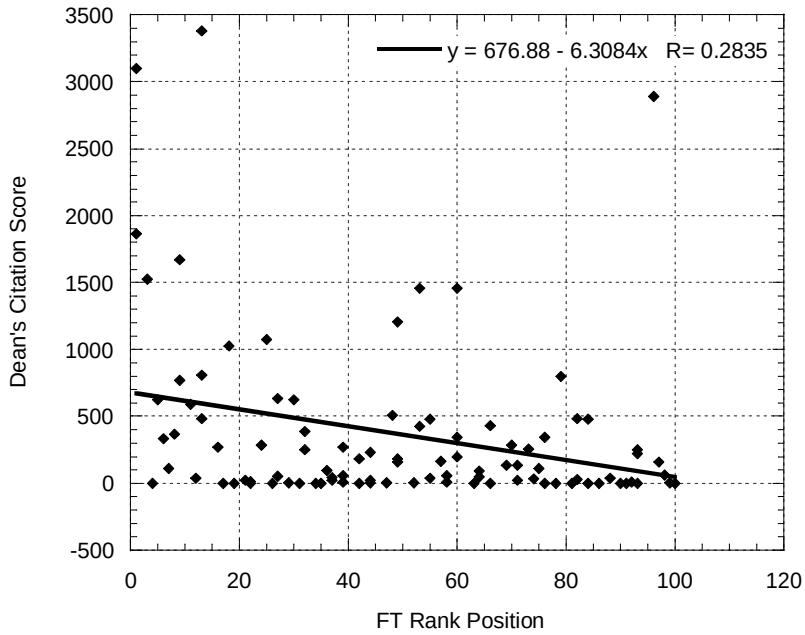


FIGURE 3.

Deans from U.S. Business Schools
(p<0.001)

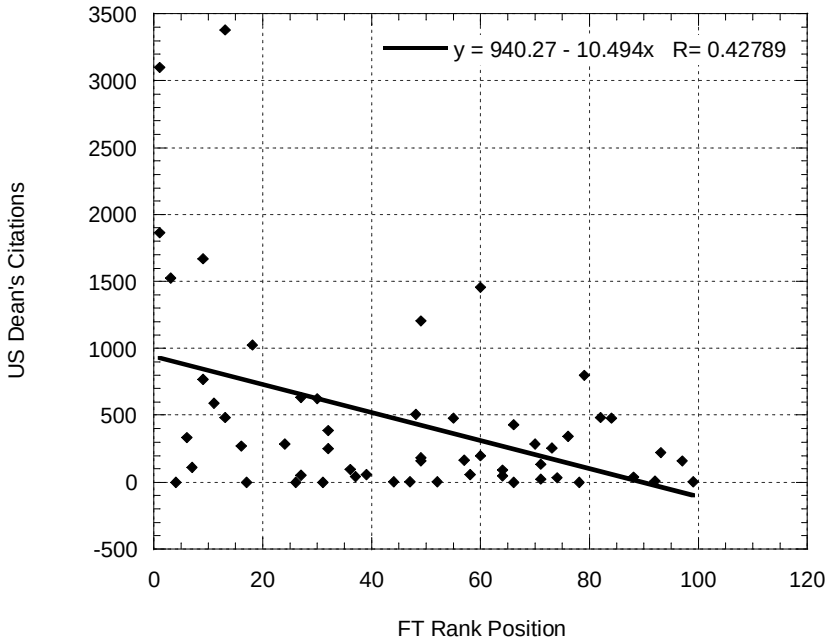
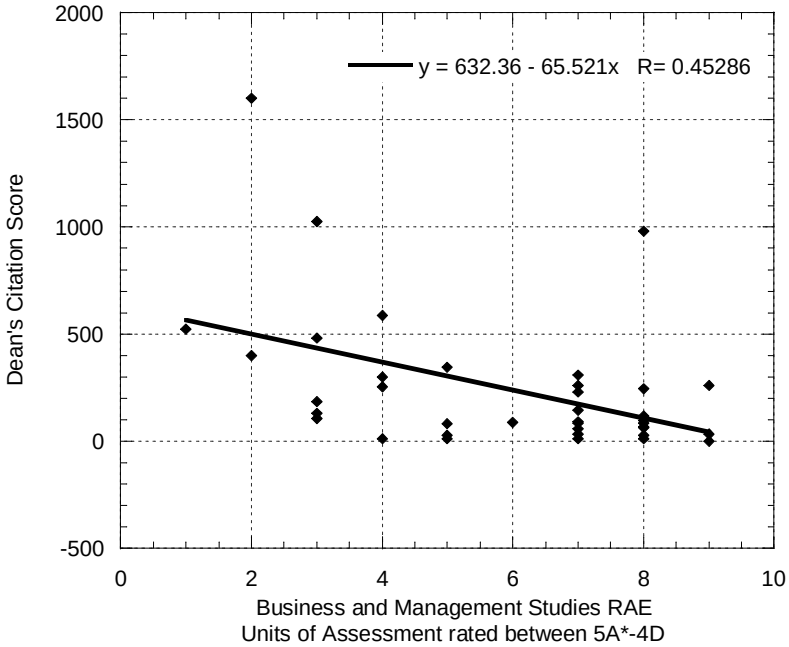


FIGURE 4.

Deans of UK Business and Management Schools
(p<0.01)



FOOTNOTES

1. Available from: www.rankings.ft.com.
2. For an overview of the strengths and weaknesses of using bibliometric data, see van Raan 1998, Norris and Oppenheim 2003, and Goodall 2006.
3. Results available at www.hero.ac.uk/rae/Results/.
4. HiCi data are available at www.highlycited.com.
5. The former UK vice chancellor asked to remain anonymous.

Appendix 1. Interview schedule

1. Kim Clark, Dean, Harvard Business School. Interview held at HBS, Harvard, March 25, 2005. He left this position in summer 2005.

2. Jeremy Knowles, former Dean, Faculty of Arts and Sciences, Harvard. Interview held at Harvard April 12, 2005.

3. Amy Gutmann, President, University of Pennsylvania. Interview held at University of Pennsylvania April 28, 2005.

4. Patrick Harker, Dean, Wharton School. Interview held at University of Pennsylvania April 29, 2005.

5. Lawrence Summers, President, Harvard. Interview held at Harvard May 23, 2005.

6. John Heilbron, former Vice-Chancellor of the University of California, Berkeley. Personal correspondence 2004.

7. Mary Blair, Director of Fundraising, London School of Economics. Personal correspondence 2005.

REFERENCES

Alvesson, M. 2004. *Knowledge work and knowledge-intensive firms*. Oxford University Press: Oxford.

Arendt, L.A., Priem, R. L., & Ndofor, H. A. 2005. A CEO-adviser model of strategic decision-making. *Journal of Management*, 31: 680 – 699.

Bargh, C., Bocock, J., Scott, P. & Smith, D. 2000. *University leadership: The role of the chief executive*. Open University Press: UK.

Bass, B. M. 1985. *Leadership and performance beyond expectation.* New York: Free Press.

Becker, G. S. 1973. A theory of marriage: Part I*. Journal of Political Economy*, University of Chicago Press, 81(4): 813-46.

Bennis, W.G. & O'Toole, J. 2005. How business schools lost their way. *Harvard Business Review*, May, 5, 83 Issue 5: 96-104.

Bertrand, M. & Schoar, A. 2003. Managing with style: The effect of managers on firm policies. *Quarterly Journal of Economics*, 118: 1169–1208.

Bigley, G. & Wiersema, M. 2002. New CEOs and corporate strategic refocusing: How experience as heir apparent influences use of power. *Administrative Science Quarterly*, 47: 707–729.

Birnbaum, R. 1988. *How colleges work: The cybernetics of academic organization and leadership.* San Francisco: Josey-Bass.

Carpenter, M. A. & Sanders, W. G. 2002. Top management team compensation: The missing link between CEO pay and firm performance. *Strategic Management Journal*, 23: 367–375.

Carpenter, M. A. Geletkanycz, M.A & Sanders, W.G. 2004. Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30: 749–778

Child, J. 1972. Organizational structure, environment, and performance: The role of strategic choice. *Sociology,* 6: 1–22.

Child, J. 1997. Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect, *Organization Studies,* 18/1: 43-76.

Cohen, M.D. & March, J.G. 1974. *Leadership and Ambiguity.* McGraw-Hill, New York.

Cyert, R. M., & March, J. G. 1963. *A behavioral theory of the firm*. Engelwood Cliffs, NJ: Prentice-Hall.

D'Aveni, R. 1990. Top managerial prestige and organizational bankruptcy. *Organization Science*, 1: 121–142.

Fenton, E. & Pettigrew, A. M. 2005. Leading change in the new professional service organization: Characterizing strategic leadership in a global context. In R. Greenwood & R. Suddaby (Eds), *Research in the Sociology of Organizations: Professional Service Firms.* JAI/Elsevier.

Finkelstein, S. & Hambrick, D. C. 1990. Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35: 484–503.

Finkelstein, S. & Hambrick, D. C. 1996. *Strategic leadership: Top executives and their effects on organizations*. Minneapolis: West Publishing.

Geletkanycz, M. A. & Hambrick, D. C. 1997. The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly*, 42: 654–681.

Goll, I. & Rasheed, A. A. 2005. The relationship between top management demographics, rational decision-making, environmental munificence, and firm performance. *Organization Studies*, 26: 999-1023.

Goodall, A.H. 2006. Should research universities be led by top researchers and are they? Forthcoming in the *Journal of Documentation*, 62, No. 3.

Haleblian, J. & Finkelstein, S. 1993. Top-management team size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36: 844–863.

Hambrick, D.C. & Mason, P. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review,* 9:193-206.

Hambrick, D. C. 1994. Top management groups: A conceptual integration and reconsideration of the "team" label. In B. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior:* Vol. 16. 171–213. Beverly Hill: JAI Press.

Hardin, C. D. & Higgins, E. T. 1996. Shared reality: How social verification makes the subjective objective. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: The interpersonal context (Vol. 3)*. New York: Guilford.

Hayward, M. & Hambrick, D. C. 1997. Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42: 103–127.

Hickson, D. J., Miller S. J. & Wilson, D. C. 2003. Planned or prioritized? Two options in managing the implementation of strategic decisions. *Journal of Management Studies* 40:7

Jackson, S. 1992. Consequences of group composition for the interpersonal dynamics of strategic issue processing. In P. Shrivastava, A. Huff, & J. Dutton (Eds.), *Advances in strategic management:* 345–382. Greenwich, CT: JAI Press.

Jensen, M. & Zajac, E. 2004. Corporate elites and corporate strategy: How demographic preferences and structural differences shape the scope of the firm. *Strategic Management Journal*, 25: 507–524.

King, D.A. 2004. The scientific impact of nations, *Nature*, 430: 311-316.

Lewin, A.Y. & Stephens, C.U 1994. CEO attitudes as determinants of organization design: An integrated model. Organization Studies, 15, 2.

Lowendahl, B.R. 1997. *Strategic management of professional service firms*. Copenhagen Business School Press, Denmark.

March, J. G. & Simon, H. A. 1958. *Organizations*. New York: Wiley.

Maister, D.H. 1993. *Managing the professional service firm*. Simon & Schuster, London.

McAdams, D. P. 1992. The five factor model in personality: A critical appraisal. *Journal of Personality, 60,* 329-361.

Mintzberg, H. 1979. *The Structuring of Organizations*, Prentice Hall.

Mintzberg, H. 1994. *The Rise and Fall of Strategic Planning*. New York, NY: The Free Press.

Mintzberg, H., Quinn J.B., & Ghoshal, S. 1995. *The Strategy Process*. Prentice Hall International, London.

Oppenheim, C. 1995. The correlation between citation counts and the 1992 Research Assessment Exercise Ratings for British library and information science university departments, *Journal of Documentation*, 51: 18-27.

Papadakis, V. M. & Barwise, P. 2002. How much do CEOs and top managers matter in strategic decision-making? *British Journal of Management*, 13: 83–95.

Peterson, R. S., Smith, D. B., Martorana, P. V., & Owens, P. D. 2003. The impact of chief executive officer personality on top management team dynamics: One mechanism by which leadership affects organizational performance. *Journal of Applied Psychology*, 88: 795–808.

Pettigrew, A. M. 1992. On studying managerial elites. *Strategic Management Journal*, 13: 163–182.

Pettigrew, A.M. & Fenton E.M. 2000. *The Innovating Organization*, Sage Publications, London.

Quinn, J. B., Anderson, P. and Finkelstein, S. 1996. Leveraging intellect. *Academy of Management Executive*, (10)3: 7-27.

Rosovsky, H. 1991. *The university: An owners manual*. Norton, New York.

Seng, L.B. & Willett, P. 1995. The citedness of publications by United Kingdom library schools. *Journal of Information Science*, 21: 68-71.

Swann, W.B. 1990. To be adored or to be known? The interplay of self-enhancement and self-verification. In R. M. Sorrentino and E. T. Higgins (Eds.) *Motivation and cognition*, New York: Guilford Press.

Tilghman, S. 2005. The Daily Princetonian, (October 24) Princeton University: New Jersey.

van Leeuwen, T.N., H.F. Moed, R.J.W. Tijssen, M.S. Visser, & Van Raan, A.F.J. 2001. Language biases in the coverage of the science citation index and its consequences for international comparisons of national research performance. *Scientometrics*, 51: 335-346.

van Raan, A.F.J. 1998. Assessing the social sciences: The use of advanced bibliometric methods as a necessary complement to peer review, *Research Evaluation*, 7: 2-6.

van Raan, A.F.J. 2003. The use of bibliometric analysis in research performance assessment and monitoring of interdisciplinary scientific developments. *Technikfolgenabschatzung*, 1: 20-29.

White, P. H. & Harkins, S. G. 1994. Race of source effects in the elaboration likelihood model. *Journal of Personality and Social Psychology*, *67*: 790-807.