THE ARGUMENT

AROUND THE YEAR 870, a bridge was built across the river Cam in England. In 1209, in that location, by then named Cambridge, one of the world's first universities was established. Nearly eight hundred years later, Cambridge University appointed its 344th and most recent president, or vice chancellor (VC), 1 Alison Richard. Richard is the first woman to lead Cambridge University. She is a distinguished anthropologist who spent her academic career at Yale University, from which in 2003 she left the position of provost to join Cambridge. Just a year later, in 2004, another long-standing English university installed its 270th vice chancellor, John Hood. Hood became the first head of Oxford University since the year 1230 to be elected to the vice chancellorship from outside the university's current academic body. Indeed Hood, a New Zealander, is not an academic. He spent most of his career in business.2

Why did Cambridge and Oxford choose two such different individuals to lead their ancient institutions?

The same year that Alison Richard boarded an eastbound jet, the Nobel Prize—winning biologist Paul Nurse left England for New York to become Rockefeller University's ninth president. He is not the only Nobel laureate to run a top American institution. David Baltimore, who stood down as president of the California Institute of Technology in 2006, is also a Nobel Prize winner, as is J. Michael Bishop, chancellor of the University of California, San Francisco. Indeed California has some of the most distinguished scholars in the world leading its universities. John Hennessy, at Stanford, is a prominent computer scientist; Robert Birgeneau, a Canadian who heads Berkeley, is a top physicist. At the University of California (UC), San Diego, Chancellor Marye Anne Fox is an eminent chemist, and at UC Irvine, the renowned atmospheric scientist Ralph Cicerone was chancellor until he left his position in 2005 to head the National Academy of Sciences. The University of California is arguably one of the best public university systems in the

¹ A vice chancellor is the principal academic and administrative officer or CEO, akin to a university president or rector. In this book the term *president* will normally be used to denote the head of a university, though other titles may also be referred to interchangeably.

² Interestingly, at the time of writing it was announced that John Hood would be replaced as head of Oxford University by Andrew Hamilton, another former provost from Yale University.

world (although it is currently enduring major financial cutbacks by the state government). The State of California is home to many great institutions. The success of UC is often attributed to its founding president, Clark Kerr, who was himself a distinguished economist.

Could it be that the high achievement of California's universities today is explained partially by the academic standards introduced by Kerr, and partially by the legacy left by a string of noted scholars who have led many of California's top institutions?

This book asks the question: is there a relationship between university performance and leadership by an accomplished researcher? The central conclusion, supported by evidence, is that top scholars should lead research universities.

WHY IT MATTERS WHO LEADS RESEARCH UNIVERSITIES

My underlying assumption is that the world needs outstanding research universities, and, therefore, that it matters who leads them.³ Most importantly, there appears to be a positive externality effect on economic growth from the amount of money that governments invest in public or university research. This happens through spillover effects that research universities generate. Such spillovers occur when the creativity or knowledge in an individual or organization spreads outward, resulting in the growth of more creativity and knowledge. In short, good ideas rub off on other people. Research universities produce intellectual externalities of many kinds (and also nonintellectual externalities like jobs). Their most important outputs are inventions and ideas.4 Economic growth, at a national and regional level, can be directly traced back to governments' investment in research and development. A growing number of studies suggest that university research is critical to industry, R&D, and the development of new technologies, and also to the creation and expansion of new firms and start-ups. There is also a strong correlation between the location of top scientists and the establish-

³ This is not to suggest that other higher education institutions are less important, only that these are what I know. In this book I use the Carnegie Foundation for the Advancement of Teaching's report, "A Classification of Institutions of Higher Education," to define a research university. The report states that research universities offer a full range of undergraduate programs, are committed to graduate education through the doctorate, give high priority to research, and consider research capability as a primary qualification for appointment, promotion, and tenure of faculty members (www.carnegiefoundation.org/classifications).

⁴ Teaching students is also an important output; however, the evidence suggests that a university education tends to benefit the individual student more than society as a whole (see Krueger and Lindahl [2001] and Oreopoulos [2007]). For this reason I believe that undergraduate students (graduate students are different) should not be heavily subsidized by the state, given the enormous financial benefit of a degree to individuals later in life. But generous scholarships for those who cannot afford fees should be readily available.

ment of biotechnology firms.⁵ In short, the social return from academic research appears to be high.

There are other benefits from the research output of universities. They are subtler. How is it possible to quantify the value of constant discoveries in medicine, physics, chemistry, or psychiatry, or the social science findings about the positive effects of education and the negative effects of poverty and discrimination? How much have we learned from history about civilization? What of the aesthetic and creative contributions of the arts and humanities? And on, and on. Moreover, and importantly, universities seek to develop and disseminate ideas independently from the state and pressure groups. This objectivity has proved essential in, for example, uncovering the phenomenon of climate change, which has been subject to much diverse political interpretation. All these are among the unaccounted externalities and spillovers of universities.

On the subject of the best form of university leadership and governance, interest has grown around the world. This is because the sector has become global and increasingly competitive. Major changes have taken place in institutions of higher education, and subsequently in the role and responsibilities of their leaders. This research is motivated in part by the recent emphasis on "managerialism" in universities and more widely in the public sectors in a number of countries. There has been a suggestion that managers as leaders may be preferable. This book argues that in universities, where the majority of employees are expert workers, having a leader who is also an expert is likely to be beneficial to the institution's long-term performance. The alternative argument takes the form: what a leader in a university or knowledgebased sector needs is primarily high managerial ability allied merely to some acceptable minimum level of technical ability. By contrast, what the later data in this study suggest is a fairly smooth relationship between the leader's level of scholarship and a university's quality. The greater is the first, the greater is the second.

The role of university presidents and their education and career history has attracted interest in previous important research,⁷ but relatively little

⁵ For the influence of human capital externalities on economic growth see Lucas (1988). For the economic effects of university or public research, see Adams (1990) and Adams and Clemmons (2008); Anselin, Varga, and Acs (1997, 2000); Basu, Fernald, and Shapiro (2001); Basu et al. (2003); Cohen, Nelson, and Walsh (2002); Aghion et al. (2005); Aghion (2006); Stuen (2007); and Bramwell and Wolfe (2008). For a link between the location of top scientists and increases in the number of biotech firms, see Zucker et al. (1998). On how the location of university graduates increases salaries for those less educated, see Moretti (2004). For a link with top scholars and size-of-research-team effect on scientific outputs and influence, see Adams et al. (2005).

⁶ See for example, Bowen and Shapiro (1998); Bargh et al. (2000); Bok (2003); Bornstein (2003); and Shapiro (2005).

⁷ Szreter (1968); Halsey and Trow (1971); Cohen and March (1974); Taylor (1986); Tierney (1988, 1989); Bensimon (1989); Rosovsky (1991); Middlehurst (1993); Bowen

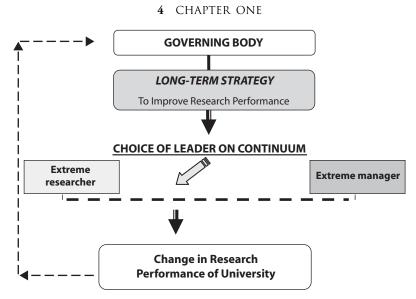


Figure 1-1. Appointment of a scholar on a continuum between extreme researcher and extreme manager

attention has been given specifically to the scholarly background of academic leaders. This question, of whether or not to appoint a major scholar, has circulated around universities in the United States and Europe for a number of years. In principle, every president's Search Committee grapples with the issue. Yet there appears to be no consensus.

To my knowledge, this is the first study to address this question empirically. Given the centrality of research performance in many institutional mission statements—expressed through the quality of research produced and the scholarly reputation of staff—it seems logical to turn to the academic ability of their leaders.

Figure 1.1 presents the central argument in a schematic model that links the appointment of a scholar with the performance of a university. It suggests that if a governing body has decided upon a strategy of raising or maintaining the research performance of their university, then hiring a leader who is a scholar may be the right choice. The diagram oversimplifies a complicated process but serves to illustrate the point and to introduce the main conceptual claim.

In this book, I draw from four separate datasets. My research starts by looking at who currently heads the world's top 100 universities. I then focus on deans in the top business schools. Next I explore whether the characteris-

and Shapiro (1998); Bargh et al. (2000); Ehrenberg (2002, 2004); Brodie and Banner (2005); and Keohane (2006).

TABLE 1.1 Interviews with University Leaders

U.S. UNIVERSITIES

Derek Bok, Former President, Harvard Kim Clark, Dean, Harvard Business School Amy Gutmann, President, U of Pennsylvania Patrick Harker, Dean, Wharton School John Heilbron, Former Vice Chancellor, Berkeley Jeremy Knowles, Former Dean, Harvard Paul Nurse, President, Rockefeller U Henry Rosovsky, Former Dean, Harvard David Skorton, President, Cornell Lawrence Summers, President, Harvard Shirley Tilghman*, President, Princeton

UK UNIVERSITIES

George Bain, Former Vice Chancellor, Queen's U, Belfast
Glynis Breakwell, Vice Chancellor, Bath U
Bob Burgess, Vice Chancellor, Leicester U
Yvonne Carter, Dean, Warwick Medical School
Ivor Crewe, Vice Chancellor, Essex U
Howard Davies, Director, LSE
Anthony Giddens, Former Director, LSE
Alan Gilbert, President, Manchester U
David Grant, Vice Chancellor, Cardiff U
John Hood, Vice Chancellor, Oxford U
Andrew Pettigrew, Dean, Bath School of Management
Richard Sykes, Rector, Imperial
Eric Thomas, Vice Chancellor, Bristol
Nigel Thrift, Vice Chancellor, Warwick U
Bill Wakeham, Vice Chancellor, Southampton U

tics of a leader in position today can tell us about the future success of their institution. Finally, using interview data from twenty-six university leaders in the United States and the United Kingdom, I present possible explanations for why better scholars may make better leaders. Interview material with presidents will appear throughout the book to illustrate points about leadership in universities. Table 1.1 above lists the heads of universities I met with.

It is important to emphasize early that scholarship will not be viewed here as a proxy for either management experience or leadership skills. An "expert" leader must have expertise in areas other than scholarship. Also, it should not be assumed that all outstanding researchers will inevitably go on to

make good managers or leaders. Before their step to the top position, most university presidents have gained management experience as provosts, provice chancellors or deans, or by running major research centers or labs. This was the case with virtually all of the four hundred leaders examined in this study. Moreover, to head up an academic department or school, one must first be a senior member of the faculty—usually a full tenured professor. Tenure is only granted after extensive publications have been acquired. Thus, scholarship is already a prerequisite of leadership in research universities. The book's concerns go beyond this basic point.

In this study I focus on research performance, because it is research quality that top universities prioritize. As suggested above, career advancement is reliant on scholarly productivity, namely publications. That is not to say that brilliant teaching is unimportant but that it alone will not usually lead to promotion in most research universities. This situation may differ in colleges and universities that prioritize teaching.

There is a link between teaching and research. The material taught to students has come from research. Interestingly, there is somewhat limited evidence that better researchers also make better teachers. A relationship has been shown to exist between a university's success in the UK Research Assessment Exercise (RAE) and the standard of its teaching instruction, as established by scores obtained in Teaching Quality Assessment (TQA). TQA scores correlate highly with RAE scores.⁸ In other words, those institutions that perform best in research tend also to obtain the highest teaching scores.⁹

Henry Rosovsky contemplates the link between research and teaching, and suggests: "Research, especially academic research, is a form of optimism about the human condition . . . Persons who have faith in progress and therefore possess an intellectually optimistic disposition—that is, teacher-scholars—are probably interesting and better professors. They are less likely to present their subjects in excessively cynical or reactionary terms." ¹⁰

Rosovsky also makes the point that teaching the same subject for years is likely to lead to boredom or burnout. Being a researcher not only keeps the

⁸ Shattock (2003).

⁹ I recently analyzed data on the teaching scores of faculty in a North American university with a view to addressing this question (are good researchers also good teachers?). As a first step I was sent only data on academics who received the highest teaching scores and who received the lowest scores. The sample included around fifty faculty members, approximately half in each group. Immediately it was clear that those in the "bad teachers" group were overwhelmingly scientists—mostly chemists and physicists; whereas, the opposite was true for those in the "good teachers" group, which was dominated by faculty from the humanities and social sciences. This is interesting, if not unexpected, given what we know about students' preferences for these subjects in North America and Europe. To attempt to answer the original question, we will need to control for discipline.

¹⁰ Rosovsky (1991, p. 89).

information fresh and up to date, but also keeps the teacher from "falling asleep at the very mention of the assignment."¹¹

Thus, those who are committed to research are possibly also more passionate about the topic, and therefore may be better educators. But the jury is still out on this question.

THE KEY ARGUMENTS IN THE BOOK

It is hoped that the evidence presented in this book will inform those involved in the selection of university presidents. The mission, or core business, of research universities tends not to differ across countries, nor to change through time. It is research and teaching. The discussion about why better scholars might make a difference to university performance is also explored using interview material with twenty-six leaders in universities.¹²

The main propositions in this book are:

- 1. Research universities should be led by individuals who have been accomplished scholars in their academic careers. It is not sufficient for university presidents to have management skills alone.
- 2. A president's appropriate level of scholarship will depend on where the university currently is—in terms of its research ambitions or position in rankings—and where it wants to be. How good should a scholar-leader be? A possible rule of thumb is that the prior research success of a leader should be equal to or better than the top 10 percent of faculty in the institution that he or she is to run.
- 3. University presidents need power if they are to lead. Presidents in the United States in general have more authority than those in European universities. Great Britain is moving in the direction of the United States—many heads can now select their own top management team. However, in other European countries, important strategic decisions are still being made by committees elected by large numbers of faculty.
- 4. Organizations linked to university policy-making or funding should also only be led by noted scholars. These would include government agencies like the National Science Foundation in the United States, the Higher Education Funding Councils in Britain and the European Union, the UK's Economic and Social Research Council, and trusts and foundations.
- 5. The reasons why presidents should be able scholars are fourfold:

¹¹ Ibid., p. 90.

¹² I have allowed myself room to expand upon ideas thrown up by the quantitative and qualitative findings, and I am informed by my own professional experience of having worked in an administrative capacity with university leaders over a number of years.

- a. Scholars are more *credible* leaders. A president who is a researcher will gain greater respect from academic colleagues and appear more legitimate. Legitimacy extends a leader's power and influence.
- b. Being a top scholar provides a leader with a deep understanding or *expert knowledge* about the core business of universities. This informs a president's decision-making and strategic priorities.
- c. The president sets the quality threshold in a university, and the bar is raised when an accomplished scholar is hired. Thus, a *standard bearer* has first set the standard that is to be enforced.
- d. A president who is a researcher sends a *signal* to the faculty that the leader shares their scholarly values, and that research success in the institution is important. It also transmits an external signal to potential academic hires, donors, alumni, and students.
- 6. The notion of leadership introduced in this book builds upon the idea that a leader's expert knowledge—about the core business of an organization—informs his or her decision-making in a way that has not been sufficiently studied. My central argument is that where expert knowledge is the key factor that characterizes an organization, it is expert knowledge that should also be key in the selection of its leader.

SETTING THE SCENE

Leaders matter. Much empirical work exposing the link between leaders and performance has emerged recently. Economists have shown in a number of settings that CEOs can substantially affect the profitability of firms. Similarly, the identities of particular leaders of nation-states have been linked to nations' later growth rates.¹³ Central to my arguments about leadership is

¹³ Bertrand and Schoar (2003) demonstrate that CEO fixed effects are correlated with firms' profitability. Their study is important because it suggests that individuals can shape outcomes. Jones and Olken (2005) examine the case of national leaders. By using, as a natural experiment, fifty-seven parliamentarians' deaths, and economic growth data on many countries between the years 1945 and 2000, the authors trace linkages between nations' leaders and nations' growth rates. The authors reject "the deterministic view . . . where leaders are incidental." Work by Bennedsen, Pérez-González, and Wolfenzon (2007) spans these two earlier papers by establishing, in Danish data, that the death of a CEO, or a close family member, is strongly correlated with a later decline in firm profitability. This, again, seems to confirm that leaders matter to the performance of organizations. Theoretical explorations of leadership are offered by Hermalin (1998, 2007), who focuses on the incentives leaders used to induce followers to follow; by Majumdar and Mukand (2007), who construct a model in which a key role is played by followers' willing to put their faith in their leader; and by Dewan and Myatt (2008), who concentrate on the role played by a leader's ability, and willingness, to communicate clearly to followers.

the way universities are categorized. Research universities should, I argue, be viewed as knowledge-centered organizations. Their core business is that of generating understanding of the world, by research, and disseminating it through their publishing and teaching. This depends on the knowledge of experts, not generalists. In many countries, universities have traditionally been seen as an extension of the public sector. The role of leadership in the public and private sectors is often looked upon differently. This, I believe, is a mistake. The exact sector is largely irrelevant to the key issue; instead, it is the core business that should determine, or at least contribute to, the identification of appropriate institutional heads.

Professional service firms—such as law, accounting, and architecture firms—are somewhat akin to universities. Professionals are treated as "autonomous competent individuals" who, on the whole, manage themselves. This does not mean that administrative and management support is unnecessary, only that management functions should not impinge too directly on professionals. With this in mind I emphasize professionalism over managerialism as essential for leadership in universities —a setting where leaders' technical ability can be measured reasonably objectively.

EXPERTS VERSUS MANAGERS

What matters is scholarship not just management. We should take management for granted. 16

The attention paid in this book to a leader's technical ability sits in contrast to recent emphasis on the managerial skills of university presidents. Over the past two decades, politicians in a number of countries have sought to introduce a business or "managerialist" culture into the public sector, often called "new managerialism" or its less ideological counterpart, "new public management." In one country, the United Kingdom, universities have been exposed to a range of management practices, and academics have experienced the pressures of external accountability and a continuous cycle of performance monitoring and quality audits. The shift to managerialism in

¹⁴ Handy (1984), in Middlehurst and Elton (1992, p. 225).

¹⁵ Handy (1984); Maister (1993).

¹⁶ In correspondence with a former UK vice chancellor who wished to remain anonymous.

¹⁷ For "new managerialism" see Clarke and Newman (1994, 1997); for "new public management" see Hood (2000). In UK universities see Deem (1998); Deem and Brehony (2005); and Deem, Hillyard, and Reed (2007) and Pollitt (1993). Charlton (2002), following Power (1997) argues that the ubiquitous use of audit, accountability, and quality measures in the United Kingdom are because of the influence of accountancy firms. Whereas in Germany, he argues, an engineering culture dominates management processing.

Britain was initiated by former Prime Minister Margaret Thatcher and bedded down by former PM Tony Blair. ¹⁸ In a review of the Blair era in the journal *Nature*, Robert May, former chief scientific adviser to the UK government, expressed fears that the "extreme growth of bureaucracy—too often masquerading as accountability," has ballooned out of all necessity, and created too many "conscientious administrators who hold meetings and send out forms to be filled in." ¹⁹ The suggestion is that the managerial systems introduced and monitored by civil servants have become means in themselves, rather than a means to an end.

University administrators can at times also become overly focused on systems that tend to suit staff more than the faculty they are there to support. It is unlikely to be beneficial for universities if the time of scientists and other scholars, whose research is vital to the success of intuitions, is diverted toward bureaucratic functions. Also, a distinguished academic is unlikely to remain at a university that overburdens him or her with paperwork and red tape. If a top researcher heads a university, should we expect greater sensitivity about the administrative demands on faculty? Their shared experience and values might suggest so.

In many countries governments have extended their influence inside universities. Consequently, universities have become less autonomous, academics' influence has weakened, and, importantly, trust on both sides has declined. In America and Britain, public universities have witnessed increased bureaucratic and managerial interventions, which have been coupled with cuts in financial support from government. The views of one long-standing UK university president interviewed for this research are interesting:

Since the Thatcher years, and then into Blair's period, universities have been condemned for being badly managed places; as if they are run by amateurs. I completely disagree and in fact I see it as insulting. I believe that the corporate sector has many more failures and also corruption and cover-ups. Don't get me wrong, I think the corporate sector has many things to teach us, particularly in the area of finance and project management, for example. But these can be bought in. They do not need to reside in senior positions.

¹⁸ The late Martin Trow, a distinguished Berkeley scholar and author on educational matters, viewed the changes under Thatcher and later New Labour as "draconian" (Trow [2005]). But, "even more surprising," he suggests, "was the feeble response of the academic community to these policies, which, whatever their wisdom, were not friendly to an autonomous university or academic community" (2005, p. 5). Trow also accuses the Committee of Vice Chancellors and Principals (CVCP now named Universities UK) as having been a peculiarly weak body over the whole of this half-century. Equally strange, he argues, was the response of the governing boards of universities that played almost no role in the changes in higher education, nor in their defense. See also Barnett (1988), Neave (1988), Jenkins (1995), and Greatrix (2005).

¹⁹ May (2007, p. 28).

If we have not been efficient then I would like to see some evidence in terms of outputs. We have successfully educated a huge number of graduates, and for very little money. UK universities are the second most-cited after the United States, we have a massive share of the overseas market, and indeed many European countries are trying to emulate our system.

In the United States it has become somewhat more common for politicians to take over as presidents of state universities.²⁰ Arguably, this also reflects an attitude that universities can be led by individuals who, on the face of it, know nothing about academe or research. That state politicians are in some cases becoming presidents may be influenced by the salary the job commands. Some may view the position as a convenient place to put those who are no longer in office. State universities in the United States are also under financial pressure, and governing boards may view the appointment of a politician as useful when negotiating with government. I surmise, however, that the future of those institutions, especially in terms of maintaining research quality, will be more uncertain under the leadership of non-academics.

In the UK a milestone in the change of official attitude toward university leaders came in a government-sponsored document, the Jarratt Report, which both predicted and advocated that university vice chancellors should be hired because of their managerial qualities as opposed to their collegial authority.²¹

This book attempts to reconnect leadership with the core business of research universities—that of scholarship. This is not to ignore the importance of management systems, or the need to run organizations efficiently and offer the best service possible to faculty, staff, and students. Partly for this reason, there may be a case for privatizing universities. U.S. private universities are among the world's best, both in terms of research output and, in my experience, being efficiently run.²²

²¹ The Jarratt Report was commissioned by the UK government in 1985.

²⁰ Martin Meehan, a long-time congressman, recently became president of the University of Massachusetts at Lowell. Bob Kerrey, former Nebraska senator, is the president of the New School, a University in New York. David Boren, former senator from Oklahoma, is president of the University of Oklahoma; and Bruce Benson, a former oilman and Republican activist, is head of the University of Colorado. Michael Garrison, a former political lobbyist, was president of West Virginia University for just one year, having to resign in June 2008 because of a political scandal. The University of Ottawa, in Canada, has also recently appointed a former politician as president.

²² Some people view the idea of private universities as inherently more inequitable. However, because of government restrictions on student fees in the United Kingdom, undergraduates are not charged a fee close to the actual costs of an undergraduate education. Therefore, overseas students are being relied upon to fill the financial gap. This means that not only are many excellent British and European students being denied undergraduate places at the best UK universities in subjects most in demand by international students,

Many of the leaders I interviewed were clear that management and leadership are different. The literature suggests that the former is about maintaining systems and instituting controls, and managers are seen as accepting the status quo. Organizational leaders, meanwhile, look at the bigger picture; they are more directly involved with strategy and also organizational change. ²³ As suggested, the qualitative data appear to support this; among the twenty-six leaders in U.S. and UK universities interviewed for this book, the majority, when I asked them to describe the most important element of their job, emphasized leadership over management. The comments of one president illustrate this view:

Leadership and management are profoundly different. I set goals for the university in discussion with colleagues. My aim is to create the best environment for academics.

Additionally, a number of university leaders interviewed stated that a president can buy in administrative and managerial expertise where he or she feels lacking:

The chief function of a university president is leadership. Leadership is most important—not management or finance, these can be hired in.

On the point made in the book's preface, about how managerial talent is distributed somewhat evenly among the population, a former U.S. dean makes an interesting observation:

A fair percentage of faculty are good managers with innate skills. In many ways this is akin to any profession because there will always be some who are better at leadership and management than others. I don't think academics are any different from others in this way. Being a dean at X is like being a CEO of a half-billion business ensuring it runs effectively. All faculty salaries are set by the dean. The position is somewhat similar to running a large law firm.

The distinction between managers and leaders may be especially important in universities—and other knowledge-based organizations—because of the

but also that British higher education is being subsidized by overseas students, many of whom come from developing countries. This system seems both inequitable and dishonest because the students who fail to get into in-demand courses are not being told why, nor are they being offered a place at an international rate they may choose to pay. It also does not seem right that a rich country like the United Kingdom is charging African or Thai students twice the fees of those in Europe. Around 12 percent of UK parents send their children to private schools costing on average £10,000 (\$18,000) a year. It might be pertinent, therefore, to ask why students from these same families are paying less for a three-year university education.

²³ Zalznik (1977); Bennis and Nanus (1985); Bennis (1989); Kotter (1988, 1990); Middlehurst and Elton (1992).

technical ability required by those who lead scholars, experts, and professionals. Although all leaders will have management experience, most managerial and service functions will reside with highly specialized staff, for example registrars, directors of human resources, finance, and IT who are experts in these fields.

Much emphasis in the leadership literature, and the real world, has been placed on the idea of the charismatic leader. In contrast, and following others, the focus here is first on the context or organization, not on the individual.²⁴ Institutional heads must always have managerial experience and some minimum level of leadership talent. Being an expert, or a top researcher, is a necessary but not a sufficient condition for being a good leader. To succeed in any organization this is, of course, normally the case. I argue that it is also important to establish what level of *technical expertise* about the core business an individual should hold as a prerequisite to other factors. For example, the head, or chief of the Air Staff, of the Air Force will first have served some required period as an officer, normally a pilot, and may also have seen active duty. The head of a school has usually spent an amount of time as a teacher; and the CEO of a car manufacturer typically knows something about the industry because he or she has spent time in it.

The United Kingdom's *Financial Times* newspaper made this point about universities in 2008 in an article by Sir Richard Sykes, head of Imperial College London—one of the United Kingdom's top research universities. Prior to joining Imperial he was CEO of GlaxoSmithKline, a UK drug company with a \$45 billion turnover (reported in their 2007 annual review). Although Sykes came from industry, he was actively involved in pharmaceutical research earlier in his career; consequently, he has a distinguished publishing record. The piece in the *Financial Times* reads:

One of Britain's most respected academic heads has warned universities against appointing business people to the top post—even though he is himself a former CEO. Sir Richard Sykes, rector of Imperial College, London, told the *Financial Times* that putting a business person in charge was "easy to say and difficult to do." He cited the example of Oxford University, where John Hood, vice-chancellor, became locked in a bitter battle with dons over how to run the institution.²⁵

This issue of whether business people should lead universities will be discussed later in chapter 5.

²⁴ Following Fiedler (1967); Bass (1985, 1990); Pettigrew (1985, 1990); Bennis (1989); Leavy and Wilson (1994); Bryman, Stephens, and Campo (1996); Khurana (2002); and others.

²⁵ Financial Times, October 29, 2007, p. 2.

THE BEST AMONG EQUALS

In the influential book on presidents, *Leadership and Ambiguity* published in 1974, Michael Cohen and James March describe the position of university head as leading in an "organized anarchy." This arises, they argue, in organizations commonly described as collegiate, where a leader is the first among equals. Without a hierarchical structure, Cohen and March suggest, leadership is at best vague and at worst an illusion.

Their view has been challenged. In particular, many question the notion that universities are nonhierarchical, pointing out that they use traditional organizational charts depicting a clear chain of command, akin to most private enterprises. ²⁶ In Henry Rosovsky's introduction to his informative book *The University: An Owner's Manual*, he writes, "universities are institutions that love hierarchies and distinctions at least as much as the military." ²⁷ The same might be said of professional service firms where, again, a similar misconception about hierarchy is often propagated. While law and accounting firms may have flatter organizational structures than most manufacturing companies, they are still run along traditional bureaucratic lines with promotion through a hierarchy. ²⁸

The structure of research universities has altered comparatively little over the hundreds of years they have existed, which is also at odds with Cohen and March's notion of ambiguity. Unlike many other types of organizations—banks, for example—universities have demonstrated unusual stability.²⁹ They have adapted to changes in the world while maintaining "business as usual," often with reduced funding. This line of argument is consistent with a comment made by one of the university presidents who was interviewed for this book; notably, he is from a nonacademic background.

There is less freedom in a university. The strategic degrees of freedom are restricted. It is more difficult to change the course—the outputs are always going to be about the same.

Arguably, there have been changes in the role of university president that reflect on the one hand a globalized world, and on the other, expanding or shrinking markets, altered funding mechanisms, technological advances, enhanced competition, and so on. But the core business of a research university does not change. Even proclamations about the decline of "brick" and the rise of "click universities" hailed during the dot.com explosion of the late 1990s, proved to be incorrect. In Britain, the government lost

²⁶ See Middlehurst and Elton (1992) and Hammond (2004).

²⁷ Rosovsky (1991, p. 18). Henry Rosovsky was Dean of the Faculty of Arts and Sciences at Harvard University for eleven years.

²⁸ Maister (1993).

²⁹ Birnbaum (1988, 1992).

£50 million (\$90 million) on its failed e-University project,³⁰ and many commercial online education companies, for example UNext.com, were forced by the early 2000s to alter their business model. Despite the sums of money spent on new pedagogical and technical innovations, traditional lectures and seminars continue.

POWER AND UNIVERSITY PRESIDENTS

Universities are important, and therefore so are those who lead them. Because leaders are not randomly assigned to organizations, measuring the effects of individuals on organizational performance is a challenge. Nevertheless, the quantitative analyses in chapter 4 attempt this. Another approach is to ask leaders how much power they have. I did this; specifically, I asked presidents: "whose role do you believe it is to write or construct the strategy for the university?" There was little or no hesitation among respondents, who, with few exceptions, stated that it was the responsibility of the president or vice chancellor. A number of authors argue that presidents need power if they are to successfully lead a university. Similarly, an institution that has too much "democracy" can become impotent. The decline of many European universities is attributed partially to their diffused decisionmaking processes—specifically, decision-making by elected committees. Interestingly, some scholars have suggested that university leaders with possibly the most direct powers reside in some of the best schools in the world, for example, Ivy League institutions, Stanford, and Caltech.³¹

One headhunter, who has been involved in the recruitment of a number of vice chancellors in Britain, believes that university chiefs may have more power than those at the helm in other industries. He said:

There is no doubt that leaders have an enormous amount of power in universities—more than in many other organizations where the long-term strategy is firmly laid out. For example, in the civil service, or at the other extreme in Asda/Wal-Mart where the leader is a motivator for the "troops" but has very little say about the strategy of the business. That is all mapped out long before in somewhere like Ohio.³²

What do university leaders say about it? A representative sample of interviewees' accounts are presented (there is not the space to include all statements on this topic). The comments of a former U.S. president are interesting:

³⁰ See the *Guardian* newspaper, June 23, 2004.

³¹ On the subject of power and democracy see Rosovsky (1991), Trow (1999), and Kerr (2001). On university strategy see Jarzabkowski (2005).

³² In fact Wal-Mart's headquarters are in Arkansas.

The background of presidents is most intriguing. Though 80% of their day may be spent undertaking a range of activities, the overall direction needs to be decided upon and led by the president. The president is often the only one who has the big-picture perspective about his or her university. If you devolve decision-making too far down you lose control, particularly of the academic direction.

Three UK vice chancellors stress that it is their responsibility to develop university strategy:

The vice chancellor sets the agenda and tone—this is where you make a difference. The VC is the only person who can ask "Where are we going? What is our strategy?" No one else can do that. The VC can articulate the university's ambition.

A second vice chancellor makes the point that it is down to her to make the final decision:

I determine the shape of strategy. Debates will emerge out of the top team but it is the responsibility of the president to finally say yes or no about an area of strategy. The buck stops with me.

A third UK head stresses the leader's responsibility as differentiated from that of committees:

The final draft of the strategy has to come off the VC's PC. It is the role of the VC to put it together and then to get it approved and negotiate the details. It is not the job of any committee.

Finally, a similar comment is made by a U.S. president:

I am very involved with the nuts and bolts of deciding the overall strategic direction of [my university]. I also decide the policy level direction.

Within my interviews, the degree of congruence on this topic is striking. Whether the sample of university leaders merely thinks that they write the strategy, compared to whether they actually do, cannot be dealt with properly here. However, if all university heads communicate in interview that they are responsible, it seems reasonable to believe them. Seemingly, leaders are appointed to make decisions, direct the institution, and take the fall when things do not work out. This explains why they usually receive the highest salary in their organizations. If governance mechanisms are functioning properly, powerful heads are, I believe, good for universities (governing boards are discussed further in chapter 6).

SELECTING THE TOP MANAGEMENT TEAM

Another of the powers bestowed on university heads is the right to hire top team members. The issue of top team selection is of particular importance to my research; this is because in the quantitative data in this book I focus on university presidents—on their influence as leaders. Arguably, members of the top team share executive responsibilities, but if deputies, deans, and key administrators are normally selected by leaders, then it may be fair to treat the team as an extension of the leaders who hired them.³³ Also, if a president has picked a dean it is likely that he or she will demonstrate loyalty and, in general, adhere to the wishes of the head. This allegiance, or collective responsibility, presumably explains some of what makes top management teams successful.

There are a number of tiers of leadership in research universities. Below presidents are provosts, pro–vice chancellors and other deputy heads, senior administrative staff, and leaders of key strategic units, such as deans of schools or faculties. For a leader to execute strategies and extend his or her influence, it matters whom she or he selects as provosts and pro–vice chancellors. Again, this tends to differ between the United States and Europe. It is normal for university presidents in American institutions to choose top team members and make other important hires. Almost all of the UK vice chancellors in my study complained that they had to first change or adapt the selection process within their own institution after they took over. Thus, in UK research universities, power to select top management teams is slowly following the U.S. example by shifting toward presidents.³⁴ The traditional European approach has been appointment through a process of faculty elections. This practice has been criticized because it substantially weakens presidential powers, inhibits organizational change, and favors the status quo.³⁵

As one former U.S. dean said:

I am strongly opposed to faculty making the selection of provosts or presidents, and generally I am against the notion of democracy.

A UK vice chancellor interviewed for this study explained he had experienced this kind of problem. He told me he had been chosen by the selection

³³ The top management team (TMT) has been widely covered in the literature on strategic leadership, initially through the work of Hambrick and Mason (1984) in upper echelons theory. Emphasis has tended to focus on top team members; in particular, how TMT characteristics influence organizational strategy and performance. However, it is the leader or CEO who normally selects the TMT, and, therefore, it could be argued that the top team should, on average, be viewed as an extension of the leader's influence. This, I believe, has been insufficiently covered in the TMT literature.

³⁴ It is more common for heads of New UK Universities, (those established from polytechnics after 1992) to have direct powers to select top teams.

³⁵ Rosovsky (1991).

committee to lead the university because of a strategy he presented in interview. When he took over as leader there were two pro-vice chancellors, or deputy leaders, in situ. The vice chancellor described in interview how his plans, that formed part of his original strategy, failed to be implemented because of the incumbent deputies. He explained that he had been powerless to do anything until their tenure was complete—he could not sack them. Only then could he engage in the process of selecting their successors. He eventually changed the way deputies are appointed. The comment below is from that leader:

I had Pro–Vice Chancellors [PVCs] in place when I started; two of them blocked me from doing anything for 2 years. PVCs were appointed by Senate that had 200 members when I arrived. The system is not right in the United Kingdom. It is far too difficult to select our own top team.

This view is repeated by a second VC:

PVCs are elected by Senate who make nominations. I think it is madness that a VC cannot select his or her own top team. I do now have some input through consultation—and I almost always get who I want. I did put my own non-academic administrators in place though, some of whom I appointed from the private sector.

Some UK heads negotiated the power to select top team members as part of their contract. This was true in the case of an experienced leader who was asked to take over the reins of a weak and struggling university:

They all went! I introduced new PVCs, COO, registrar, etc.

This sentiment is reflected in the statement of another two UK heads:

The VC now has total say on who gets the job [of PVC]. Faculty do not have any input.

And:

I now appoint all the PVCs and deans, but I had to change the structure to do this. Previously they were elected.

As suggested above, the position of U.S. presidents is less ambiguous:

I do not micro-manage but I appoint deans and provosts who act on my behalf. I oversee their work.

One UK vice chancellor discussed this issue with two American presidents. He said:

Amy Gutmann [president of the University of Pennsylvania] and Shirley Tilghman [president of Princeton] are amazed about the amount of work that I have to get involved with where they can appoint line managers or provosts.

As mentioned earlier, in European universities, power has often been allowed to reside in committees. In the United Kingdom this is changing; indeed, some leaders have apparently started to flex their muscles when it comes to the old notion of collegiality:

The committees do not take decisions—even if that is what they think they do. They merely endorse decisions. I have tried to weaken the committee structures or at least function outside of it. But I try to take the committees with me in terms of the decisions I want to make.

One UK head put his position on the line:

I made it clear to Senate that has 60 members; they may have had access and input into planning and resources before, but not any more. Senate is to have no budgetary powers and if they were not willing to accept this then I was not willing to stay in the job . . . Collegiality doesn't mean everyone makes decisions.

The issues of strategy, power, and democracy are further discussed in chapters 5 and 6.

A SUMMARY OF WHAT IS COMING UP

This book has been written with world universities in mind. I believe these findings are generalizable across borders. Some of my data are international in the broadest sense, although the interviews with university heads are from the United States and the United Kingdom.

It is important that the conclusions rest on a disinterested reading of the data gathered. As mentioned earlier, I draw from quantitative and qualitative evidence. I have resisted putting the statistical information into an appendix; instead, I have tried to present the findings in the text so that they are accessible to nonstatisticians. Quantitative evidence is presented in chapters 2 to 4, but the qualitative data, consisting mostly of statements from leaders in research universities, appears intermittently throughout the book. Many of my central arguments have come directly from comments made in interviews. It is here, arguably, where objectivity is particularly difficult for an outsider to check. In the interviews there is of course supposition, and the explanations I present about *why* and *how* scholar-leaders might improve their institutions are supported solely by interviews and argument. But my

hope is that an unconventional mixing of the qualitative and the quantitative provides some advantages.

There are approximately four hundred leaders in the quantitative dataset, plus thirty-two semistructured qualitative interviews. The data collection process is explained in appendix 1, where the names and positions of those interviewed are also listed. The research quality of presidents and vice chancellors is assessed in this book by using citations and bibliometric data. To compare across disciplines—for example, to contrast the lifetime citations of a biologist with an economist or historian—the different individuals' citations must be normalized. Appendix 2 has information about how the citations were collected, the normalization method, and general information on the use of bibliometric data.

Regarding the nomenclature of leaders' titles, I opt for simplicity rather than detailed precision. I will mostly refer to the executive heads (akin to CEOs in the for-profit sector) as university *presidents*, which will include labels such as vice chancellor, rector, principal, director, and so on.³⁶ In the next few sections, I summarize briefly what is coming up in the book.

I begin to analyze the quantitative evidence in chapter 2; specifically, I uncover who are the leaders of the world's top 100 universities. If the best institutions—that arguably have the widest choice of candidates—systematically appoint top scholars as their presidents, this could be one form of evidence that, on average, better researchers make better presidents. Economists would call this a revealed preference argument. Also in the next chapter, I offer descriptive information about the 100 global universities. Most notably, I find a positive correlation between the lifetime citations of a university's president and the position of that university in the global ranking. The higher the university is in the international league table, the higher the lifetime citations of its leader. I show that this pattern exists for my full global sample of 100 universities, and for the subsample of U.S. universities. However, when I isolate non-U.S. institutions the pattern largely disappears. In other words, American research universities appear to be selecting their leaders differently. This is interesting because the sample of U.S. institutions that I examine in this chapter include the world's very best. Scholars in the same group of universities are also winning the majority of Nobel Prizes. I present bar diagrams and a scatter plot showing that the number of Nobel laureates in European universities has declined strongly over the last fifty years; whereas Nobels being won by researchers in the top U.S. institutions has risen remarkably (further into appendix 4, I discuss the issue of why).

³⁶ The term *vice chancellor* (or VC) will be used in chapter 4 where the data include a sample only from the United Kingdom. The titles of *Chancellor* and *Vice Chancellor* are also used in public universities in the United States.

Chapter 3 looks for a similar pattern in a different dataset. Here I go inside universities and isolate a particular unit, the business school. The president may stop the buck, but there are many leaders in universities. I choose to look at business schools because they are often among the largest departments in universities, and business schools have the interesting but complicated task of reaching out to two communities—researchers and practitioners. Again, I look for a relationship between the citations, this time of deans, and the ranked position of a business school in the *Financial Times* global MBA ranking. Because of the dual function of schools of business and management, it might be expected that a significant relationship would not exist. Yet, again, using cross-sectional data, a positive correlation is found between the position of a business school in the ranking and the prior research achievement of its dean; better scholars appear also to be leading better business schools.

Chapter 4 attempts to go beyond cross-section patterns. Its aim is to address questions of causality. This is done by drawing upon longitudinal information. I look at the performance of a university, and then trace back to examine the characteristics of its leader a number of years earlier. Using an appropriate measure of performance, one that has existed in the United Kingdom since 1986—the so-called Research Assessment Exercise—I try to identify whether universities that performed well in the Research Assessment Exercise tended to be led by strong scholars. Here the data come from fifty-five UK research universities, namely, those institutions that competed in the RAE in 1992, 1996, and 2001. Using regression analysis, the study uncovers evidence that seems consistent with the existence of a causal relationship between the research ability of a leader and the *future* performance of his or her university.

Interview material appears throughout the book. However, chapter 5 draws exclusively from qualitative data. It presents arguments about how and why scholar-leaders improve the performance of their universities. I start the chapter by focusing on the unanswered questions that arise from the simple cross-section correlations; specifically, do richer or better universities hire more distinguished scholars merely because they can? This would suggest that any causality goes the other way. Or, perhaps the point is that good scholars are simply good at everything? I attempt to dispel these arguments, and then move on to the oft-debated topic of hiring nonacademics as heads of research universities. Overwhelmingly, those leaders that I interviewed are opposed to the selection of outsiders. One UK vice chancellor later equates the issue with heads in the British National Health Service (NHS); he suggests that many of the problems in the NHS have stemmed from the fact that managers, who are not health practitioners and researchers, have been put in charge.

It is important to point out that a leader should represent the aspirations of the institution. Hiring a Nobel Prize winner to head up a university starting at a low research base is unlikely to be successful. In this chapter I also suggest that because individuals tend to select others who are like themselves, it is imperative that good scholars are on hiring and tenure committees. Finally, I turn attention to the ways that outstanding researchers can make an impact, including the many positive spillover effects both in a region and a university. I close by briefly arguing that having distinguished scholars at the helm of research universities is not sufficient; scholar-leaders should also lead organizations, like government funding bodies, that support universities.

Chapter 6 looks at how leaders get selected. A president interviewed in this book remarked that universities often rotate between hiring a strong scholar and then, as their successor, a weaker one. Thus I have asked the question: is there evidence that leaders may be chosen partially because they differ markedly from their predecessors—creating a kind of alternating leader cycle? If evidence of such a pendulum effect is found, it raises questions about how this form of selection might affect, adversely or otherwise, institutional strategy and organizational performance. For example, how much does an alteration in leader create a change in the direction of an organization? In a dataset of 157 leaders in fifty-five research universities, I observe two successive changes of leader per institution. The findings presented in bar diagrams and statistically suggest, quite strongly, that an alternating leader cycle does exist. Therefore, it could be argued that highereducation governing bodies appear to be selecting leaders in part because they differ from those they follow into the top job. The implications of this are discussed. I then present evidence from a case study where members of a university leader's hiring committee are interviewed. Although the findings are limited, because this is a look at only a single university, they may help to throw open the lid on a fascinating procedure that is rarely written about. It focuses attention on how leaders are chosen: is the process strategic or arbitrary? In other words, are university heads chosen because they fit the requirements of a long-term strategy? I also refer to comments, from presidents and vice chancellors interviewed for the book, about their own selection processes; and I uncover the doubts that exist about the quality of knowledge among many on university boards. This prompts a discussion in the book about governors and the involvement of boards in designing longterm strategies for universities.

In chapter 7, I move outside universities. I look at some other types of knowledge-based organizations where expert leadership is appropriate. The first arena I explore is a sports one—basketball. I report on coauthored work where it is shown that basketball coaches who were better players a number of years earlier accrue the highest number of wins as team heads. The "expert

knowledge" effect of having been a top basketball player appears to be large, and, significantly, to be visible in the data within the first year of a new coach arriving. I suggest that expert knowledge may allow coaches who were better players to devise winning strategies since they may be able to "see" the game in ways that others cannot. Elsewhere in the book I suggest that professional service firms, such as accounting, consulting, or architecture practices, are fairly similar to universities. Their main business is in offering expert knowledge. Interview statements from a small number of heads of such firms (listed in appendix 1) reveal that the worlds of professionals seem similar to faculty in universities; in particular, leaders, often senior partners, must first be credible experts. Unlike what happens occasionally in universities, a firm's head is not likely to be someone from outside of the profession. Interesting comments are made from interviewees about how one identifies future senior partners, the necessary training and the challenges of maintaining one's expert credibility while leading a practice or firm. Finally in chapter 7, I look briefly toward the arts and ponder whether the great leadership successes of a conductor might partially be attributable to his artistic ability.

In chapter 8, I conclude. A paradox has existed in leadership research. Its intellectual status within business schools has been low, yet demand from MBA students, among others, is high. This study attempts to use objective measures to analyze leadership and performance in a particular form of knowledge-intensive organization—research universities. The book ends by suggesting the kinds of reader that I hope might be interested in this work.