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The recruitment of university top leaders: Politics, communities and markets in interaction



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KEYWORDS

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Governance;
Universities;
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Summary In modern society academic institutions attract an increasing amount of attention as providers of education and innovation. While such institutions were earlier largely governed by the academic community itself, they are nowadays increasingly subject to external forces. This paper therefore focuses on the changing character of the interaction between the academic community, politics and markets as it is manifested in the recruitment of Vice-Chancellors. It is hypothesized that these recruitments can be expected to have changed – earlier and more noticeably among young institutions – towards increasing (1) external recruitments, (2) emphasis on managerial rather than academic credentials, (3) recruitments from the natural and life sciences, (4) recruitments of females, and (5) turnover. The hypotheses are confronted with data regarding the 165 recruitments of VCs that have occurred in the Swedish universities and university colleges since the 1960s. The analysis lends support to the hypotheses.

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Introduction

In the period after the Second World War, governments of various political colours all over the world have increasingly emphasized the need to prepare their nations for the knowledge society (Boeme & Stehr, 1986). As a matter of fact, national policies for higher education and research appear to have taken on the role of a modern defence policy (Engwall, 2005). In the present world, nations strive to be competitive in relation to other nations through high

competence in the labour force and innovations that can be exported (Porter, 1990). In this world, academic institutions have come to play a significant role. In the last fifty years a large number of new institutions have been created at the same time as the previously existing institutions have grown in terms of budgets, faculty, staff and students (Rothblatt & Wittrock, 1993).

Traditionally, academic institutions have had a strong professional character. They have in principle been self-governed. However, the expansion of the university system has implied large government investments, which has made politicians eager to have an influence on the governance of academic institutions through regulation and resource allocation. More recently there has been a tendency among European politicians to increasingly use markets for resource

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allocation (Whitley & Gläser, 2007; Whitley, Gläser, & Engwall, 2010).

The changes just mentioned have implied an increasing interest in the leadership of academic institutions. A number of studies (cf. e.g. Bargh, Bocok, Scott, & Smith, 2000; Cohen & March, 1974; Engwall & Eriksson Lindvall, 2012; Middlehurst, 1993; Middlehurst, Goreham, & Woodfield, 2009; Tierney, 1998) have thus paid attention to the role and working conditions of academic leaders. Like studies of business executives (cf. e.g. Carlson, 1991; Mintzberg, 1973; Stewart, 1967; Tengblad, 2002) these studies have revealed the demanding character of top leadership. However, they have also stressed the significance of academic reputation for university leaders. This circumstance has been particularly underlined in research by Amanda Goodall (cf. Goodall, 2006, 2009a, 2009b; Goodall, Kahn, & Oswald, 2011). In a study of the 100 highest ranked universities (Goodall, 2009a, 2009b) she demonstrates that top universities are led by well-reputed scholars. Her data also shows that among these highest ranked universities Vice-Chancellors (VCs) at the very top have higher reputations (measured by citations) than those leading institutions further down the ranking (Goodall, 2006, p. 398, 2009a, p. 37). These findings, as well as interviews with some fifty leaders of UK universities and a study of 68 basketball coaches (Goodall, 2009a, Chap. 7; Goodall et al., 2011), lead Amanda Goodall to conclude that earlier success in the profession is important for success as a leader. Therefore, she argues that “[r]esearch universities should be led by brilliant scholars, not merely talented managers” (Goodall, 2009a, p. 136). This conclusion is particularly worth attention as the idea of the general manager, who can manage any type of organization, is becoming widely spread.

Against the above backdrop the present paper aims at analysing the effects of the mentioned changes towards market governance on the recruitment of academic leaders. For this purpose the paper presents in the following section a framework for analysis of institutional governance in general which has been developed on the basis of neo-institutional theories. With reference to earlier research it is then demonstrated how European university systems through political decisions have tended to move towards market governance. It is argued that this change is likely to have had some important effects on the recruitment of Vice-Chancellors. Therefore seven hypotheses regarding the appointment of university top leaders are formulated. In an empirical section these are confronted with data regarding Swedish universities and university colleges. A final section provides conclusions.

Three forces of governance

Although there still exist systems in the world with highly centralized governance – i.e. dictatorship and central planning of resource allocation – the general trend since the Second World War has been towards decentralization. Citizens in more and more nations are given the opportunity to express their opinions in general elections (Huntington, 1991). At the same time, individuals are also increasingly able to communicate their preferences through spending on various goods and services. In the words of the political scientist Charles E. Lindblom (1977) they can manifest their desires through *politics* and *markets*. Both are based on the principle of

competition, i.e. for political support and for economic resources, respectively. These two mechanisms are parallel and interactive. Politics set the rules for markets, and markets provide politics with a mechanism for decentralized resource allocation. In this interplay the regulation of markets has changed to a large extent during the post-war period. The strict regulations of financial markets have been loosened up in the interest of more efficient allocation of capital (Morgan & Knights, 1997), and earlier restrictions on international trade have also been removed in order to stimulate economic growth (Krugman, 1991). In addition, the idea of the state as a provider of certain goods and services has been challenged and led to various schemes of privatization (Megginson & Netter, 2001). Nevertheless, it has to be borne in mind that these changes do not imply that politics have been completely replaced by markets. Rather it is a matter of a shift in the balance between them (Boyer & Drache, 1996).

However, although the dichotomy of politics and markets is fundamental in modern social systems, it does not completely capture modern governance. Research by another political scientist, Eleanor Ostrom (1990, 2005), shows that in handling common pool resources collaboration between individuals within *communities* has been more successful than either politics or markets. Likewise, organization researchers have introduced various concepts for the intermediate form between hierarchies and markets: clan (Ouchi, 1980), networks (e.g. Burt, 1992; Forsgren, Hägg, Håkansson, Johanson, & Mattsson, 1995; Hägg & Wiedersheim-Paul, 1984) and communities of practice (Lave & Wenger, 1991; Wenger, 1998).

The above implies that it is appropriate in the analysis of governance to pay attention to three interacting ideal types: politics, communities and markets. In relation to Scott (1995) these correspond to three pillars of organizations: the regulative, the normative, and the cognitive. These in turn constitute coercive, normative and mimetic forces towards organizational isomorphism (DiMaggio & Powell, 1983). Politics thus constitute a regulative pillar providing coercive forces through laws and other formal rules. Similarly, communities operate as a normative pillar setting norms for behaviour, while markets provide a cognitive pillar and a mimetic force through which actors obtain market signals for setting prices (Chamberlin, 1933; Robinson, 1933) as well as for other strategic decisions (Engwall, 1981, 1994; Engwall & Wallenstål, 1988).

Universities and forces of governance

Changes in university systems

In a comparative analysis of the governance of university systems (Fig. 1) Clark (1983) uses three ideal types similar to those presented in the previous section. Although he uses state instead of politics and profession instead of communities, the gist is the same, as he compares systems of higher education. He concludes that the systems in France, Germany, the Netherlands, and Scandinavia have traditionally been characterized by a predominance of state governance (politics, i.e. the regulative pillar and coercive force), whereas in Italy and the United Kingdom they have largely been controlled by the profession (the academic community, the normative pillar and normative force). Meanwhile the university system

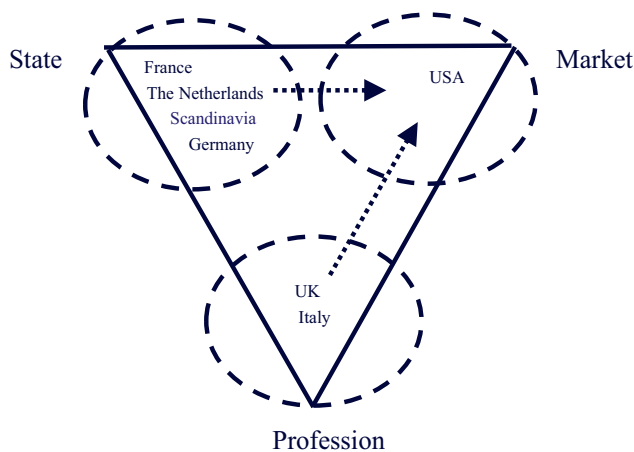


Figure 1 University systems: state, profession, and market.

in the United States has long had a market orientation (the cognitive pillar and the mimetic force), a bent that has been reinforced over time (Bok, 2003; Cole, 2009; Johnson & Rush, 1995; Slaughter & Rhoades, 2004). However, in recent years European systems have gradually also taken on more and more market features (Whitley et al., 2010). Micromanagement by the state has been jettisoned, as U.S. universities have become role models. This has had an impact on the management and governance of European universities.

The movements illustrated by the arrows in Fig. 1 imply, as already mentioned above, that the European states (politics) have tended to outsource their decision-making power to markets to a considerable extent. Two actions have been particularly significant for this development: (1) the establishment of new institutions, and (2) the introduction of New Public Management.

The establishment of new institutions

In terms of the number of academic institutions there has been a considerable growth worldwide since the end of Second World War due to the above-mentioned belief in the significance of higher education and research for future prosperity. For instance, in the United Kingdom, a traditionally profession-governed system according to Clark (1983), in the 1960s after the Robbins report (Higher Education, 1963, see also Scott, 1993), Oxbridge and the “red brick” universities founded in the nineteenth century were supplemented with the “plate glass” universities. Eventually in 1992 all UK polytechnics were granted university status (Further and Higher Education Act, 1992). And, similar developments occurred in other countries. Sweden, a traditionally state governed system according to Clark (1983), thus in the beginning of the twentieth century had eight institutions of higher education, while in 2012 there were 16 universities and 31 university colleges, in total 47 institutions.¹ Together these, like their counterparts in the United Kingdom and in

other countries, presently have a considerably larger student enrolment than a century ago.²

The introduction of new public management

The introduction of New Public Management (Hood, 1995), i.e. the adoption of corporate management ideals in public organizations, implied a shift from the regulative and normative pillars towards the cognitive pillar of governance. In this way academic institutions came under increasing pressure to organize themselves more efficiently. A significant feature of this change was that funding was increasingly transferred to market competition through a movement from block grants given to academic institutions towards project grants allocated to individual researchers or research groups (Whitley, 2010), and an increasing emphasis of bibliometrics, rankings (Liu & Cheng, 2005; Wedlin, 2006), and evaluations (Whitley et al., 2010). In the United Kingdom the latter were manifested through the various Research Assessment Exercises, through which institutions were evaluated and received resources according to their grades (Martin & Whitley, 2010). Likewise, the Swedish system can be said to have undergone a change involving a movement away from resource allocation where the visible hand lost in relation to the invisible hand (Engwall & Nybom, 2007). These mentioned tendencies were no doubt reinforced by arguments regarding the new production of knowledge (Gibbons et al., 1994; Nowotny, Scott, & Gibbons, 2001) and the plea for a triple helix interaction between universities, industry, and society (Etzkowitz & Leydesdorff, 1997).

Implications for university governance

Effects on the recruitment of university top leaders

Traditionally the role as VC in many European universities was circulated among professors, who took turns of a semester as the *primus inter pares*. With the passage of time the role as top leader of universities became more and more demanding (Bargh et al., 2000), and VCs therefore were elected for longer terms of tenure among faculty members. In countries where the State has played a dominant role in the governance of universities such as France, Germany, the Netherlands, and Scandinavia (upper left corner of Fig. 1), the described transition towards more market governance (the upper arrow in Fig. 1) has entailed a number of a changing conditions for the recruitment of VCs.

As far as the expansion of the system is concerned, it has had three effects. First, the mere growth of the system created an increased demand for university leaders. Secondly, the young institutions needed to look outside for their leaders, since, due to their youth, they had not had the time to attract faculty members with the competence and experience necessary for traditional academic leadership. Thirdly,

¹ <http://www.hsv.se/aboutus/publications/reports/reports/2012/swedishuniversitiesuniversitycollegeshortversionofannualreport2012.5.485f1ec213870b672a680003262.html>.

² For instance, Uppsala University, the oldest of the Swedish universities, had 1500 students in 1880, while the corresponding number in 2012 was 40,000 (<http://www.uu.se/om-uu/upptack-uppsala/historia/>).

with the passage of time institutional growth led to an increasing supply of university leaders as tenures terminated.

The introduction of New Public Management, on the other hand, drew more scholars into administration inside universities as department chairs, deans, vice deans, vice rectors, etc. as well as outside universities as members or even leaders of research councils and other funding bodies (Bargh et al., 2000). In this way they got both a liking and the training for university leadership. This prepared them for future administrative positions but also pulled them out of teaching and research. At the same time, business schools and consultancies widely spread the ideal of strong and strategic leaders who could generate change (Boal & Hooijberg, 2001). Universities were in this way receiving the message that omnipotent leaders, preferably from the outside, would be necessary in order to shake up dormant and lethargic academic institutions (Ernst & Young, 2012).

Seven hypotheses

The above implies that, in systems moving towards more market governance (cf. again the upper arrow in Fig. 1), we can expect a number of effects on patterns of recruitment of VCs (Fig. 2). These are likely to be earlier and stronger for young institutions than for old institutions, since we can expect the latter to have developed stronger collegial systems.

First, we may expect that both the increase in demand and supply of academic leaders will lead to an increase in the share of external recruitments, i.e. VCs coming from other institutions (both within and outside academia). This is particularly to be expected in the young institutions, since, owing to their limited age, they have not yet been able to attract enough qualified people to choose from. This leads to the first hypothesis:

H1. Young institutions can be expected mainly to recruit their leaders externally.

However, with the passage of time we may expect the old institutions to follow suit as markets for VCs develop. Evidence of this is the external recruitments of the very old and prestigious British institutions Oxford University and Cambridge University. In 2004 Oxford recruited John Hood from the University of Auckland in New Zealand as VC, and he

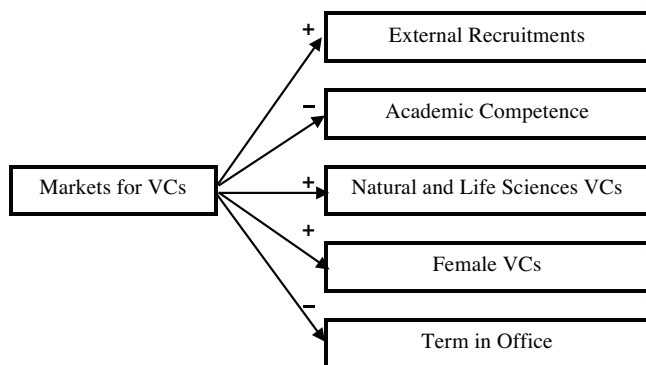


Figure 2 Expected effects of the emergence of markets for VCs.

was succeeded in 2009 Andrew D. Hamilton from Yale University. Likewise, in 2003 Cambridge appointed Dame Alison Richard from Yale, who was followed in 2010 by Sir Leszek Krzysztof Borysiewicz, chief executive of the UK Medical Research Council.³

We can thus formulate a second hypothesis:

H2. As time goes by old institutions can be expected to follow young institutions and increasingly recruit their leaders externally.

Further, we can expect that the lower status of the younger institutions will lead to difficulties for them in attracting VCs with strong academic standing. They are therefore more likely to place the emphasis on administrative talent rather than academic credentials. However, with the passage of time they can be expected to strive for increasing academic standards at the same time as the development of the market will provide more candidates. Nevertheless, they may face difficulties in becoming on a par with the old institutions in terms of recruiting top scholars as VCs.

This leads to a third hypothesis:

H3. The academic standing of VCs at young institutions can be expected to be lower than those of the VCs at the old institutions.

However, as we expected that the old institutions would be following suit in terms of external recruitment, we could expect them to eventually listen to the gospel of managerialism and to search for CEO type VCs. The arguments behind such moves are simply that the old institutions need to change and that this requires outsiders with leadership qualifications. Hence, we can expect that with the passage of time also in the old institutions academic qualifications are downplayed in favour of management qualifications, i.e.:

H4. With the passage of time old institutions can be expected to follow the young ones and place less emphasis on academic standing.

Due to market forces, both old and young institutions can be expected to come under pressure to provide innovations that can be exploited through patents and eventually new products. As a result we can anticipate that institutions will expand fields where such innovations are expected to occur as well as to favour VC candidates from such fields. Parallel to this demand component, we can also expect a supply component here. The rapid development nowadays in the natural and life sciences makes it more difficult for VCs from those fields to come back to research. As their tenures finish they simply have to seek new administrative positions. This leads to the fifth hypothesis:

H5. Institutions can be expected over time to increasingly select leaders with a background in the natural and life sciences.

³ Source: Web pages of the two universities.

Further, the increasing recruitment of female students to universities as well as general trends towards equal opportunities for women and men in society are likely to have effects on the recruitment of VCs. Since most VCs in both the old and the young institutions have been male, the institutions can be expected independently of each other to break the tradition of male recruiting. This leads to the sixth hypothesis:

H6. Institutions can be expected over time to increasingly select female leaders.

Finally, for two reasons we could expect that VCs with the passage of time will stay in office for shorter periods than earlier. First, university boards are likely to put more pressure on the academic leaders to deliver change and successful output, which may be taxing and may lead to early resignations. Second, the creation of a market for VCs provides openings for VCs in office to move to more prestigious institutions. Therefore we can formulate the following hypothesis:

H7. The terms in office of the VCs can be expected to decline over time.

Together these seven hypotheses aim at providing an opportunity to investigate to what extent the above-discussed movement towards a stronger market orientation of institutions of higher education has occurred.

Confronting the hypotheses with empirical data

In confronting the above-formulated seven hypotheses with empirical data it is appropriate to once more go back to Burton Clark's triangle (Fig. 1). The development we want to study is the movement from the upper left corner in the direction of the upper right corner. Among the countries mentioned in the upper left corner we have selected a Scandinavian country (Sweden), for reasons of accessibility of reliable data. Before presenting the results we will therefore provide information on some significant regulatory changes in the Swedish system. We will then present the data and the operationalization of the variables.

Significant regulatory changes in the Swedish system

In relation to the recruitment of Swedish VCs changes in the 1990s in the regulation entailed that the influence from the academic community (the normative pillar) was reduced. First, a Governmental Bill in May 1997 (*Regeringens proposition, 1996/97:141*) introduced a change from January 1, 1998 in the Higher Education Act (*Högskolelagen*) stipulating that VCs, who traditionally had been the chairperson of the university boards, would no longer hold this position. Instead the government appointed external chairpersons from politics and business to the boards of the institutions of higher learning. Although it was never explicitly expressed, it appears that the political intentions behind this change, which may very well have been inspired by corporate govern-

ance ideas about principals and agents (Jensen & Meckling, 1976), were to encourage change in the universities. These ambitions were reinforced by formal and informal meetings of the chairpersons arranged by the Ministry of Education and the Swedish Agency of Higher Education. During these meetings the representatives of the new institutions were in the majority, which appears to have spread the idea of external recruitment and the use of head-hunting consultants also for the selection of VCs of the old institutions (see further Engwall, 2007).

An additional important later change in the Higher Education Ordinance (*Högskoleförordningen*) in 1998 removed the earlier compulsory rules regarding faculty consultation in the selection of VCs. These rules had been introduced in 1977 in connection with a larger reform of the Swedish system of higher education, and were at that time a change from earlier procedures whereby VCs were chosen by their faculty colleagues. The rules of consultation entailed that VCs were elected by an assembly with representation from the different faculties, students, and labour unions, who were also part of the search process. As of 1998 it is up to each university board to design its own procedures for consultation (Edwardsson, 2005, pp. 4–5 and *Högskoleförordningen*, Chap. 2, Section 8). In a number of institutions it has implied the reduction or the abolishment of faculty consultation.⁴

A third change in terms of the regulation regarding the selection of VCs was associated with gender. As of 2002 it is thus explicitly stated that both male and female candidates should be considered. It is also compulsory for the boards to give an account of their handling of the gender aspect.

More recently in 2010 the government provided legislation implying even more freedom for the universities and university colleges in terms of their organization (*Regeringens proposition, 2009/10:149*). So far, as far as can be judged, this change has not had any significant effects on the recruitment of VCs, but might in the future. The present study, undertaken before these changes took effect, may therefore be a good platform for coming research.

The above obviously demonstrates that, in the Swedish academic system, the state has not completely given up its control over universities. Instead it means that the state – through appointments to university boards and rules for recruitment procedures – has tended to apply the corporate model for governance. In the words of a university chairman: “The state is the owner of the universities, and has to govern them!” In so doing, the state and its representatives have tended to apply New Public Management to universities. This means that the profession has lost out to both the state and the market.

The population for the study

In 2012 the Swedish system of higher education contained 52 institutions. Of these, 23 have been excluded from the present study due to their character. They are the College of Physical Education, the Defence College, eight colleges of

⁴ In Denmark the collegial influence on leader appointments was even totally removed (*Lov om universiteter – Universitetsloven, 2006*).

Table 1 The studied population of Swedish institutions of higher education.

Name	Start	Category	Remark
Uppsala University	1477	Old	
Lund University	1666	Old	
Swedish University of Agricultural Sciences	1762	Old	Merger of three units in 1977
Karolinska Institute	1810	Old	
Royal Institute of Technology	1827	Old	University status in 1877
Chalmers University of Technology	1829	Old	University status in 1937
Stockholm University	1878	Old	University status in 1960
Gothenburg University	1887	Old	University status in 1954
Stockholm School of Economics	1909	Old	
Umeå University	1965	Young	
Linköping University	1970	Young	University status in 1975
Luleå Technical University	1971	Young	University status in 1997
Borås University College	1977	Young	
Dalarna University College	1977	Young	
Gävle University College	1977	Young	
Jönköping University College	1977	Young	
Karlstad University	1977	Young	University status in 1999
Kristianstad University College	1977	Young	
Linnaeus University (Växjö University)	1977	Young	University status in 1999
Mälardalen University College	1977	Young	
Mid-Sweden University	1977	Young	University status in 2005
Örebro University	1977	Young	University status in 1999
Skövde University College	1977	Young	
Halmstad University College	1983	Young	
Blekinge Institute of Technology	1989	Young	
West University College	1990	Young	
Södertörn University College	1996	Young	
Gotland University College	1998	Young	
Malmö University College	1998	Young	

performing arts and small schools for nursing, psychotherapy, and theology. Among the remaining 29 institutions (Table 1) there are 9 that were founded before the First World War (in order of age: Uppsala University, Lund University, Swedish University of Agricultural Sciences, Karolinska Institutet, Royal Institute of Technology, Chalmers University of Technology, Stockholm University, University of Gothenburg, and Stockholm School of Economics), and 20 that are either university colleges or institutions that have been granted university status after the Second World War.⁵ In the analysis we will label the first group 'old institutions' and the second group 'young institutions'. Among the latter, Umeå University, founded in 1965, was directly granted university status, while a number of the others started out as extensions of the established universities. Eventually, from 1977, these became independent institutions in the form of university colleges, some of them, after considerable effort, later being upgraded to universities (see further Engwall & Nybom, 2007, pp. 33–34).

As the young institutions were founded in the 1960s it has been natural to exclude the recruitments before that decade. As a result the final population of appointees consists of 165 persons, who were appointed up to the end of 2011. Of

these, 55 were appointed as VCs at the old institutions and 110 at the young ones (Table 2 and Appendix). About 60% of the VCs have been appointed since 1990. Data on the VCs have been obtained from various sources of reference and the institutions.

Operationalizing the variables

In relation to the above-specified hypotheses the variables in question have been operationalized in the following way:

External recruitment is considered to have happened when a new VC comes from another institution, regardless whether the appointee has earlier connections with the recruiting institution through doctoral work or earlier appointments. The variable is measured by the shares of external recruitments for the two categories.

Academic competence is measured by the number of years as professor at the time of appointment as VC. For those who are not professors the value of this variable is zero. The variable is measured by the mean values for the two categories.

Academic orientation is used to measure the academic background of appointees. A rough division is made between what Snow (1959) mentions as the two cultures, i.e. natural science, technology, medicine and pharmacy, on the one hand, and humanities, law, social sciences and theology, on the other. The variable is measured by the shares of persons of the first kind for the two categories.

⁵ <http://www.hsv.se/densvenskahogskolan/universitetochhogskolor/adresslistaibokstavsordning/adresslistaikategorier.4.4dfb54-fa12d0dded89580001181.html>.

Table 2 The population of appointees.

Period	Old	Young	Total
1960–1969	7	2	9
1970–1979	11	19	30
1980–1989	12	12	24
1990–1999	10	33	43
2000–2009	14	31	45
2010–2011	1	13	14
Total	55	110	165

Gender is simply dichotomized between male and female, and measured by the shares of females in the two categories of institutions.

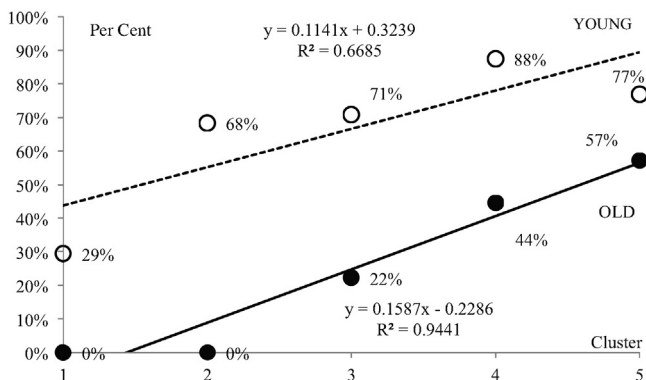
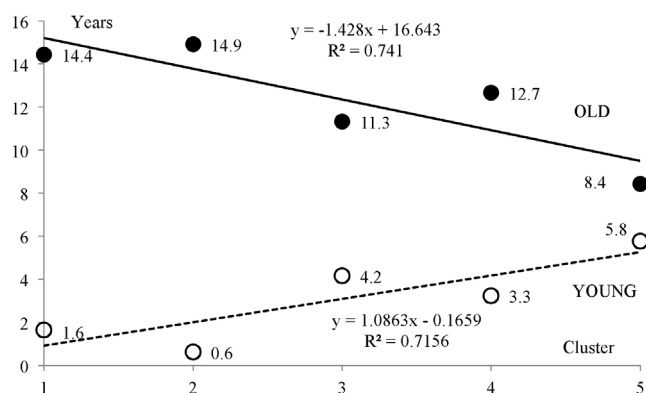
Term of office is measured as the difference between end year and starting year. For VCs who are still in office, the end year has been defined as the year their current appointment ends. For some this may imply an underestimation of the term of office, since their term may be prolonged. At the same time it may be an overestimation for others who resign earlier. The bias should therefore not be significant.

Since recruitments are not evenly distributed over time, the 165 appointments were ordered consecutively by time and then grouped into five clusters of 33 appointments each. In this way it was possible to compare the development of the averages for the variables over time.

Results

Both hypotheses regarding external recruitment appear to be supported in the material (Fig. 3). In terms of the young institutions (Hypotheses 1), they started out with about one third of their appointments being external, a circumstance that can be explained by their difficulty in attracting externals during their early years. However, with time the external recruitments have successively increased, reaching a peak within the fourth cluster of recruitments, with close to 90% externals.

Fig. 3 also lends support to the idea that the old institutions tend to follow the young ones with the passage of time (Hypothesis 2). In the first two clusters of recruitments none is external among the old institutions. Then the share increases in the following two periods, first to 22% and then to 44%, to end up at 57% in the last period. A closer look at the

**Figure 3** Share of externally recruited VCs.**Figure 4** Average number of years as professor at appointment.

various institutions reveals that the resistance towards external recruitments seems to be associated with institutional age and professional power. Thus among the four oldest Swedish universities, the youngest, Gothenburg (founded in 1891), was first to recruit an external VC in 2003. It was followed by Stockholm (founded in 1878) in 2004, Lund (founded in 1666) in 2009 and finally Uppsala (founded in 1477) in 2012. Of these, Gothenburg went back to internal recruitment after their first try in 2003–2006. The prestigious medical school, the Karolinska Institutet, has thus far abstained from turning to the external market, a circumstance that can probably be explained by the strong professional culture of the institution. However, it should be noted that the VC of the Karolinska Institutet 2004–2012 before she was elected VC was a part-time Secretary General for Medical Sciences at the Swedish Research Council (Vetenskapsrådet). This affiliation with funding bodies is something she shares with the VC of Stockholm University in the period 2004–2013, who held the corresponding post for the natural sciences.⁶ Other examples of links to funding bodies are the present VCs of Lund, Chalmers, and Umeå, all three of whom had served in the top management team of Sweden's Innovation Agency (Vinnova) before their appointments. Similarly, a number of other externally recruited VCs had earlier worked for some time in governmental organizations after their academic studies, while very few had been working in industry.

Likewise we find support for our Hypotheses 3 and 4 regarding the lower academic competence among VCs in the young institutions and the declining emphasis on academic qualifications in the old ones (Fig. 4). Thus in the first two clusters of appointments the average tenure as professor of the appointed VCs in young institutions was very low (1.6 and 0.6, respectively), to a considerable extent owing to the fact that quite a few of the appointees were not professors. In the following three clusters the average has increased, although it is still lower than for old institutions. For the latter we can observe a downward trend from averages well above ten years in the earlier clusters to an average below 9 years in the last cluster.

⁶ Both VCs got successors in 2013. In both cases insiders were recruited. Since Stockholm University had earlier a VC from the outside, the Karolinska Institutet is now the only institution with only VCs from the inside.

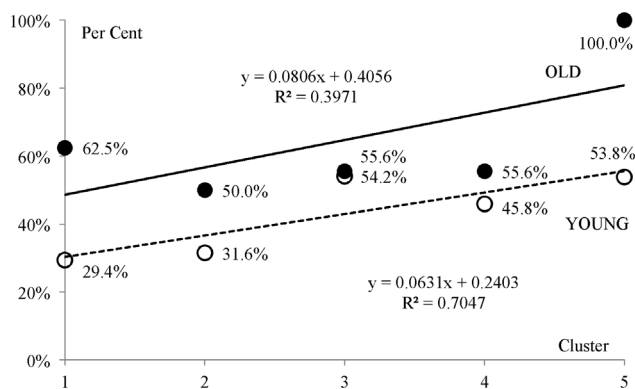


Figure 5 Share of recruitees with background in the natural sciences and life sciences.

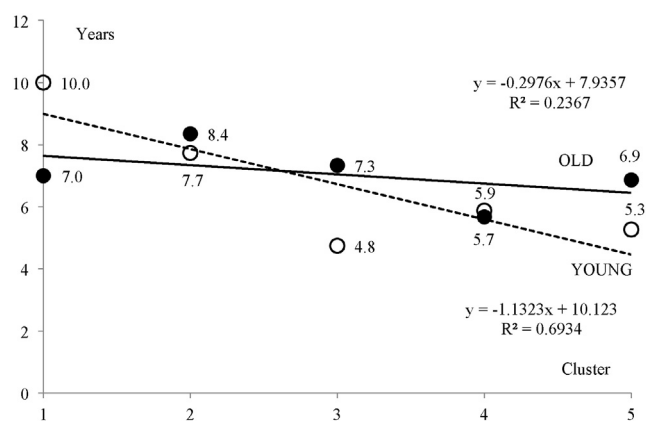


Figure 7 Average terms of office of VCs.

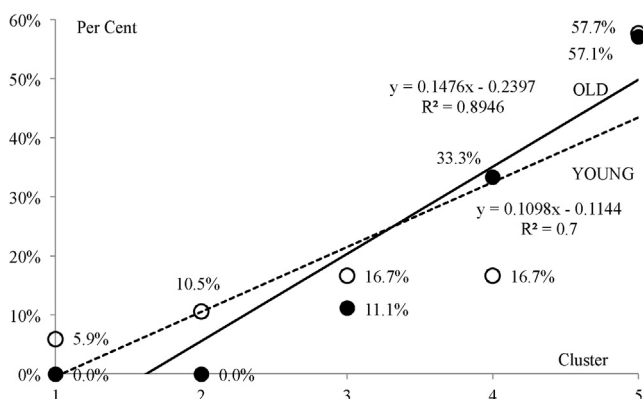


Figure 6 Share of female VCs.

In relation to the results presented, it might be argued that the reason for the shorter tenures as professor is that the recruited VCs are much younger in recent decades. However, this does not seem to be the case. On the contrary, the average age of the recruited has been increasing in both clusters. Among the old institutions the average age in the first cluster was 52.9 years, a figure that changed to 56.1 years in the last cluster. Similarly, the average age of the recruited VCs in the young institutions has increased from 47.9 years in the first cluster of appointments to 53.5 years in the fifth one.⁷

The data also lend support for Hypothesis 5, i.e. that the institutions over time are increasingly selecting leaders with a background in the natural and life sciences (Fig. 5). For the old institutions the share was as high as almost two-thirds in the first cluster, then dropped to 50%, and has since increased considerably to reach 100% in the last cluster. An increase from a lower level has also occurred among the young institutions from about 30% to around 50% in the last three clusters. The latter development can be seen as a result of the fact that the young institutions were first primarily oriented towards the humanities and the social sciences, and that, in their ambitions to become full-fledged

universities, they brought in leaders from the hard sciences to develop such competence.

It is also clear from the data that Hypothesis 6 regarding increasing recruitment of female VCs is supported (Fig. 6). Until the recruitments in the third cluster no VC at the old institutions had been a woman, and in the young institutions the shares for the first clusters were above zero but low. The real take-off occurred in the last cluster of recruitments, during which the share of female recruitees was above 50% for both the old and the young institutions. The legislation mentioned above thus seems to have had an effect.

Finally, the data also support Hypothesis 7, i.e. that the terms of office for the VCs can be expected to decline with the passage of time for the young institutions, where tenures have fallen from ten years in the first cluster to about five years in the last cluster (Fig. 7). At the same time, although slightly falling, the average time in office for VCs in old institutions has been fairly stable around the average in the first cluster, seven years. This difference seems to indicate that the VCs at the young institutions live a riskier life than their colleagues at the old institutions, i.e. that market ideals are stronger in the young institutions, but may also be a result of VCs in these moving along in their careers.

Conclusions

There can be no doubt that academic institutions today are expected worldwide to be powerhouses for economic growth through education and research. As a result old universities have grown in size at the same time as a large number of new institutions have been created in many countries. This in turn – in a world of general change towards less regulation and the introduction of New Public Management ideas – has implied that governments in countries like France, Germany, the Netherlands and Scandinavia have tended to decrease central regulation of universities and instead outsource decision-making for student recruitment and research funding to markets. This change has led to an increasing demand for strategic leadership and a demand for strong academic top leaders. At the same time leaders from new institutions have increased the supply of candidates. Together demand and supply have facilitated a market for academic leaders. Empirical evidence of the above reasoning has been provided in the empirical study reported above. Although limited to

⁷ These figures are very close to those reported by Bargh et al. (2000, pp. 137–138).

one country (Sweden), similar results could be expected to be found in other countries in transition from relatively detailed regulation of universities towards more market governance.

The data presented regarding the recruitment of VCs to Swedish universities and university colleges from the 1960s until the end of 2011 has shown that, in accordance with our expectations, the share of external recruitments of VCs, i.e. leaders who are not selected among the present faculty, has been increasing. Another indication of the greater market orientation is an increasing emphasis on managerial rather than academic credentials. A further sign of a growing market orientation is the increasing recruitments of VCs from the natural sciences and the life sciences, i.e. fields where research is expected to lead to significant innovations. The recruitment base has also been broadened through an increasing share of female VCs. A final indication of the increasing market governance is that the number of years in office has declined as a result of movements among the institutions but also due to resignations. Also in accordance with expectations, the indications of market orientations have been stronger for young institutions in comparison to old institutions.

Among the results, the tendency of falling academic standing of VCs appears particularly noteworthy. This goes contrary to the results of Amanda Goodall referred to above, which shows that top universities have top scholars as VCs. Although cause and effect may be difficult to establish, it is a convincing argument that academic prestige is an asset in the leadership of academics. It is therefore worrying that the empirical results points to a result in the other direction. As a matter of fact, we could even expect that the credentials of managers in general become more significant in other types of organizations as the knowledge component becomes more significant, i.e. when companies are becoming more like universities. This is an important aspect for future leadership research, which should also be able to take advantage of the theoretical framework used in the present study. It implies that the governance of organizations should be seen as an interplay between politics (the regulative pillar), communities (the normative pillar) and markets (the cognitive pillar), which provide rules, norms, and role models, respectively. Over time we can expect their influence to vary. For the time being we have seen a strong increase in the influence of the cognitive pillar. However, with the passage of time other power structures can be expected. They in turn will have significant implications for leadership.

Finally, the present study should be a reason to undertake further studies of the recruitment of academic top leaders. Although the hypotheses studied have a general character they have above been confronted with data from just one country, Sweden. Needless to say, it would be of great interest to undertake comparative studies of academic systems in various countries to determine to what extent the results presented in the present paper have a broader validity as well as how recruitment patterns differ across nations and over time. In this way we would also be able to shed more light on the continuous interplay between politics, professions and markets, which appears to be of great significance for our understanding of governance.

Appendix. List of VCs in the study listed in order of age of their institution

Uppsala University (1477)

1978–1989	Martin H:son Holmdahl (b. 1923)
1989–1997	Stig Strömholm (b. 1931)
1997–2006	Bo Sundqvist (b. 1941)
2006–2011	Anders Hallberg (b. 1945)
2012–2017	Eva Åkesson (b. 1961)

Lund University (1666)

1968–1970	Per Stjernquist (b. 1912)
1970–1977	Sven Johansson (b. 1923)
1977–1980	Carl-Gustaf Andrén (b. 1922)
1980–1983	Nils Stjernquist (b. 1917)
1983–1992	Håkan Westling (b. 1928)
1992–2003	Boel Flodgren (b. 1942)
2003–2008	Göran Bexell (b. 1943)
2009–2014	Per Eriksson (b. 1949)

Swedish University of Agricultural Sciences (1762 foundation of first unit)

1977–1982	Lennart Hjelm (b. 1915)
1982–1994	Mårten Carlsson (b. 1936)
1994–2000	Thomas Rosswall (b. 1941)
2000–2006	Ann-Christin Bylund (b. 1950)
2006–2015	Lisa Sennerby Forsse (b. 1948)

Karolinska Institutet (1810)

1969–1977	Sune Bergström (b. 1916)
1977–1983	Bengt Pernow (b. 1924)
1983–1995	Bengt Samuelsson (b. 1934)
1995–2003	Hans Wigzell (b. 1938)
2004–2012	Harriet Wallberg-Henriksson (b. 1956)

Royal Institute of Technology (1827; university status in 1877)

1968–1974	Göran Borg (b. 1913)
1974–1980	Anders Rasmuson (b. 1923)
1980–1988	Gunnar Brodin (b. 1931)
1988–1998	Janne Carlsson (b. 1932)
1999–2007	Anders Flodström (b. 1944)
2007–2013	Peter Gudmundsson (b. 1955)

Chalmers University of Technology (1829, university status in 1937)

1966–1974	Nils Gralén (b. 1912)
1974–1989	Sven Olving (b. 1928)
1989–1998	Anders Sjöberg (b. 1935)
1998–2006	Jan-Eric Sundgren (b. 1951)
2006–2015	Karin Markides (b. 1951)

Stockholm University (1878 as Stockholm University College; university status in 1960)

1966–1974	Dag Norberg (b. 1909)
1974–1978	Gunnar Hoppe (b. 1914)
1978–1988	Staffan Helmfrid (b. 1927)
1988–1994	Inge Jonsson (b. 1928)
1994–2003	Gustaf Lindencrona (b. 1938)
2003–2004	Gunnel Engwall (b. 1942)
2004–2013	Kåre Bremer (b. 1948)

University of Gothenburg (1887 as Gothenburg University College; university status in 1954)

1966–1972	Bo Eric Ingelmark (b. 1913)
1972–1982	Georg Lundgren (b. 1923)

1982–1986	Kjell Härnqvist (b. 1921)	1986–1988	Nils Gruvberger (b. 1928)
1986–1992	Jan S. Nilsson (b. 1932)	1990–1990	Agne Boeryd (b. 1933)
1992–1997	Jan Ling (b. 1934)	1990–1993	Lars Amtén (b. 1945)
1997–2003	Bo Samuelsson (b. 1942)	1993–1994	Agne Boeryd (b. 1933)
2003–2006	Gunnar Svedberg (b. 1947)	1994–2004	Clas Wahlbin (b. 1945)
2006–2015	Pam Fredman (b. 1950)	2004–2009	Thomas Andersson (b. 1959)
<i>Stockholm School of Economics (1909)</i>		2009–2015	Anita Hansbo (b. 1960)
1968–1970	Knut Rodhe (b. 1909)	<i>Karlstad University (1977 as Karlstad University College; university status in 1999)</i>	
1970–1986	Per-Jonas Eliæsson (b. 1934)	1977–1994	Lennart Andersson (b. 1929)
1986–1995	Staffan Burenstam-Linder (b. 1934)	1995–2006	Christina Ullenius (b. 1943)
1996–2000	Claes-Robert Julander (b. 1946)	2007–2011	Kerstin Norén (b. 1950)
2000–2003	Leif Lindmark (b. 1946)	2011–2017	Åsa Bergenheim (b. 1954)
2004–2012	Lars Bergman (b. 1947)	<i>Kristianstad University College (1977)</i>	
<i>Umeå University (1965)</i>		1977–1994	Kaj Björk (b. 1934)
1964–1969	Lars-Gunnar Larsson (b. 1919)	1995–1997	Claes I. Helgesson (b. 1936)
1969–1973	Karl-Gustav Paul (b. 1919)	1997–1998	Bengt Lindner (b. 1949)
1973–1992	Lars Beckman (b. 1928)	1999–2004	Bengt Lörstads (b. 1941)
1992–1998	Sigbritt Franke (b. 1942)	2005–2005	Thomas Nordström (b. 1951)
1998–1999	Jan-Olof Kellerth (b. 1942)	2005–2006	Malin Irhammar (b. 1948)
1999–2005	Inge-Bert Täljedal (b. 1942)	2007–2012	Lars Carlsson (b. 1952)
2005–2010	Göran Sandberg (b. 1955)	<i>Linnaeus University (1977 as Kalmar University College and Växjö University College; university status in 2010)</i>	
2010–2016	Lena Gustafsson (b. 1949)	1977–1994	Hans Wieslander (b. 1929) (Växjö)
<i>Linköping University (1970, university status in 1975)</i>		1977–1995	Dan Isacson (b. 1932) (Kalmar)
1970–1983	Hans Meijer (b. 1922)	1994–1999	Bengt Abrahamsson (b. 1938) (Växjö)
1983–1995	Sven Erlander (b. 1934)	1995–2004	Örn Taube (b. 1940) (Kalmar)
1996–1999	Anders Flodström (b. 1944)	1999–2003	Magnus Söderström (b. 1942) (Växjö)
1999–2003	Bertil Andersson (b. 1948)	2003–2009	Johan Sterte (b. 1959) (Växjö)
2003–2011	Mille Millnert (b. 1952)	2004–2009	Agneta Bladh (b. 1946) (Kalmar)
2011–2017	Helen Dannetun (b. 1957)	2010–2015	Stephen Hwang (b. 1956)
<i>Luleå Technical University (1971 as Luleå University College; university status in 1997)</i>		<i>Mälardalen University College (1977)</i>	
1977–1979	Lars Nordström (b. 1918)	1977–1989	Sven Bertil Magnusson (b. 1929)
1979–1993	Torbjörn Hedberg (b. 1939)	1989–1995	Lillemor Kim (b. 1940)
1994–2005	Ingegerd Palmér (b. 1946)	1995–2003	Hasse Odenö (b. 1938)
2005–2009	Pia Sandvik Wiklund (b. 1964)	2003–2005	Magnus Söderström (b. 1942)
2009–2015	Johan Sterte (b. 1959)	2005–2011	Ingegerd Palmér (b. 1946)
<i>Borås University College (1977)</i>		2011–2017	Karin Röding (b. 1955)
1977–1977	Ulf Dittmer (b. 1921)	<i>Mid-Sweden University (1977 as Sundsvall/Härnösand University College and Östersund University College; university status in 2005)</i>	
1978–1989	Nils-Bertil Faxén (b. 1928)	1977–1993	Ola Román (b. 1941) (Sundsvall)
1989–2001	Anders Fransson (b. 1942)	1977–1981	Alf Gunnmo (b. 1942) (Östersund)
2001–2005	Said Irandoust (b. 1960)	1981–1987	Stefan Hammarqvist (b. 1943) (Östersund)
2006–2011	Lena Nordholm (b. 1944)	1987–1990	Erling Nilsson (b. 1932) (Östersund)
2011–2017	Björn Brorström (b. 1953)	1990–1993	Alf Gunnmo (b. 1942) (Östersund)
<i>Dalarna University College (1977)</i>		1993–1994	Alf Gunnmo (b. 1942) (Sundsvall)
1977–1980	Hans-Lennart Lundh (b. 1917)	1994–1998	Kari Marklund (b. 1938) (Sundsvall)
1980–1991	Birger Christofferson (b. 1927)	1999–2003	Gunnar Svedberg (b. 1947) (Sundsvall)
1993–1994	Clas Wahlbin (b. 1945)	2003–2008	Thomas Lindstein (b. 1947)
1995–1997	Anders Marelus (b. 1938)	2008–2014	Anders Söderholm (b. 1961)
1997–2003	Leif Borgert (b. 1943)	<i>Örebro University (1977 as Örebro University College; university status in 1999)</i>	
2004–2010	Agneta Stark (b. 1946)	1977–1978	Thore Hammarland (b. 1927)
2010–2016	Marita Hilliges (b. 1963)	1978–1982	Stefan Björklund (b. 1932)
<i>Gävle University College (1977)</i>		1983–1989	Anders Stening (b. 1946)
1977–1989	Wenche Nerdrum-Ullman (b. 1929)	1990–1999	Ingemar Lind (b. 1934)
1989–2000	Birgitta Stymne (b. 1940)	1999–2008	Jan Erik Gidlund (b. 1947)
2001–2008	Leif Svensson (b. 1943)	2008–2014	Jens Schollin (b. 1949)
2008–2013	Maj-Britt Johansson (b. 1955)	<i>Jönköping University College (1977)</i>	
<i>Jönköping University College (1977)</i>		1977–1982	Yngve Glenow (b. 1922)
1977–1982	Yngve Glenow (b. 1922)	1982–1990	Ingvar Törnqvist (b. 1938)
1982–1990	Ingvar Törnqvist (b. 1938)		

- Skövde University College (1977)
 1997–2001 Lars-Erik Johansson (b. 1946)
 2001–2010 Leif Larsson (b. 1945)
 2010–2016 Sigbritt Karlsson (b. 1958)
- Halmstad University College (1983)
 1983–1997 Sven-Ove Johansson (b. 1939)
 1998–2000 Lars Fredén (b. 1949)
 2000–2010 Romulo Enmark (b. 1954)
 2011–2011 Carina Ihlström Eriksson (b. 1960)
 2011–2017 Mikael Alexandersson (b. 1952)
- Blekinge Institute of Technology (1989)
 1989–2000 Per Eriksson (b. 1949)
 2001–2007 Lars Haikola (b. 1947)
 2007–2013 Ursula Haas (b. 1962)
- West University College (1990)
 1990–2002 Olof Blomqvist (b. 1943)
 2002–2011 Lars Ekedahl (b. 1947)
 2011–2017 Kerstin Norén (b. 1950)
- Södertörn University College (1996)
 1997–2002 Per Thullberg (b. 1945)
 2003–2010 Ingela Josefson (b. 1943)
 2010–2016 Moira von Wright (b. 1957)
- Gotland University College (1998) [merged with Uppsala University as of 1 July 2013]
 1998–2003 Gunhild Beckman (b. 1941)
 2003–2008 Leif Borgert (b. 1943)
 2009–2014 Jörgen Tholin (b. 1956)
- Malmö University College (1998)
 1998–2002 Per-Olof Glantz (b. 1936)
 2002–2011 Lennart Olausson (b. 1948)
 2011–2017 Stefan Bengtsson (b. 1961)

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