cheps

Center for
Higher Education
Policy Studies

The Dutch Academic Profession in International Comparative Perspective

Report on the international CAP project

Report by
Egbert de Weert

March, 2012

Contact:
Egbert de Weert
Centre for Higher Education Policy Studies (CHEPS)
University of Twente
P.O. Box 217 7500 AE Enschede
The Netherlands
T +31 53 – 4893263
F +31 53 – 4340392
E e.deweert@utwente.nl
W www.utwente.nl/mb/cheps

C12EW023

Table of Contents

1   Introduction

Researchers from various countries have joined together to undertake an international research project about "*The Changing Academic Profession*". This is a research among academics working at universities, research institutes and other higher education institutions.
The research builds upon the first international survey conducted in 1992 by the Carnegie Foundation on the academic profession in which the Netherlands also participated (see Ph. Altbach 1996).

Altogether 15 countries are participating in this current research, among them. The Dutch survey was carried out by the *Center for Higher Education Policy Studies (CHEPS)* of the University of Twente, The Netherlands.

The core of the international study is a survey of academics in over 20 countries worldwide. So far, data have been supplied by 19 national research teams:

Argentina	Australia	Brazil
Canada	China	Finland
Germany	Hong Kong	Italy
Japan	Malaysia	Mexico
Netherlands	Norway	Portugal
South Africa	South Korea	UK
USA		

A follow-up European study will add partial data from a further five countries: Austria, Croatia, Ireland, Romania, and Switzerland.

The research aims to investigate the nature and extent of the changes experienced by members of the academic community. These changes concern working conditions, status, international dimension, (public) accountability, professionalism in research and teaching, and the orientation towards the applicability of the academic work. The research aims to increase the understanding of the implications of these changes for the attractiveness of the academic profession as a career and for the ability of the academic community to contribute to the further development of knowledge societies and the attainment of national goals.

The study is attempting to address the following research questions:
1. To what extent is the nature of academic work changing?
2. What are the external and internal drivers of these changes?
3. To what extent do changes differ between countries and types of higher education institution?
5. How do the academic professions respond to changes in their external and internal environment?

6. What are the consequences for the attractiveness of an academic career?
7. What are the consequences for the capacity of academics to contribute to the further development of knowledge societies and the attainment of national goals?

Three themes have become particularly pervasive:
- Knowledge production and relevance: fundamental and/or applied knowledge, disciplinary and multi- / interdisciplinary; tensions between internal scientific and external quality criteria of research and education;
- Internationalization: national traditions versus international developments; international mobility of students and staff;
- Management and collegiality: shifting accents in decision-making powers, pressure on efficiency and effectiveness.

The 1992 Carnegie Study on the Academic Profession

The CAP study also aims to follow up the First International Survey of the Academic Profession in 1992, sponsored by the Carnegie Foundation and including 14 countries. This survey highlighted many problems facing the academic systems around the world as well as the overall satisfaction of academics with their professional work and their occupational choice (Altbach 1996). The Netherlands also participated in this first survey.
The CAP questionnaire repeats some items from the earlier survey and allows to compare responses to these questions from the two surveys.

Although there is no space to present an in-depth analysis of the results of the two surveys in this report, some interesting comparisons are included where appropriate.

Relevance of CAP for the Netherlands

This thematic area is relevant in the Netherlands especially regarding the attractiveness of the academic career in comparison with other countries. As a relatively small country higher education is increasingly subject to internationalisation, with greater mobility of students and staff, its growth as a transnational business and increasing international collaboration in teaching and research.
Reference can be made to discussions that have taken place recently about the career perspective of (young) researchers. As the nature of academic work changes, the routes into the profession are also being transformed, with alternatives to the traditional career trajectories becoming more prevalent. Various reports by the Association of Dutch universities (VSNU), and other funding council, KNAW, NWO, AWT about academic careers and the emergence of tenure tracks.

Reference can also be made to discussions about university research (basic and/ or applied) in collaboration with knowledge centers of industry and other societal organisations as well as current evaluation practices of education and research.
For the HBO-sector the developments with respect to lectorates, knowledge circles /centers and the growing significance of practice-oriented research are relevant as well. Given the specific relevance of some issues, questions have been added in the Dutch questionnaire on

the tenure-system and on research in the HBO to the standard international questionnaire the tenure-track system and the was

The Dutch system can be classified as a research-focused system with a clear distinction between the research universities and the other institutions focusing on professional education. However, this distinction has become less pronounced due to developments in both sectors.

The other institutions – in Europe named as Universities of Applied Sciences – have pioneered the view that research embraces a continuum of activity, including basic, applied, and practice-oriented research. The Dutch government supports the view that these institutions should have an important role to play in applied research and augment the research capacity of these institutions mainly through earmarked funding. This has led to an extension of the working tasks of the staff of these institutions.

In the universities the introduction of new public management with emphasis on the relevance of research and contract-research has put pressure on the research-teaching nexus. This has been reinforced by universities who have organised their teaching and research activities in separate units.

O the basis of the CAP data it will be considered to what extent the traditional distinction between research universities and teaching institutions still holds. In the analysis variables of staff on different positions and in different career stages will be taken into account, comparing the Dutch data with those of other CAP countries with a binary structure (Germany, Finland, Norway and Portugal).

The Dutch results will be reported in international comparative perspective. Comparisons over time with data from the previous Carnegie survey will be made;

2   The Dutch survey

The international research team designed a standard questionnaire to be used in all participating countries. This questionnaire consists of the six sections:
- A. Career and professional situation
- B. General work situation and activities
- C. Teaching
- D. Research
- E. Management
- F. Personal background

National teams were able to define national categories, for example regarding existing staff ranks, definitions of institutions. National teams they could also add questions that were considered of specific interest to a particular country. In the case of the Netherlands these concern question on introducing tenure track career systems and especially for HBO staff members a special section on the research function of Universities of Applied sciences and their perceptions on these issues.

The research concerns a representative sample of the academic personnel in all staff ranks charged with education and/or research tasks at universities, (independent) research institutes, and HBOs. As in the international survey doctoral students (AIOs) were not included in this CAP research as in most countries they are considered students, they were also left out in the Dutch sample, although they belong in the Netherlands to the category of academic personnel.

The sampling design for the CAP project was shaped by three factors: the analytic goals of the project, the design effect of the sampling design, and the structure of higher education in each country.
For inferring population characteristics from sample data, a minimum completed sample size is necessary to attain respectable confidence intervals. The project team decided on an effective completed sample of 800 for each participating country. If the sampling design is a simple random sample and the response rate is expected to be circa 33% then an initial sample of 2400 would be required (800* (1/.33) = 2400). For other designs a larger samples would be required.

The Netherlands has compared to other countries a rather straightforward public higher education system: Altogether 14 universities and around 40 HBOs. A number of institutions were asked to participate and within each of them a stratified sample was drawn on the basis of the different staffing categories.
The survey took place in two stages. The first was carried out in 2009 among university staff only in Altogether 10 universities participated who decided to send the online survey to a sample from their academic personnel.
Also Research institutes, the so-called KNAW institutes (Royal Dutch Academy of Sciences) were included. The field phase was in 2009 from 1-03 to 1-05.

A survey among HBOs/ UAS was not a good moment as there was at that time another large survey. In order to avoid an overkill and risking a high non-response rate it was decided to postpone the CAP survey to a later stage. Altogether eight institutions agreed to send the online questionnaire to a selected group or placed the invitation on the general intranet for academic staff with an invitation to participate. The field phase was from 1 April to 1 June 2010.

Table 2.1 Response of Dutch survey

	Total response	Sample	Total academic staff per 2008
Universities	628	3500	12430
Research institutes	38		460
UAS	539	Not known	16152
TOTAL	1205		

By the international methodology team it was indicated that an overall response of 800 would be acceptable for international comparison.

The data analysis is based on the international dataset as compiled by INCHER in Kassel, Germany. Several versions were circulated, the last one in September 2011 is the definitive one and most of the data in this report is taken from that database.

In this report universities and other higher institutions have regularly been separately analysed. Another broad distinction is between higher and lower academic positions.

For universities higher staff includes professors and *Universitair Hoofddocent* (similar to associate professors internationally) and senior researchers. Lower university staff are *Universitair Docent* (or assistant professors), post docs and other academic staff.

For HBO the senior staff are lector and *Hogeschoolhoofddocent* or docent/ researcher. The lower staff are the HBO-docents.

The proportional response across these functional categories corresponds quite well with the actual numbers in each category, and is considered representative. The distribution is as follows:

Table 2.2 Proportion of respondents per functional category

Universities (total Acad. Staff: 14,300) N=628	UAS (total Acad. Staff: 15,411) N=539
Professors (16%)	Lector (3%)
Universitair Hoofddocent (UHD) (14%) (eq. associate prof)	Senior lecturer/researcher (40%)
Universitair docent (UD) (30%) (eq. assistant prof)	Lecturer (45%)
Others (researcher/postdoc) (40%)	Others (not defined) (12%)

3 Career and professional situation

3.1 Preparation for the academic profession

The nature and quality of graduates and doctoral education has come under increasing scrutiny, not only as training for highly skilled occupations beyond the academy, but also for careers in the academic profession itself. The forms, duration, funding and status of doctoral programmes vary considerably. In many Western and Northern European countries, doctoral candidates are regarded as junior or assistant researchers and not considered to be students.

Higher proportions of academics in North and Latin America were required to take a prescribed set of courses than in Western Europe, where the master/apprentice model still holds sway. In the Netherlands and Italy doctoral / graduate schools are of a recent date.

Academics in Asian and Latin American countries received more intensive faculty guidance about their research than those in most European countries, although respondents from Portugal and Italy reported this frequently.

The question whether respondents during their doctoral studies received training in instructional skills or learned about teaching methods was answered by a minority. This is subject of a general compliant made by doctoral students and highlights not only the narrowness of doctoral studies focusing on research but also the fact that doctoral

programmes provide virtually no training in pedagogy and offer limited opportunities to teach.

The proportion of respondents receiving a scholarship or fellowship ranges from 14% (the Netherlands), 21% (Germany) to 81% (Italy). Likewise, the range of those in receipt of an employment contract during their studies has a broad range as follows:

Japan (4%), Italy (17%), Portugal (29%), UK (33%), Hong Kong (39%), Australia (41%), Finland (50%), US (52%), Germany (56%), Korea (60%), Norway (61%), Canada (65%), and the highest The Netherlands (77%). The Dutch system of doctoral students which treats as paid employees is compared to the CAP countries rather unique.

The CAP survey provides rich data on the modes and duration of employment of academic staff in the different countries. Table 3.1 provides an indication of the degree to which the expansion and marketization of higher education has introduced more varied and flexible employment conditions, particularly in the form of part-time and fixed-term contracts. The percentages do not all add up to 100% per country as some other types not further indicated were left out here.

Increasingly, HE institutions are introducing renewable contracts, with the effect that over two thirds of respondents reported fixed term employment with permanent/ continuous prospects. The latter may include tenure-track positions, but not necessarily so (see below). The higher ranks in both universities and the other HE institutions have the largest scores for permanent positions. More than 90% have university higher ranks in Germany, Norway and the UK. have the highest percentages, Respondents in the category university higher ranks, followed by the USA, Portugal and the Netherlands.

Despite the abolishment of the system of tenure in the UK the majority of existing academics are permanently employed.

Table 3.1 Contract duration: percentage of respondents, by country

	AU	FI	DE	NL	NO	PT	UK	US
University higher ranks								
Permanent	63%	57%	91%	80%	94%	87%	96%	86%
Fixed-term with prospects	10%	14%	2%	2%	2%	6%	1%	3%
Fixed-term without prospects	13%	18%	2%	14%	2%	3%	1%	2%
University lower ranks								
Permanent	39%	19%	11%	56%	18%	39%	68%	6%
Fixed-term with prospects	11%	8%	6%	14%	4%	35%	16%	50%
Fixed-term without prospects	37%	41%	61%	25%	70%	19%	3%	18%
Other HE higher ranks								
Permanent	77%	76%	91%	87%	86%	81%	83%	84%
Fixed-term with prospects	1%	8%	2%	7%	9%	10%	7%	5%
Fixed-term without prospects	13%	1%	1%	4%	2%	7%	0%	3%
Other HE lower ranks								
Permanent	57%	64%	17%	81%	35%	27%	78%	13%
Fixed-term with prospects	14%	7%	9%	13%	17%	8%	8%	58%
Fixed-term without prospects	18%	4%	26%	5%	48%	55%	0%	15%

In Germany the high proportion of lower rank university staff who are employed for a fixed duration without permanent prospects is quite notable. This group mainly consists of scientific co-workers (wissenschafliche Mitarbeiter), who can spend long periods of dependence and uncertainty before becoming secure and independent scholars. Generally

speaking, newer recruits are less likely to be awarded permanent contracts because of recent policies on flexible employment.

Another remarkable observation is that the staff in the other HE institutions have more favorable employment prospects: not only are more of the higher ranks in permanent positions, also the lower ranks there are more staff who are permanently employed compared to the lower ranks in universities.

3.2 Views on academic careers

In the international literature there is much reference to the fact that academics are in a deteriorating condition. Compared with other countries participating in the CAP study, job satisfaction among UK academics appears to be low, with only 45% of respondents describing their overall satisfaction with their current job as high or very high. Responses to statements about the academic career support these findings., with respondents from the UK more likely than those from other countries to agree with assertions that: "This is a poor time for any young person to begin an academic career in my field", If I had to do it over again, I would not become an academic' and' My job is a source of considerable personal strain.'

Table 3.1 summarises the responses for a selected group of countries, making a distinction between universities and the other HE institutions given the variation between them. The figures are not further segregated in higher and lower ranks as the variation between them does really differ, at least not notably.

As the table indicates the Dutch respondents indicate a relatively positive image of the academic career. The statement about the poor time to begin an academic career was agreed by 36% of the Dutch university staff and only those from Norway and USA were lower. Also a lower proportion of the other HEI in the Netherlands (UAS) (20%) agreed with the statement, with only their counterparts from the USA and Germany slightly lower.

Table 3.1 Positive views on career (percent; responses 1 and 2)

	AU	FI	DE	IT	NL	NO	PT	UK	US
This is a poor time for any young person to begin an academic career in my field									
All	45	41	41		26	22	40	50	20
Universities	44	46	44	75	36	22	39	51	22
Other HEI	50	24	18		20	20	41	35	16
If I had to do it over again, I would not become an academic									
All	22	16	18		14	16	23	25	10
Universities	22	18	19	11	17	16	16	27	10
Other HEI	21	8	8		13	19	28	16	10
My job is a source of considerable personal strain									
All	51	46	38		56	35	46	58	34
Universities	51	47	38	30	57	35	45	58	36
Other HEI	50	44	33		56	37	47	59	28

Question: Please indicate your views on the following (Scale of answer 1 = Strongly agree to 5 = Strongly disagree)

For the other HE institutions all the four countries show a decrease, indicating that their situation has improved over time.

Table 3.2 View on academic career, comparison over time (percentages 1 + 2 (strongly) agree).

Comparison over time	1992				2009			
	DE	NL	UK	US	DE	NL	UK	US
If I had to do it over again, I would not become an academic								
University higher ranks	13	13	20	9	14	18	23	9
University lower ranks	20	15	21	13	17	15	24	12
Other HEI	15	17	21	12	8	13	16	10

The statement 'if I had to do it over again, I would not become an academic again' was most often agreed by university staff in the UK, Australia, Germany and Finland. The Dutch counterparts are in the middle. Similar outcomes apply to the other HE institutions. Since this question was also asked in the 1992 Carnegie study the percentages are compared in table 3.2 for four countries and split for the two university ranks. For the university higher ranks the percentages have increased over time, indicating that people feel that their situation has worsened.

For the university lower ranks, however, the percentage has decreased in Germany and remained the same in the Netherlands.

The data presented here helps to refine our understanding across countries, illustrating a complex and diverse picture of satisfaction amongst the academic profession. Table 3.3 illustrates the level of satisfaction divided between universities and other HE as well as between the higher and lower ranks.

Across all these divisions the Dutch academics appear to be the most satisfied with their current job situation, in most instances quite considerably. So the Netherlands presumably is able to maintain quite attractive working conditions for the academic profession. The higher ranks more than those in the lower positions. Quite lower scores are found for Portugal, Australia, US and particularly the UK.

Table 3.3 Job satisfaction (percent satisfied or highly satisfied)

	AU	FI	DE	IT	NL	NO	PT	UK	US
Universities higher ranks	72%	74%	74%	71%	77%	69%	65%	49%	63%
University lower ranks	53%	65%	57%	56%	72%	67%	51%	46%	61%
	NL	FI	DE	PT	AU				
Other Institutions higher	79%	71%	65%	63%	70%				
Other institutions lower	67%	65%	42%	48%	44%				

Question: How would you rate your overall satisfaction with your current job?

3.3 Tenure-track in the Netherlands

A special question in the Dutch questionnaire was asked about the views by academic staff about the introduction and effects of tenure track career system. Since a decade much debate took place on the pros and cons of an American type of tenure-track in the way to attract young academics. Tenure in the Dutch system means permanent appointment, in

the past similar to civil employment status. Tenure can be achieved after a certain period, mostly 5-7 years during which the candidate has to prove to be eligible for such a position. A major feature of the Dutch tenure-track model compared to the system in for example the USA is that in the USA this has the connotation as the 'road to permanency', while in the Netherlands this has been connected with the meaning of flexibilisation of staffing policies and at the same time the development of talent. In other words, a mixture of flexibility and control (Blok & Fruijtier2007).

Dutch universities have adopted this system as a way to recruit and retain talent in order to enhance the quality of their personnel. The University of Tilburg for example formulated the goal as follows:

"The main goal of this system is to recruit and retain young, talented and internationally oriented researchers. These young researchers have been recently educated, are internationally oriented and therefore foster a good research climate in the department".

Most of the views on the tenure-track system have been viewed from the perspective of the university management (as the legal employers) to offer attractive career opportunities. The issue has also been criticized from various directions, for example it would be too expensive since the number of permanent positions will likely increase in the future. Receiving tenure is more dependent on the proven qualities of staff members rather than the available positions in a department (i.e. the formation principle'). This may become expensive when the financial conditions get worse. Another critique is that it would not suit in the current academic culture as this is only available to a limited number of staff members. Especially the sitting staff who entered the academic profession on the basis of other expectations and employment conditions would not favour this new element as they are forced to engage in such a ratrace to the top academic positions.

it is interesting to know the views from the academic staff themselves. Three propositions were presented in the extent to which the tenure-track is indeed assuring the career paths of promising academics, as well as more critical statements compared to the traditional career model. Respondents could score on a 5-points scale from strongly agree to strongly disagree.

Table 3.4 Views of university academic staff on tenure-tracks (1 strongly agree to 5 strongly disagree)

	1 strongly	1+2 agree								
Tenure-tracks are desirable in order to keep excellent and ambitious scientists in the institution										
University higher ranks	24%	51%								
University lower ranks	20%	52%								
Tenure-tracks are only attractive for a limited groups of scientists										
University higher ranks	24%	55%								
University lower ranks	27%	59%								
Introduction of tenure-tracks causes a serious disruption of the general career possibilities of the academic profession										
University higher ranks	13%	27%								
University lower ranks	10%	28%								

Universities only: N= 257 (higher ranks) 288 (lower ranks)

As the issue is actual only in the university system this table only summarizes the university respondents.

The figures show that more than half of the academic staff agrees (score 1 + 2) with the general purposes of the tenure-track system and considers it a way to attract and retain young scientists. The majority also agrees with the view that a tenure-track system is only attractive for a selective group of scientists. Especially those in lower position are more sceptical since they likely experience more competition in this system and may be stuck in their career.

The responses about the disruption of the general career possibilities indicate that there is lees fear that this will happen. Also in the current system with a high proportion of academics on temporary positions the general career possibilities are rather uncertain and commonly takes place in a rather discontinue way.

3.4 Support for academic work

CAP respondents were asked to rate the levels of institutional support for academic work, including facilities, resources and personnel. The highest proportions of respondents rated telecommunications, libraries and computer facilities as excellent to good. Research funding and research and teaching support staff tended to attract the lowest proportions of good ratings. The Netherlands scores on a medium level compared to the CAP advanced countries. The score is relatively higher for classrooms, technology for teaching, and teaching support staff.

Generally, in those countries with consistent differences, higher rank staff were more likely to be satisfied with the institutional support they receive than the lower rank academic staff.

The Dutch CAP questionnaire included a number of question on the research function of the Universities of Applied Sciences, such as whether they are participating in knowledge circles, whether they would like extension of their research tasks. Of all the respondents 25% indicated that they would like to have an extension, and another 25% if this would lead to a reduction of their teaching load.

Another 19% said they don't want to reduce their teaching tasks and 11% is not interested in research at all.

In addition a number of statements were presented on the role of practice-oriented research in these institutions.

Table 3.5 Views among HBO respondents on the role of applied or practice-oriented research in HBO (1 = strongly agree, 5 strongly disagree)

	1+ 2: Agree + strongly agree	
	Higher ranks	Lower ranks
Research contributes to the professionalization of the teaching staff	90	70
Research contributes to curricular innovation	82	74
Research contributes to innovation of professional practice	80	77
Research reinforces the dialogue with business and the professional field	72	64
The type of research at HBO is clearly distinguished from university research	67	62
In order to undertake research in HBO you need to have a PhD	20	11

These outcomes show that staff at UAS attach much value to practice-oriented research in their higher education sector and corresponds mainly with the current policy to strengthen its role both in the teaching process and its role for professional development. On all items the lower ranks assess the role of research lower than their counterparts in the higher ranks, although their majority is positive. Remarkable is the view than both the higher and the lower ranks consider a PhD degree not a necessary condition for doing practice-oriented research. This is at odds with the current policy to increase the number of UAS staff with doctoral degrees.

4   Aspects of teaching and research

While universities in the middle ages were primarily teaching institutions, since the establishment of Berlin University in 1810, there has been much discussion of the relation between teaching and research in higher education. Which is the primary function of the universities and of the academics employed at these institutions, do these functions reinforce or compete with each other, and might there not be variation depending on a particular institution's mission, the student body composition, or other factors. A notable illustration of this tension was the controversy associated with the decision to establish the Johns Hopkins University in 1876 as a graduate school without a linked undergraduate program. U.S. higher educators have in recent decades revisited the controversy, with one milestone being Ernest Boyer's *Scholarship Reconsidered* that argued for more attention to be focused on the scholarships of integration and dissemination.

4.1 International differences on teaching and research

With the growth of technology-based industrial development, the balance between teaching and research has moved toward research in many higher education systems. The strong emphasis on research has shifted academics' interest within education and has led

to complaints from students in many countries. These countries put more weight on research in their resource allocation, prioritize research in faculty hiring and promotion, and aggressively attract research productive academics. As a result of these policy changes, academics now tend to prefer research, allocate more time to research, and as a result dedicate less time to teaching activities, especially in research focused universities. These changes raise a question about what is a university. Is a university a center for research or for teaching? Is the phenomenon occurring in countries sensitive to global rankings or is this a global phenomena in the 21st century?

The 1992 Carnegie International Survey of the Academic profession both highlighted many problems facing academic systems around the world as well as the overall satisfaction of academics with their professional work and their occupational choice. The CAP survey intends to make comparison between academics in 1992 with academics in 2007.

The early 1990s was possibly a pivotal period in the relation of academic systems to their respective national contexts. Since then at least in the more economically advanced societies policy makers have tended to stress the private as contrasted with the public benefits of higher education. And thus has emerged the new market ideology for higher education to compete with a historical faith in its public benefit. Accompanying this new perspective has been increasing pressure on academics to engage in academic capitalism, that is to re-orient their research agendas to the knowledge needs of the commercial sector. Accompanying this new discourse is more pressure on higher education to become efficient and accountable.

Meanwhile around the world we find an amazing trend of higher educational expansion which necessarily leads to the increase in the size of the academy, especially in the emerging nations, and to an increased flow of academics to new employment opportunities opening up in nations other than their own. Who then are the contemporary academics, why have they joined, what do they value, how comfortable are they with the changing definition of the role of the academy in modern society, and what are their expectations for the governance and management of the institutions where they are finding employment?

The two research initiatives enabled researchers and policymakers to understand academic work life. In addition, we can compare the differences in academic scholarship between 1992 and 2007 because many survey items in the 1992 and 2007 surveys are the same or similar. In this book, our special focus is on how teaching and research are defined in each higher education system, how teaching and research are preferred and conducted by academics, and how academics are rewarded by their institution. As an example, Table 4.1 shows two core focuses of this book: how academics preference on research (or teaching) and their workloads on research (or teaching) have changed between the Carnegie survey of 1992 and our CAP survey of 2007.

Table 4.1. Research preference and the share of research hours (1992-2007)

Country	Research Preference		Share of Research hours	
	1992	2007	1992	2007
US	50.8	44.1	30.2	24.7
Germany	65.8	62.5	39.7	34.7
Japan	72.5	71.7	38.8	31.9
Netherlands	75.2	55.9	-	23.7
UK	55.6	66.8	24.4	26.1
Korea	55.7	68.0	32.6	33.6
Australia	52.0	69.6	26.1	29.1
Hong Kong SAR	54.1	63.1	25.7	27.8
Mexico	34.8	42.7	22.8	19.8
Brazil	38.0	47.8	22.0	21.3
average	55.5	59.2	26.2	27.3

Notes: Research preference is the percent of academics in the country that indicate either a preference for research or a leaning to research when asked "regarding your own preferences, do your interests lie primarily in teaching or in research. The share of research hours is the share of research hours in the total faculty workloads in the session including research, teaching, service, and administrative activities.

The two surveys show interesting trends between the relatively well established higher education systems and the emerging systems. The established higher education systems (e.g., US, Germany, and Japan) moved toward a clearer balance between teaching and research while the other systems moved toward research. The USA and the Netherlands show impressive changes toward teaching (the USA) or from research toward teaching (the Netherlands). The changes related to academics and policy efforts to emphasize balancing between different types of academic scholarships since the 1990s when Boyer (1990) proposed the issue in his book *Scholarship Reconsidered*. Follow-up discussions have been promoted by Glassick, Huber, and Maeroff in their *Scholarship Assessed* (1997) and in *Faculty Priorities Reconsidered* by O'Meara and Rice (2005). According to these studies, US higher education is leaning toward a balance between teaching and research.

On the other hand, noticeable changes leaning toward research were identified in relatively recently emerged higher education systems such as Korea, Australia, and Hong Kong. These countries also have increased their time on research in their total share of working hours. Interestingly, two Latin American countries did not increase their share of research hours while their research preference has been noticeably increased between the two surveys. An exception of these trends is the UK where research preference and research hours have been impressively increased between the two surveys though the UK is a well-established system. The trend of emphasizing research has been reported in many emerging higher education systems (e.g., Mexico and Brazil). These changes are related to institutional competition caused by global ranking and knowledge society.

4.2 The diversification of organisational models

The early modern universities and colleges were largely self-governing church established institutions with a primary focus on training members of the clergy in such fields as theology and law. Most institutions were small and residential, and often the faculty were themselves clerics. Essentially the same collegial procedures that were used to select senior officers in the clerical hierarchy were applied in the selection of academic officers. Thus the heads of the early universities and colleges emerged from the ranks of the professoriate, and were essentially selected by their colleagues.

From these common origins several distinctive organizational models emerged—some more focused on research and other more focused on teaching or service. A major driving force behind these changes was the recognition that academic research often revealed new approaches for solving practical challenges such as new ways to grow agricultural crops, to smelt steel, to build motor vehicles, and even to package and deliver explosives. Given the increasing relevance of academic research, academic leaders searched for organisational reforms that could enhance the research productivity of academics.

 At the institutional level, Ben-David (1977) highlights the differences between the English model that was teaching oriented, the German and French models that were research-oriented, and the U.S. model that stressed service. Ben-David argues that each of these models has its strengths and weaknesses with the German model arguably superior in the fostering of basic research and the U.S. model enjoying an advantage in applied research. Whereas in the German model there was a tendency to assign responsibility for all research in a particular discipline to a lone senior professor who commanded an institute staffed by numerous junior researchers, in the U.S. case universities tended to establish departments composed of several equal rank academics exploring a common field. In France, separate organizations were established to respectively foster teaching (Grande Ecoles) and to foster research (institutes) in designated fields.

4.3 The global stratification of academic systems

The systems described by Ben-David were the pioneers, achieving much in terms of scholarly products—for example, a disproportionate number of Nobel prizes have been received by member of their respective academies. And arguably they have been looked to as the best places in the world to pursue advanced academic study. So with the increasing international recognition of the importance of knowledge, there has been a tendency for these systems to dominate in research and training, and for others to follow.

Some have described this stratification using the world system language of the core, semi-periphery and periphery. As new nations launched their own academic systems, they tended to look to the core for the setting of standards and the training of personnel. They dreamed of catching up, but they faced the stubborn reality that the journey is long. Hence it is meaningful to think of higher education systems in terms of relative ascendancy. On the one had are the established systems, and on the other are those that are emerging, trying to catch up. In both groups, there is much internal variation.

One of the salient differentiating characteristics of academic systems is their ability/willingness to train their faculty. Core systems tend to believe they are on top of the world's body of knowledge and hence qualified to train the next generation of academics while peripheral systems lack this confidence and tend either to recruit faculty from the core institutions or to send their best students to the core systems for advanced training. Thus many of the faculty of peripheral systems have been trained in the universities of the core countries.

While this core-periphery distinction persists, in recent years several of the core systems have experienced difficulty in motivating young people to consider the academic profession as their chosen path. For example, in the science and engineering disciplines many of the core systems are unable to attract indigenous students and thus have welcomed increasing number of students from peripheral systems to their graduate student ranks. And the best and brightest of these international students have moved up to become members of the new generation of academics in the core systems. Meanwhile the quality of facilities and faculty in several of the former peripheral systems has rapidly upgraded to the point where these systems favorably compete with the core.

Table 4.2 Research preference and share of research hours by center and periphery

Core/periphery	Countries	Preference	Share of res. hrs	PhD ratio	Productivity
Core	Germany	62.5	34.7	64	15.2
	US	44.1	24.7	77	12.9
	UK	66.8	26.1	73	12.7
	Japan	71.7	31.9	74	18.1
	average	61.3	29.4	72	14.7
Semi-Core	Canada	67.6	31.2	92	17.8
	Australia	69.6	29.1	73	15.9
	Korea	68.0	33.6	97	24.5
	Italy	76.7	37.7	45	21.8
	Norway	83.0	39.4	53	11.7
	Netherlands	55.9	23.7	37	13.7
	Finland	65.3	38.0	41	12.0
	Portugal	53.3	29.4	40	14.0
	HK SAR	63.1	27.8	79	20.2
	average	66.9	32.2	61.9	16.8
Periphery	China	46.9	29.9	25	13.0
	Mexico	42.7	19.8	29	9.6
	Brazil	47.8	21.3	57	13.7
	Argentina	57.1	37.0	20	13.5
	Malaysia	47.4	18.0	39	14.9
	South Africa	46.9	20.0	52	8.4
	average	48.1	24.3	37	12.2

Notes: (a) the PhD ratio is the academics who hold PhD degrees among the respondents.

(b) the productivity is the research productivity combined of book (book publication and book editing), article (published in academic book or journal, and in newspaper and magazine), conference presentation, and research report and monograph for funded project during the three years between 2004 to 2006.

Among the 19 higher education systems in the CAP survey, the core systems are the systems that established earlier stage of modern higher education systems and have a strong influence on other higher education systems. According to Ben-David, the *core systems* are German, French, English, and the American systems. From a wider view, the core systems can be expanded to Russia, Spain and Japan (Cummings, 2004). The Russian higher education system has strong influence on former communist countries, Spain on Latin American countries, and Japanese higher education systems on East Asian higher education. The *semi-core systems* are the higher education systems that imported the modern university ideas from the core systems and their higher education has virtually caught up with the core systems. The *periphery systems* are the developing higher education systems with the influences from core and or semi-core systems. According to this typology, the 19 CAP participating countries are classified into the core (Germany, US, and UK), semi-core (Canada, Australia, Korea, Italy, Norway, the Netherlands, Finland, Portugal, and Hong Kong SAR), and periphery (China, Mexico, Brazil, Argentina, Malaysia, and South Africa).

The core higher education systems show high research orientation, but relatively less than semi-core higher education systems as shown in Table 4.2. Although the ratio with holding PhD degree among academics is higher in the core systems, the research productivity which is measured by publication and international conference presentations is higher in the semi-core systems than the core systems. Among the semi-core systems, Canada and Korea show quite distinctive features from their peers in the semi-core group or even the core systems in their research productivity and the ratio of PhD degree holdings. This fact implies that the semi-core higher education systems emphasize research to catch up with core systems. Compared to the core and semi-core systems, the periphery systems are still teaching focused and low on research productivity.

4.4 Expansion and diversification of purpose

Ben-David's analysis focused on the premier institutions of the respective systems where the focus on research was paramount. However, concurrent with the rise in the salience of academic research was the transformation of the modern economy towards increasing efficiency in the industrial and service sectors. With the shift in the economy was a corresponding shift in the employment structure towards an increasing emphasis on data and people-oriented jobs, requiring higher levels of education.

Martin Trow observed for the U.S. that the demand for secondary level graduates began to accelerate by the turn of the 20th Century and peaked in 1940s; subsequently the demand for college graduates accelerated leading to the shift from elite to mass higher education. The increase in the demand for higher education was accompanied by the founding of an

ever expanding number of medium and small higher educational institutions whose primary focus was on teaching rather than research.

Representative of this trend was the explosion of junior and community colleges where the mission focus was exclusively on teaching. This diversification of institutional missions was captured in the Carnegie classification of institutions of higher education and subsequently in UNESCO's distinction between tertiary type A (bachelor and post-graduate emphasis) and type B institutions (less than bachelors).

While the U.S. led in the expansion of tertiary education and its provision to an ever increasing proportion of the age cohort, other national systems were soon to follow—especially in East Asia and Western Europe. By the turn of the 21st Century, Finland, Canada, and Korea had surpassed the U.S. in their enrollment rates and many other countries were approaching U.S. levels. Particularly impressive in terms of their rates of expansion are those nations often referred to as Newly Industrializing Countries or Emerging Nations, a distinction we make in this volume.

Table 4.3 Research preference and share of research hours by research universities

Countries	Research university		Average nationwide	
	Preference	Share of res. hrs	Preference	Share of res. hrs
Germany	71.9	39.0	62.5	34.7
Japan	89.7	38.7	71.7	31.9
NL	77.7	32.4	55.9	23.7
UK	79.0	31.8	66.8	26.1
US	61.1	35.6	44.1	24.7
Australia	79.5	35.4	69.6	29.1
Korea	80.4	39.2	68.0	33.6
Mexico	59.0	29.9	42.7	19.8
Brazil	57.9	30.2	47.8	21.3
Canada	72.2	31.9	67.6	31.2
Norway	83.0	39.7	83.0	39.4
China	67.5	44.7	46.9	29.9
Finland	78.5	45.6	65.3	38.0
Average	73.6	36.5	60.5	31.5

Notes: the research universities are based on the classification of each country: Australia (government eight university), Brazil (public federal university), Canada (medical doctoral university), China (national public university), Finland (higher education institute or research institute), Germany (university), Japan (national research university), Korea (seven research group), Mexico (universities), the Netherlands (university), Norway (university), the UK (Russell group), and the US (Carnegie Research Intensive).

The teaching and research orientation differ by institutional missions, e.g., academics in a research focused university have stronger research preference and use more time to conduct research than teaching. This is consistent across all the CAP participating

countries. As shown in Table 4.3, the academics in research focused universities show quite higher research preference than their peers in other types of universities and they spend quite larger share of their time on their research than their colleges in other types of university.

4.5 Tensions between academic and organiational priorities

Over time the universities and colleges of modernizing societies came to grow in scale and to recognize new specialties, especially in the sciences and social sciences. With the increasing specialization of academic life, individual academics came to identify with the health of their specialization more than with the health of the institutions employing them. For the academics, disciplinary health came to be seen in terms of number of faculty and the quality of facilities rather than in terms of the number of students or the financial viability of their sub-units. So long as a field was rising in popularity, disciplinary and university health were in harmony. But such harmony was not always achieved, leading to tensions between those responsible for the respective levels.

An additional dimension of tension was between the intellectual convictions of particular professors in the university and the convictions of those outside. In view of the religious origins of many higher educational institutions, particularly controversial was the clash over religious issues such as creation versus evolution, the right to life versus choice, and more specialized theological interpretations. In the medical field controversies could naturally emerge over the efficacy of treatments, particularly where commercial firms had a stake in the outcome. When such controversies emerged, university authorities often encountered pressure to censure the responsible academics. But the academics could rightly protest that they were merely elaborating the latest discoveries in the ever moving frontiers of knowledge. What were the rules that should mitigate these tensions?

4.6 Patterns of system coordination

Arguably, one outcome of these tensions was the transformation of the governance and management of higher education with different arrangements emerging in different national settings. In all nations, the expansion of higher education was accompanied by the growing interest of diverse stakeholders, including notably the state and the corporate sector, in higher educational decision-making. But the way particular nations integrated these pressures varied.

In the case of Russia (and later the Soviet Union) and France, the State moved in to assume major responsibilities for the finance and administration of higher educational institutions; with the increased role of the state many of these disputes were resolved by high-level officials appointed by the government rather than the academy.

In contrast, according to Clark (1983) was a more decentralized form of coordination exemplified by Italy and Germany where much authority was invested in prominent academics who came to enjoy a near oligarchic control over academic life. While the state's

support of higher education was not exceptionally generous, the state's intrusion into academic matters was relatively modest.

And finally the U.S. (and the UK) evolved a third pattern where individual institutions were controlled by boards of trustees (and in the case of public institutions the trustees often coordinated with state departments of education) who, in their plans significantly deferred to market signals. Especially in the U.S. the national and local governments have followed the market ideology and have sharply cut back their direct support of higher educational institutions. Accompanying the decline of public funding has been the emergence of a market ideology of revenue generation and allocation leading to increases in student tuition, the intrusion of commercialism into the research labs of the leading universities, and to the offering of tenuous employment contracts for an increasing proportion of the academic community.

Of course, none of these types are pure, but rather are meant to be suggestive of the core principles guiding decision-making. Clark sees other systems as being approximations of these three patterns. Therefore, it is quite difficult to apply Clark typology for the classification of CAP participating countries. Instead, Shin and Harman (2009) suggested the concept of coordination by profession, market, and state; then they classified CAP participating countries by the three coordinating models. According to Shin and Harman, the profession-coordinating models are continental European systems (Germany, Italy, Norway, Finland, and the Netherlands) and Latin American systems (Mexico, Brazil, Portugal, Argentina), the market models are Anglo-American systems (the US, the UK, Canada, and Australia), and the state models are mainly Asian countries (Japan, Korea, China, Malaysia, and Hong Kong SAR).

Figure 4.1 Research preference and share of research hours by the coordinating principle.
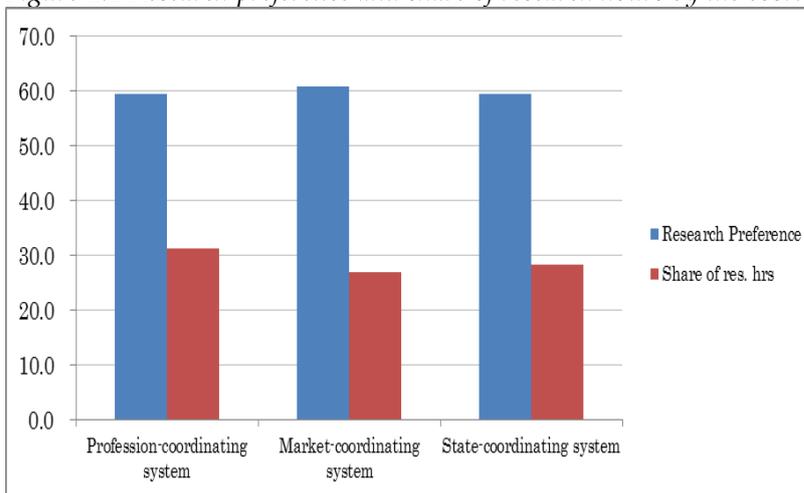
Notes: the Netherlands is in the market-coordinating system because the systems have moved toward strong market principle since the 1990s. South Africa in classified in the profession-coordinating systems. For details of research preference and the share of time on research in each country is reported in table 4.2.

According to the typology of Shin and Harman, the research orientation of academics does not evidence a difference across the three coordinating systems. Academics research

preferences in these three systems are around 60% and their use of time for research is between 27% and 31%. This is quite interesting to interpret. There are significant gaps in the research orientation between higher education systems in the core and periphery, and between research universities and others. Interestingly enough, however, the differences in coordination principles (profession, market, and state) do not produce differences in their research orientation. This requires further investigation. One interpretation is that each type of coordination model includes quite different ranges of systems in each category. For example, Norway which is the highest in research preference is in the same profession model with Mexico which is the lowest in that. Or arguably, the coordination principle may not relate to research orientation while the center and periphery does.

5   Aspects of governance and management

5.1 Decision-making powers

Like in the 1992 survey the Cap survey asked respondents how influential they deemed themselves as individuals in helping to shape key academic policies at the level of their department, their faculty or school and at the level of their institution as a whole. Generally it may be expected that given the increased emphasis in most countries on managerialism is likely to reinforce academics' views that they are losing influence. Some countries like the Netherlands and the UK the changed university governance structure emphasizing a strong New Public Management (NPM) component in the time between the two surveys which - that academics have less power on major decisions regarding academic issues.

Table 5.1 Actors having the primary influence on decision-making areas (percentages)

	FI	DE	IT	NL	NO	UK	USA
1: Selecting key administrators							
Institutional managers/ ext stakeholders	72	59	81	87	62	57	77
Unit managers/ deans	6	16	9	10	20	14	15
Faculty boards	22	25	10	3	18	29	8
2: Choosing new faculty							
Institutional managers/ ext stakeholders	18	30	7	5	26	16	6
Unit managers/ deans	15	23	33	52	23	29	33
Faculty boards	66	47	60	43	52	54	61
3. Making faculty promotion and tenure decisions							
Institutional managers/ ext stakeholders	32	26	8	6	42	30	18
Unit managers/ deans	11	36	36	69	20	17	31
Faculty boards	57	38	56	25	37	53	51
4: Determining budget priorities							
Institutional managers/ ext stakeholders	53	68	42	36	54	55	55
Unit managers/ deans	10	19	30	53	23	15	42
Faculty boards	37	13	27	10	22	30	2
5: Determining the overall teaching load of faculty							
Institutional managers/ ext stakeholders	24	100	15	10	42	25	30
Unit managers/ deans	13		32	56	31	35	59
Faculty boards	63		53	34	28	40	11
6: Setting admission standards for undergraduate students							
Institutional managers/ ext stakeholders	43	45	26	23	46	32	67
Unit managers/ deans	8	22	16	36	9	17	12
Faculty boards	49	32	58	42	45	50	22
7: Approving new academic programs							
Institutional managers/ ext stakeholders	58	54	10	13		29	48
Unit managers/ deans	6	18	14	45		10	17
Faculty boards	36	28	75	41		61	36
8: Evaluating teaching							
Institutional managers/ ext stakeholders	26	24	9	5	20	19	8
Unit managers/ deans	11	24	15	38	18	18	44
Faculty boards	48	29	40	48	36	51	28
students	15	23	36	8	26	12	22
*9: Setting internal research priorities**							
Institutional managers/ ext stakeholders	19	16	9	6	33	23	22
Unit managers/ deans	11	20	13	41	28	23	36
Faculty boards	70	64	78	53	39	54	42
*10: Evaluating research**							
Institutional managers/ ext stakeholders	42	32	26	25	40	37	11
Unit managers/ deans	15	26	18	39	13	21	37
Faculty boards	43	41	56	36	48	43	52
11: Establishing international linkages							
Institutional managers/ ext stakeholders	18	22	13	20	11	27	41
Unit managers/ deans	13	15	10	43	12	17	17
Faculty boards	69	62	77	38	76	56	42
Count	1061	904	1485	767	843	796	974

Question: At you institution which actor has the primary influence on each of the following decisions.

This comparison of faculty perceptions of the primary decision-maker in various decision areas shows how in the Netherlands the academic unit managers/ deans have by far the highest decision-making powers on most of the areas compared to the other countries in the table. Nowhere the percent is as high on all the items except for selecting key

administrators. This clearly relates to the current governance structure of Dutch higher education on the appointment system of key administrators, mainly the board of governors (Colleges van Bestuur). This external influence is in the other countries in this table considerably lower. On all the other decision areas the central institutional managers/ external stakeholders exert less influence than in other countries.

Of all the countries Norway shows a very centralized structure, where the primary decisions on several areas are being made on the institutional managers on the central level. The greatest perceived influence on faculty appointment, promotion and tenure decisions Finland, Italy and USA.

Comparing The Netherlands with the other countries it appears in most of the decision areas the unit manager/dean has the highest score of all the countries regarding the primary influence on most of the decision making areas. The faculty board (including individual faculty decisions) on the other hand is in the Netherlands generally the lowest. Germany on the other hand shows a higher decision-making power on the level of faculty boards. This outcome corresponds with the general development in higher education according to the new governance structure (MUB) which assigns a greater decision-making power to the middle management, in particular the dean as a professional manager.

5.2 Professional space

The question is whether this formal decision-making power would diminish the factual influence as experienced by academic staff. In that context a discussion emerged in Dutch higher education (as well as in the educational sector in general) about the freedom academic staff have in influencing their basic tasks. The term "Professional space" has been coined to refers to the extent to which academics experience authority about their work, and how through a system of 'shared governance' they are exerting influence on how they design and carry out their primary academic tasks of teaching and research. Involvement in decision-making is seen as essential to exert influence in shaping key academic policies.

In Europe it is a generally believed view that this professional space has been reduced in the last two decades, mainly due to the development of new governance models and managerial powers that have been imposed to academics. Emphasizing relevance and accountability, these powers have been regarded as an attack on institutional and professional autonomy, thereby weakening the professional space as experienced by academics.

In many countries higher education has undergone major structural reforms that are altering the traditional features of the academic profession. Apart from massification and continuous financial pressures to deliver more public goods with less public support, an important element concerns the development of new governance models and managerial powers in higher education institutions in order to cope with new developments and demands. Part of this process is the withdrawal of many governments to control and prescribe organizational input and processes. Instead governments are focusing on accountability requirements and setting nationally-defined priorities, such as the quantity and quality of graduates and assessing research proposals in terms of practical relevance

and the potential for valorisation of results. For example In the UK research councils require that academics demonstrate the economic impact of their research in an 'impact summary' in grant applications which will end blue-skies research.

The changing relationship between government and institutions has in its turn led to a strengthening of institutional management. Countries may differ in the extent to which they undergo this development, but generally decision-making powers regarding academic and non-academic affairs have increasingly been devolved to the executive positions at the central and the middle levels (at the faculty or school level). For this movement the 'New Public Management' (NPM) has become the ideological term to legitimate the changing power structure by managers in public organisations that were previously managed by professionals according to their own professional standards.

Many scholars have identified this new public management as the chief antagonist of academic professionalism (Reed, 2002; Meek, 2003; Roberts & Donahue 2000; Freidson, 2001; Furedi 2004; Lorenz, 2008). The organizational reforms engendered by new managerialism are impacting on the power and control of the academics and have been associated with a process of de-professionalisation of the academic community. Academics are under such a regime expected to work according to management principles that in their consequences are eroding the professional space. The de-professionalization thesis involves:

- Increased bureaucratisation and regulation, cost-accounting approaches, turning work into calculable units.
- Measuring faculty productivity in terms of student credit hours; the desire to quantify work productivity in order to measure efficiency.
- Centralised management with faculty being largely excluded from decision-making.

It would be useful to investigate whether the CAP results provide any light on this issue and consider the extent to which the faculty have the discretionary space allowed to make choices to regulate and control their own work behavior and working conditions under the current NPM regime. The following dimensions are particularly useful: views on scholarship, on teaching and research, the ability to control the immediate conditions of the work, academic leadership, evaluation, locus of influence and faculty role in decision-making. In the Netherlands the managerialism has been strongly developed over time since the previous Carnegie survey in 1992. Comparisons will be made over time (where possible) and with a selected number of other countries.

5.3 Personal influence in shaping key academic policies

The question of the influence of academics on academic matters concerns both the factual primary influence and the personal influence experienced by faculty in helping to shape key academic policies (questions E1 and E2 respectively).

The factual primary influence is laid down in more or less formal decision-making structures. A set of three decision-making areas directly related to academic matters can be distinguished:

- Personnel issues: choosing new faculty, and making faculty promotion and tenure decisions
- Teaching: approving new academic programs, and evaluating teaching

- Research: setting internal research priorities, and evaluating research
- The items within these three areas are over all very consistent and show a high reliability.

It appears that of the three organizational levels distinguished (central institutional, faculty and departmental level) the academic unit / faculty level is the most dominant for decisions regarding academic matters. Only for a few countries the institutional level is the most important one with regard to approving new academic programs. On the middle level two actors are prevailing: the unit manager/dean and the faculty committees/ boards. On this level the actor that has the primary influence is the faculty board/committee for most countries, and exceeds the influence by unit manager or faculty dean. Most significant are the decisions regarding personnel issues and the items belonging to research. Even the UK faculty boards by far exceed unit managers in decision-making powers. This is contrary to what might be expected given the fact that managerialism has expanded enormously in the UK.

A clear exception in the tables is the Netherlands where the academic unit/dean has the highest influence and exceeds the influence of faculty boards on most of the items. This is in line with the current legislation which attributes to the dean decision-making powers regarding the strategic aspects of the primary processes of teaching and research, a regulation that obviously would diminish the professorial authority of the previous period to a considerable extent. In addition, deans are no longer primus inter pares, nominated to do management and organizational tasks on behalf of and indistinguishable from the collegial faculty. Rather deans nowadays are appointed as professionals, often from outside the academic faculty and functioning in a hierarchical management system. The introduction of this deanship in 1997 implied a shift in control over academic matters from the faculty to professional management. Several scholars consider this change as an attack on professional autonomy (cf. Lorenz, 2008).

In the CAP survey academics were asked to rate their personal influence in helping to shape key academic policies on the level of the department, at the faculty or school level and at the institutional level. Not surprisingly, the more remote the level from individual academics, the less personal influence they will feel they exert on it. It appears to be highest at the departmental level and the lowest at the central institutional level. The faculty level is in between, but has increased considerable over the last two decades.

Professors indicate to exert more influence on all the three levels compared to the lower academic ranks who are experiencing systematically less influence. Academics from universities and other HEIs hardly differ in this respect.

Compared to the other European countries in the CAP survey, the Dutch academics experience the highest personal influence at the departmental level and the second highest (after Germany) at the faculty level. This is quite remarkable given the changes in authority structure within Dutch HE institutions.

This outcome is even more surprising when we compare the outcomes with the previous survey 1992 in which the same question was asked.

Figure 5.1 Personal influence to shape key academic policies 1992-2010 (mean scores)*
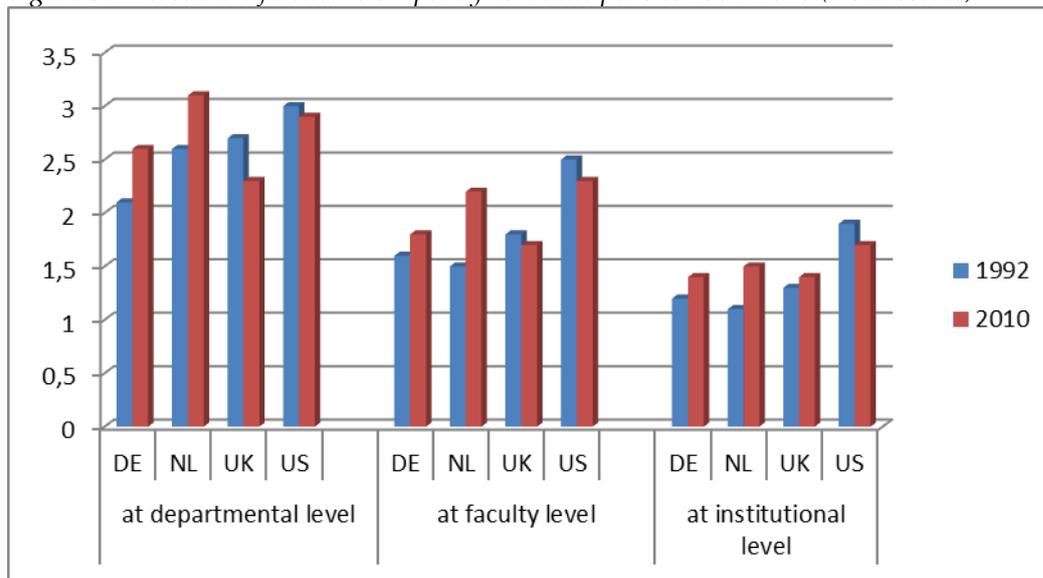

*Measured on a 4-points scale (very influential to not at all - mean scores reversed)

Figure 1 shows interesting shifts over time. In 1992 German and Dutch respondents considered their influence to be lower than average on all three levels compared to other countries, except for the UK at the departmental level. However, they rate their influence in CAP higher than their counterparts in most other countries. For Dutch academics this shift is even stronger as they experience more personal influence than their predecessors in 1992 on all three organizational levels. This is a quite remarkable finding and contradicts the general belief that the influence has weakened due to the increased managerialism since 1992 and particularly the rising influence of academe's middle managers, namely deans (as professional managers) and directors of research and teaching. The outcome that academics would have experienced a loss of influence would in the light of the recent developments be expected. In the UK and US this influence has decreased over time and this finding is more in line with the fact that more authority has been vested in the different management levels.

The question can be raised how this outcome can be explained. It is clear that the managerialist governance structure as such cannot the definite factor to account for this remarkable difference. What factors play a role in impacting on the personal influence as experienced by academics?

Figure 5.2 show the distinction between universities and the other institutions regarding the personal influence of academic staff on the three organizational levels. In Germany the difference between universities and Fachhochschulen appears quite high, whereas in the Netherlands there is hardly a differences between the two sectors.

Figure 5.2 personal influence on key academic policies (mean on three organisational levels) Difference between Universities and Other higher education institutions.

Non-estimable means are not plotted
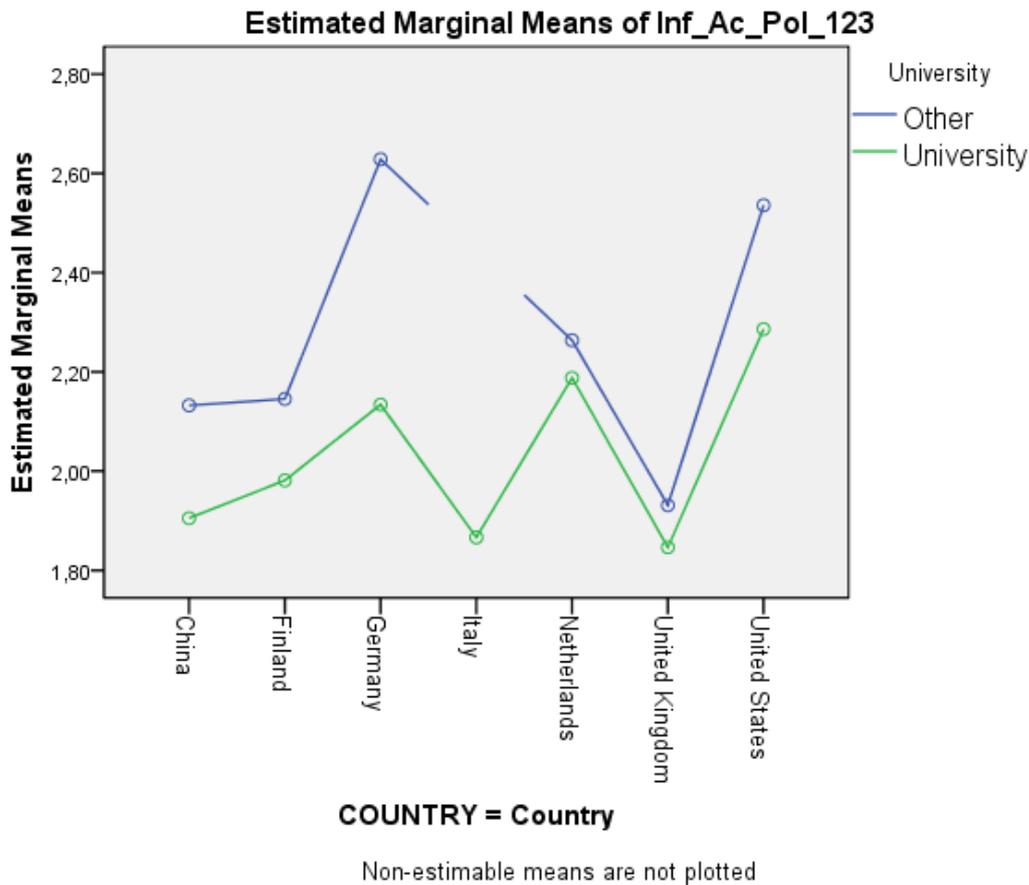
5.4 Factors explaining differences

One way to explore conditions in HEIs and their effect on the personal influence of academics on academic policies is to investigate the formal governance structures. Such an approach has its limits if the governance structure as such is not the decisive factor.

There is a difference between having influence versus the competence to make formal decisions, thus distinguishing influence from authority. In his classical study on academic organizations, Peter Blau (1973) investigated how different bureaucratic traits and institutional conditions affect academic work. Exploring variations such as size of organization, differentiation in the structure, central versus decentral authority structure, Blau attempted to advances a theory to explain different bureaucratic traits. One such view is that a centralized authority structure gives faculty members less freedom whereas decentralized responsibilities put more administrative burden on faculty members. This would suggest that in countries where more authority has been vested in deans/ faculty administrators the more likely faculty can influence decisions in their areas, as the CAP outcomes on Germany and the Netherlands over time show. The way this management ' manages the professionals' affects the personal influence the latter experience on key academic policies. The management style that has been adopted seems an important factor.

Another factor is the prevailing orientation to research, also mentioned by Blau. In their study of individual departments, Dressel and his colleagues found that the greater the emphasis upon basic research in the department, the more likely it was that decision making would be delegated for recruitment and selection of new faculty. Assuming that basic research is opposed to applied research and other forms of commercial research, this means that those strongly oriented to practical or applied research would experience less personal influence on academic policies.

A last variable taken from Blau's work is the significance of the collegial climate in an academic institution, in particular the degree of collaboration. Implicit in this discussion is the well-known typology of 'locals' and 'cosmopolitans' where locals are more affiliated to their own institution and cosmopolitans oriented primarily to reference groups in their own discipline no matter in what institution these other individuals are working. This typology is often measured in terms of the allegiance to the local institution respectively to the department or discipline. Cummings found earlier a relationship between sense of affiliation of US faculty with their institution and recent managerial trends at their institutions. Here we concentrate on the collaboration variable.

5.5 Variable construction

Dependent variable
Since in many countries the academic unit managers c.q. deans have the primary influence on key decisions this level is the most important to consider the personal influence of academics. However, for most countries in this analysis the correlation on all three levels (institutional, faculty and department level) is reliable (with Cronbach's Alpha 0.77), that these three levels are taken together as the measurement of personal influence.

Independent variables
Management style has been constructed from the following items:
- Good communication between management and academics
- Collegiality in decision-making processes
- A supportive attitude of administrative staff towards teaching respectively research activities
- Top-level administrators are providing competent leadership.
- A top-down management style (reverse)
- A cumbersome administrative process (reverse)

The last two items have been recoded in reverse in order to combine them with the others towards a 'collegial' management style.

Collaboration: given the fact that the scores on the collaboration in any of the research projects, whether from the own institution, or from other institutions nationally or abroad show a high reliability, it is justified to take these three together.

Applied: consists of three items:
- Applied/ practically oriented research (D2_2)
- Scholarship includes the application of academic knowledge in real-life settings (B5_2)
- Faculty in my discipline have a professional obligation to apply their knowledge to problems in society (B5_8).

It would be appropriate to balance these with the emphasis on basic/ theoretical research and emphasis on original research. However, a clear relationship has not been found and therefore the latter items were not used. The variable has been reversed: the higher the score, the more applied/practically-oriented research.

External influence: this measured for one item only, namely 'External sponsors or clients have no influence over my research activities' (D6_3). Other items have been included, such as restrictions on the publication of results or commercially oriented research, but the items show little coherence.

5.6 Analysis

Multiple regression has been carried out for seven countries of the CAP research: China, Finland, Germany, Italy, the Netherlands, United Kingdom and USA. Taken as a whole all variables are significant on the .001 level with an explained variance of R2=.058 (adj.) and separately for universities (R2=.076 adj) and other HEIs (R2=.084 adj).
If calculated for the different countries the following picture appears.

Table 1 Effect of key variables on personal influence to shape key academic policies (beta values)

Universities	CH	FI	DE	IT	NL	UK	US
Management style	.163*	.147**	.256**	.257 **	.249**	.303**	.247**
Collaboration	.131	.138**	.204**	.100**	.111*	.084	.074*
Applied	-,002	.097*	.151**	.076**	.040	.009	.053
External influence	-,073	.003	-,034	.002	-,084	-,053	.034
R2 (adj)	.035	.049	.133	.078	.071	.093	.068
N	351	810	827	1474	390	196	600

Sign *p.01 **p <.001

Other HEIs	CH	FI	DE	IT	NL	UK	US
Management style	.236**	.186	.300**		.290*	.295**	.257**
Collaboration	.135*	.181	.160		.278*	.123	.046
Applied	.037	.136	.084		-,045	.145*	.091
External influence	-,094	.124	-,019		-,93	-,102	.089
R2 (adj)	.079	.080	.109		.121	.106	.062
N	324	122	147		101	669	166

Sign *p.01
**p<.001

N.B. China local universities with N= 1632 has similar outcomes as those of other HEIs in China.
UK post 1992 universities = Other HEIS

The regression analyses show that the management style is a strong explaining variable for personal influence in all the countries, mostly on a .001 level.
The variable 'collaboration' and to some degree the 'applied' variable turn out to be also important factors in accounting for the score on personal influence across countries. This is more pronounced in Finland, Germany and Italy. A higher score on each of these variables

increases the personal influence on key policies as experienced by academics. However, both variables mainly apply for universities and for other HEIs in a few countries only (those indicated not to be involved in research were counted as missing). Collaboration is only significant in China and the Netherlands. The lower score of the other HEIs is understandable as the variables collaboration and applied have been measured in terms of research activity, while for the other HE institutions the research function is a rather recent phenomenon. The 'applied' variable in the UK is significant, but it should be added that in this group the post 1992 universities have been included. These institutions have a longer time period to develop research activities, although there is much variance between them in this regard.

The variable 'External influence' does not seem to play any role of significance in universities neither in other HEIs in affecting personal influence. The question arises whether this outcome can be interpreted in the sense that despite the pressure on HE institutions to attract external funds this has not resulted in a narrowing down of the professional space of academics. In the overview of tables of the 19 countries as integrated by the Chinese CAP team, overall the percentage responding agree or strongly agree on the statement that *'external sponsors or clients have no influence over my research activities'* is about 50% with an overall mean between 2.4 and 3.0 on a 5-points scale.

Given the importance of management style which applies to both universities and other HEIs, it is worthwhile to have a closer look at this variable. The scatterplot of the relationship between management style and personal influence suggests a rather linear relationship between the two variables. The personal influence is measured here at the faculty or school only as on this level the major decisions regarding academic policy issues are made.

Figure 5.2 shows that the higher the score on the management variable, the more influence has been experienced to shape key academic policies. Some countries are incongruous, most notably Norway, which if left out would result in a more dense scatterplot.

Figure 5.2 Relationship between management style and personal influence at faculty or school level (arithm. means of 4-points scale ranging from very influential to not at all).
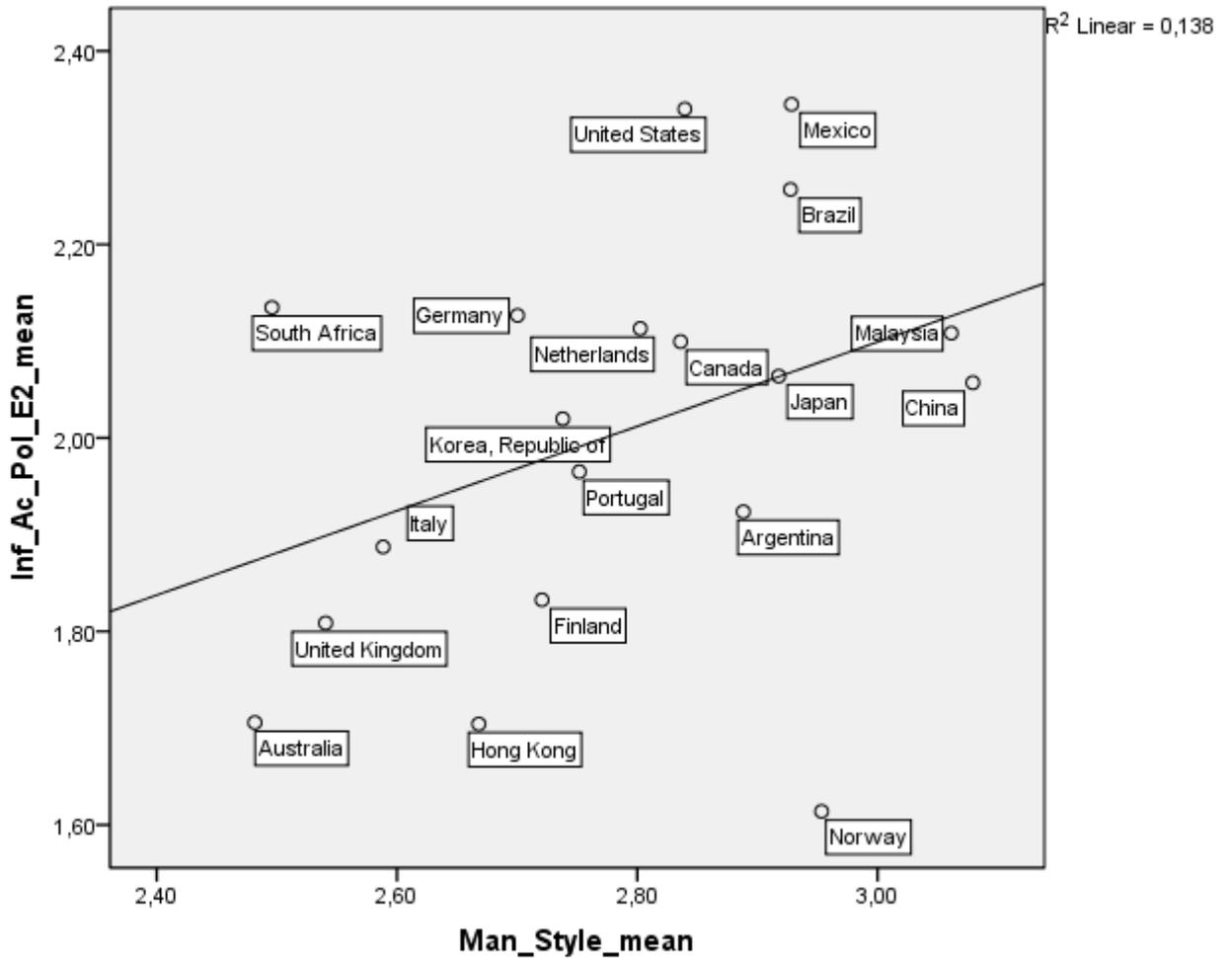
6   Conclusions

This report investigates several outcomes of the CAP project especially as far as the Netherlands compared to a selective group of other countries is concerned.

The Netherlands show an average case generally, but on some aspects a quite favorable outcome.

This relates to the positive attitudes of staff towards their own academic career, the employment conditions in terms of permanent positions, and the general satisfaction with their working conditions. On these points Dutch academic staff have relatively quite favorable outcomes.

Also the effect of managerial developments on the influences academics feel to exert on their working situation. Some factors may account for different outcomes of personal influence of academics to shape key academic policies. The comparison with the previous survey in 1992 shows for some countries unexpected outcomes given the changes in the management structure.

The findings suggest that the formal authority structure is not a necessary condition for restricting the personal influence of academics on academic matters, even when a more managerialist approach has been implemented. Although academics may have lost formal influence in decision-making structures, there are aspects of these structures and institutional conditions that may leave quite some space for academics to influence key academic policies. This occurs partly through informal rules and channels which enable academics to utilize their professional space, most often through faculty boards/ committees which are important channels through which to exercise influence.

The management style as defined here involves a 'collegial' attitude and an approach by 'walking around' rather than a top-down or a cumbersome bureaucratic process. Such a collegial style is more attuned to the experiences of the professional, referred to as the '*reluctant manager-academic'* or the '*good citizen manager'* (Deem et al 2007).

Cultural differences between countries in experiencing influence may play a role as well. In some countries a more hierarchical structure is more generally accepted whereas in other countries more emphasis is on individualistic attitudes and self-regulation. Variables regarding the space of the teaching profession have been considered as well. Some items may be appropriate, for example whether the grades strictly reflect levels of student achievement or funding of departments based on numbers of graduates. These items may identify the extent to which faculty are regulated by norms imposed by the organization.

References

Ph. Altbach (1996), *The International Academic Profession, Portraits of fourteen countries,* San Francisco: Jossey Bass.

Arimoto, A. (2009). Changing Academic Profession in The World from 1992 to 2007. In Research Institute for Higher, Education Hiroshima University (Ed.). *The Changing Academic Profession Over 1992-2007: International, Comparative and Quantitative Perspectives.* RIHE International Seminar Reports: Vol. 13 (pp. 1–37). Hiroshima: RIHE.

Arimoto, A. (2010). The Academic Profession and the Managerial University: An International Comparative Study from Japan. *European Review, 18* (Supplement 1), 117-140.

Ben-David, J. (1977). Centers of Learning: Britain, France, Germany and the United States. New York: McGraw-Hill.

Blau, Peter (1973*) The Organization of Academic Work.* New York: John Wiley.

Boyer, E. (1990). Scholarship reconsidered: Priorities of the professoriate. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Clark, B. (1984). The Higher Education System. Berkeley: University of California Press.

Cummings, W.K. (2008). "Is the Academic Center Shifting to Asia?" In Gerard Postiglione, William K. Cummings, and David Chapman, Editors (2008) Crossing Borders and Bridging Minds: Issues and Perspectives. Springer & HKU CERC.

Enders, J. & E. de Weert (eds.) (2009) *The Changing Face of the Academic Profession; Analytical and Comparative Perspectives*. Palgrave Macmillan.

Deem, R., S. Hillyard & M. Reed (2007) *Knowledge, Higher Education, and the New Managerialism. The Changing Management of UK Universities.* Oxford/ New York.

De Weert, E. & J. Enders (2004) (eds.) *The International Attractiveness of the Academic Workplace in Europe*. Gewerkschaft Erziehung und Wissenschaft (GEW), Frankfurt/Main.

De Weert, E., Kaiser, F., & Enders , J. (2006). The Changing Academic Profession: The Case of the Netherlands. In Research Institute for Higher Education, Hiroshima University (Ed.), *Reports of Changing Academic Profession Project Workshop on Quality, Relevance and Governance in the Changing Academia: International Perspectives.* COE Publication Series, Vol. 20 (pp. 167-182). Hiroshima: RIHE.

Finkelstein, M., Ming Ju & William Cummings, Perspectives on Faculty Governance in the United States: 1992-2007. In: W. Locke, W.K. Cummings & D. Fisher (eds) *The Changing*

Governance and Management in Higher Education. The Perspectives of the Academy (Forthcoming).

Fruijtier, B. & W. Blok (2007) Tenure track een goed instrument voor talentmanagement? Zie VSNU.nl. Ministerie van Onderwijs, Cultuur en Wetenschappen (2010) Het Nederlandse Wetenschapssysteem.

Geurts, P, P.A.M. Maassen & F.A. van Vught (1996) *The Dutch Professoriate*. In: Altbach (1996) p. 493-528.

Kogan, M., & Teichler, U. (Eds.) (2007). *Key Challenges to the Academic Profession. (*Werkstattberichte: Vol. 65). Kassel: International Centre for Higher Education Research Kassel.

Locke, W., & Teichler, U. (Eds.) (2007). *The Changing Conditions for Academic Work and Careers in Select Countries* (Werkstattberichte, Vol. 66). Kassel: International Centre for Higher Education Research Kassel.

Lorenz, Ch. (2008) *If you 're so smart, why aren't you rich?* Universiteit Markt & Management. Amsterdam: Boom.

Roberts, K. & K. A. Donahue (2000) Professing Professionalism: Bureaucratization and Deprofessionalization in the Academy. *Sociological Focus*, Vol. 33 no.4, pp. 365-383.

Teichler, U. Germany: How changing Governance and Management affects the views and work of work of the academic profession. In: W. Locke, W.K. Cummings & D. Fisher (Eds.) *The Changing Governance and Management in Higher Education*. Springer Dordrecht. (Forthcoming).