

Ministry, Technology and Innovation

The Danish University Evaluation
2009

Report on
Degrees of freedom

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1. Wrap up

The subject of this report is the assessment of management at the universities and relevant stakeholders regarding their ability to navigate and fulfil their particular roles under the regulations of The University Act.

Research is presumed to be the most relevant function whereas knowledge dissemination is important in terms of societal legitimacy, and less a virtue for the individual researcher to pursue as knowledge dissemination in itself does not bring academic adulation to the researcher.

There are some differences in regard to the managers' perception of their ability to make decisions ensuring that the university achieves its goals in several areas. The higher the management level, the higher the potential for making decisions to ensure the university reaches its goals. Yet, there are some variations in this picture between the academic disciplines, as well as seniority seem to be connected with the possibility to make decisions ensuring the university's goals.

What is further striking is that it seems to be a great advantage to be a male manager in relation to decision-making, as female managers believe their ability to make decisions ensuring the university's goals is noticeably smaller.

According to most managers the development with regards to research freedom is unfortunate since some researchers are prevented from investigating certain issues due to lack of funding which prohibits new and potentially important research. Today, research funds are given as if the future can be predicted which affects the research freedom negatively. This has the consequence that the competitive tendering is diminishing research freedom, as it is not in the nature of research to produce results in a coordinated and timely manner. Most therefore believe in raising the basic funding and to increase the rates given to the universities. According to the managers, the most important virtue for the universities is to secure academic freedom and exploration – within certain fixed boundaries.

The managers are striving to demonstrate stimulating rather than controlling leadership, and point to dialogue as an important tool. The string-formation

structure has made it much easier to navigate as leader since it is now clear where the decisions are made, and the external stakeholders are certain that the professional leadership will be improved in the years coming.

The quantitative results show some great variances in the managers' perception of their managerial space when ensuring that the university meets its strategic objectives. It is in the financial areas where the managers have the slightest space whereas the research area is where they have the largest space. Again, there are differences at the different managerial levels as well as across academic disciplines, and finally the issue of seniority is also at stake in this regard.

The managers seem to believe to have more autonomy regarding research and education strategies compared to finances, personnel and other resources. Further, there are differences across the universities in the way the managers perceive their degree of independence. Not surprisingly, the higher the managerial level the greater feeling of independence.

In general, the managers strongly oppose what they experience as a very detailed regulation from politicians and thus the Ministry. They perceive the regulation as an expression of lack of trust in the universities' own judgement, and it feels somewhat ironic that The University Act in fact intended to give the universities more degrees of freedom. This goes for research funding as well as education. Political objectives are not always clear and development contracts are better functioning in some places than other.

2. Introduction

The subject of this report is degrees of freedom at a managerial level i.e. how the managers at the universities – together with external actors – assess the level of political and administrative regulation of the Danish universities.

The report represents results from the quantitative survey that has been conducted among managers and leaders at the Danish universities. It also presents results from qualitative interviews with managers and leaders from all university levels (board, rector, faculty, department, and student administration level) as well as with external stakeholders/actors.

One of the key objectives of the agreement behind The University Act was to ensure more autonomy to the universities in order to increase their possibilities to meet their goals. The discussion about the degrees of freedom is continuous and centred on the balance between Government regulation and the universities' codetermination – in the universities' endeavour to meet the societal objectives in joint effort with the Government.

The report covers how the management at the universities and relevant actors experience and assess the balance between regulation and autonomy. The report focuses on managers' personal experiences. A central aspect is whether the financial and regulatory constraints of managerial freedom are experienced as a support or barrier to achieve the common goal: Universities at a high international level.

The report explores how the managers experience the opportunities and constraints to act and make strategic decisions. In this regard one of the most central themes is the expediency in the present regulation (e.g. through rules, financial incentives, and development contracts) for the universities to pursue their overall objective (research, education, knowledge dissemination and research-based public-sector service).

The aim is to uncover the possibilities in the current regulation as well as negative aspects of the regulation e.g. potential conflicting or inconsistent regulations. This also includes presentation of concrete examples from the managers on both possibilities and limitations at the current regulation. Furthermore, the report evaluates the relation between the political objectives and the concrete regulation and in doing so research freedom will also be touched upon.

The report will be organised in three broad themes: 1) The universities' function in society; 2) management and leadership; and 3) the regulation of the universities.

3. The universities' societal function

"Universities make the difference of whether a society is struggling for survival or evolution" (Dean).

Formally, the universities have societal functions with regard to 1) research, 2) education, 3) knowledge dissemination and 4) research-based public-sector service. To the managers (as well as most employees) research is the primary function, and the ideal is to deliver knowledge that is not only useful but also "the knowledge we didn't know we were in need of" as a board member puts it. Many refer to the ideal from Humboldt and to keep posing daring and critical questions in the search of new landmarks to conquer.

On the other hand, managers feel that knowledge dissemination has a tendency to be left behind when researchers pursue academic glory. 'Enlightenment of the people' is not a very meriting discipline – at least not within the academic hierarchy at the universities. Nevertheless, the universities' deliverance of knowledge dissemination is important in terms of societal legitimacy.

Managers at all levels place emphasis on the societal legitimacy. 30 years ago the universities were living in their own world outside society. Things have changed now; especially in recent years where the political attention has increased considerably and has resulted in a strong interest in strategic research funding, publication outcome of research, and a new University Act. This underscores the importance of university leaders' ability to ensure that the universities achieve all of their four functions or goals.

Table 1 presents the managers' assessment concerning the possibilities to make decisions within different areas corresponding to the objectives of the university. The table reports the PDI-score.

Table 1. To what extent is it possible for you to make decisions ensuring that the university achieves its goals regarding...? PDI-score.

	Research	Education	Knowledge dissemination	Research-based public-sector services	N
Aalborg University	12	14	31	-10	297
Aarhus University	23	18	35	-2	686
Technical University of Denmark	34	23	46	1	571
Copenhagen Business School	6	22	39	•	161
IT University of Copenhagen	3	35	32	•	34
University of Copenhagen	15	12	35	•	942
Roskilde University	9	16	30	•	113
University of Southern Denmark	12	29	35	-12	340
Director/rector/pro rector	71	88	88	64	24
Dean/pro Dean	72	78	74	28	50
Head of department	87	69	85	27	129
Head of centre	41	11	50	8	154
Head of research unit	41	15	47	2	765
Head of studies	3	62	25	-26	265
Administrative leader	-4	8	28	-18	759
Other management responsibility	8	7	27	-4	998
Humanities	25	28	39	-10	322
Natural science	33	14	41	0	657
Social science	24	31	34	-6	413
Health and medical science	31	18	48	11	359
Technical science	36	36	45	-6	332
Seniority 0 - 5 years	6	9	27	-13	539
Seniority 6 -15 years	16	19	35	-8	1142
Seniority 16 years or more	26	21	41	2	1463
Man	28	21	42	-1	2153
Woman	-1	11	25	-13	991
All	18	19	37	-4	3144

Note: Calculation of the PDI: PDI = ('to a great extent' + 'to some extent') minus ('to a slight extent' + 'not at all').

Table 1 shows that the assessments of the degrees of freedom vary across different areas. In general, the managers believe that it is possible to make decisions concerning knowledge dissemination (PDI 37), but decisions concerning research-based public-sector services are evaluated as more difficult (PDI -4). Looking at the areas research and education both areas are evaluated relatively positively. The majority of managers say that it to great or some extent is possible to make

decisions that ensure that the university achieves its goals within these two areas (PDI 18 and 19).

Some differences between the management levels can be observed. Not surprisingly, there seems to be a trend that the higher management level the higher PDI-score. This indicates that managers at the highest levels too a higher extent report that they can make decisions to ensure that the university achieves its goals. This trend is seen within all four areas.

Looking at the research area department managers in particular feel that they are able to make decisions regarding research (PDI 87) and the Deans/pro-Deans together with the Rectorate also have a relatively high score here (PDI 72 and 71, respectively). On the contrary, the lower levels of managers experience this possibility as markedly more difficult. Especially the administrative leaders assess the possibilities as very poor, and the PDI -4 indicates that administrative leaders only to a limited extent are able to make these decisions.

Within the education area the same tendency can be observed to some extent; the higher level of management, the higher share of managers believes that it is possible to make decisions concerning education that ensure the goal attainment. As expected, the heads of centres and of research units have relatively little saying in these matters (PDI-scores at 11 and 15 respectively), whereas the heads of studies assess a relatively high decision-making power (PDI 62), which is also expected as education is their main area. Yet, it is worth noticing that all though heads of studies have a high PDI of 62, all managers from department level and up report to have even greater managerial space regarding education.

The areas concerning knowledge dissemination and research-based public-sector service follow the same pattern, but the managers' saying and decision-making power concerning research-based public-sector service is generally assessed slightly lower compared to the other areas with PDI-scores from 64 (Rectorate) to -26 (head of studies).

Across universities, the managers' assessment of the managerial space differs to some extent and in particular with regard to decisions about research. Hence, The IT University of Copenhagen has a PDI at 3 whereas the Technical University of

Denmark has a PDI at 34. It is worth noticing that the Technical University of Denmark in general has the largest share of managers reporting sufficient managerial space to make decisions ensuring the university's goal attainment.

Additionally, in this particular case there seems to be differences between universities that have been involved in the mergers and universities that have not. Respondents from universities that have not been involved in the mergers assess the managerial space better with regards to the areas research and knowledge dissemination.

Table 1 also reveals some variance between the academic disciplines. This is in particular the case within education where managers from natural science and health/medical science assess less good opportunities to make decisions (PDI-scores at 14 and 18, respectively). Notable differences also exist regarding the research-based public-sector service. Managers from Humanities evaluate their possibilities for making decisions relatively poor (PDI -10), whereas managers from Health and medical science evaluate their opportunities more positively (PDI 11). This is by no means surprising given the fact that managers from Humanities only to a very small extent have anything to do with research-based public-sector service.

Furthermore, seniority appears to be related with the assessment of possibilities to make decisions ensuring that the university achieves its goals. Thus, managers and leaders who have been employed at a Danish university for 16 years or more take a more positive attitude towards the possibilities than managers and leaders with lower seniority. This tendency is seen across all areas.

Finally, there seem to be striking gender differences. The female managers believe to a much lower extent that they have the possibilities to make decisions ensuring that the university achieves its goals, and this goes for all areas. However, the largest gap can be seen at the research area where the PDI-score is -1 for female managers and 28 for male managers.

There is no notable difference as to whether or not the researcher is participating in RPS (figures not reported).

According to the majority of managers the balance between free funding and strategic funding is under pressure since most attention has to be directed towards the strategic means in recent years, and some managers believe that the strong focus on strategic funding have negative implications when it comes to research freedom.

The Strategic Research Council retains greater importance and the majority of the managers believe that this development is unfortunate as it prevents some researchers from investigating areas that can turn out to be of great importance in the years to come. This is a dangerous development since no one can predict the need for research in the future – not very well at least.

With the balance between free and strategically marked funds some managers fear that the treasured originality and transverse scientific thinking is under acute pressure. Besides, in order to maintain the (basic) teaching at the universities some researchers will have to 'stick to the classics'.

The external stakeholders express a need to strengthen the Danish universities' competitive position internationally. They stress that this is a political ambition, and as such the universities should direct the money towards areas with most chance of succeeding. This is the same places as the business community has its interest which is perceived as an extra advantage. The external stakeholders basically view competition as a positive quality as it is considered 'healthy and good' to compete for funds.

According to the managers the universities prime task is to exert free research, but of course with certain responsibilities. Some managers stress the Humboldt ideal of a university and mention the many Nobel Prize recipients. Furthermore, a dean points to research conducted in England where 'the blue skies research' has a better return of investment for society as a whole compared to competitive tendering. Nevertheless, the universities' deliverance of knowledge dissemination is also very important particularly in terms of societal legitimacy.

The university as an institution has to be able to deliver "the knowledge we didn't know we were in need of". If research has to be conducted within too narrow frames the researchers cannot produce such important knowledge, which in turn can prove problematic for society. Therefore, all the managers are very concerned with the diminishing of basic research.

According to the managers, the universities wish for autonomy but in order to achieve that they need to deliver a product – hence they need to publish. The central question for the universities is how to deliver the product in the most transparent way in order for the society to actually see what it pays for (accountability).

Some managers mention the conflict of having to publish internationally as not all research fits this profile (e.g. Danish literature, culture or history). The fact that Anglophone publications give more merits than Danish publications is thus considered problematic and as a hindrance for research freedom.

4. Leadership

"It is equally important that you dare to listen and that you dare to go in front."
(Board member).

Almost all managers recognise universities as very anarchic in spirit. Not the least because of the gathering of so many strong individuals each with their own way of dealing with things. "Everything is negotiable. It's a discipline of its own to be a successful manager in such a semi-organised chaos", as a pro-Dean puts it.

Whether they are situated at one level or another all managers can agree that dialogue is of utmost importance and should be taken very seriously. Despite the new status as employed and not elected managers they still depend on well-functioning departments and units. "Researchers are sensible and passionate about their work and we cannot afford to lose this enthusiasm" (Head of Department).

Without listening and thereby winning the trust of the employees, a manager's legitimacy will erode. At the same time, the managers must not be afraid of leadership. In any case, there is a clear preference for stimulating style of leadership rather than a controlling style of leadership.

However, there is a latent danger in the new system that the management 'forgets to listen' as there is no formal mechanism that ensures this.

The external stakeholders have a more relaxed relationship to professional management and agree that it is only natural that the new managers have clear instruments – otherwise the management would only have a pseudo character, as one argues. Besides, they are convinced that the new professional management will only improve in the years coming.

A common stand among the managers is that the new single-string management (where Rector employs Dean who employs Head of Department) gives a stronger and more coherent management at the university. On one hand, this speeds up decision-making processes as 'the way is clear' down through the system – but on the other hand, rapid processes tend to struggle with legitimacy among those employees who would like a say before the changes are agreed upon or comes into

effect. A concrete example of such a process was seen at one university in relation to the rector's wish for more interdisciplinary activities.

Further, the new system does not invite for internal rivalry in the same way as earlier since decisions are allocated with the new hierarchy and not 'out on the floor'.

The department level is the Achilles heel in the new single-string. This management level is difficult to handle since "It's like an orchestra. Everybody is a passionate master with their own instrument and I'm the conductor responsible for the rhythm. Not an easy task!" (Head of Department).

At the other end of the spectrum the new university boards are very important bodies in the new system. However, only the Rectorate has a steady contact with the board and this makes the board seem somewhat distant to most of the managers in the system due to the dominating principle of one-way communication. Some managers explicitly wish for a stronger recognition and dialogue between the board and the rest of the university at all levels. A board member supports this point of view and takes it even further: "The boards should also be more visible in the public debate."

During the former University Act it was difficult to realise a systematic and clear leadership. The decision-making process was not always obvious due to corridor politics. Nowadays, managers feel that there is a much more transparent leadership and it is their experience that the employees to a great extent enjoy this transparency. It is a relief to know who is directly responsible for the decisions made, and this produces legitimacy. You can disagree – but at least you know who and why.

Altogether, this is a major cultural turn at the universities and for the better if you ask the managers in chair. A concrete example is the employment procedure where the process is split up in an academic committee (deciding which candidates are qualified) and an employing committee (picking the candidate to employ).

Turning to the survey, one of the purposes with the single-string management was to ensure that the university meets its strategic objectives at all levels. Table 2 presents the results concerning the managers' possibilities to make decision ensuring that the university meets its strategic objectives. The table reports the PDI-score.

Table 2. To what extent do you have managerial space to make decisions that ensure that the university meets its strategic objectives concerning ...? PDI -score.

	Research	Education	Finances	Personnel resources	Other resources	N
Aalborg University	-2	4	-33	-29	-25	297
Aarhus University	20	11	-21	-16	-16	686
Technical University of Denmark	33	14	-16	-19	-11	571
Copenhagen Business School	17	31	-28	-16	-18	161
IT University of Copenhagen	18	38	0	26	3	34
University of Copenhagen	8	3	-32	-30	-24	942
Roskilde University	3	10	-42	-37	-36	113
University of Southern Denmark	6	23	-23	-19	-14	340
Director/rector/pro rector	71	88	63	63	58	24
Dean/pro Dean	76	82	66	58	68	50
Head of department	88	68	19	42	33	129
Head of centre	37	15	-32	-38	-20	154
Head of research unit	33	4	-47	-45	-41	765
Head of studies	7	57	-42	-38	-27	265
Administrative leader	-11	3	4	9	6	759
Other management responsibility	4	-3	-38	-37	-31	998
Humanities	13	17	-48	-49	-41	322
Natural science	28	7	-45	-44	-37	657
Social science	22	30	-42	-39	-34	413
Health and medical science	26	4	-52	-48	-41	359
Technical science	34	29	-31	-39	-27	332
Seniority 0 - 5 years	2	3	-4	-6	-2	539
Seniority 6 -15 years	16	13	-30	-24	-20	1142
Seniority 16 years or more	18	13	-30	-28	-23	1463
Man	22	15	-23	-22	-17	2153
Woman	-2	4	-30	-25	-22	991
All	14	11	-26	-23	-19	3144

Note: Calculation of the PDI: PDI = ('to a great extent' + 'to some extent') minus ('to a slight extent' + 'not at all').

In general, there seems to be relatively great variation in the managerial space within the different areas. The assessment of the managerial space is most positive regarding decisions concerning research (PDI 14) and education (PDI 11). Finance, personnel resources and other resources are assessed as areas where it is somewhat more difficult to make decisions that ensure goal attainment, and all three areas have negative PDI-scores ranging from -19 to -26.

Across universities managers' assessment of responsiveness differs to a relatively great extent. It is worth noticing that the IT University of Copenhagen in general has the largest share of managers saying that they have managerial space to make decisions.

Regarding research, managers at the Technical University of Denmark (PDI 33) and to some extent Aarhus University (PDI 20) assess the managerial space to make decisions better than the remaining universities - especially Aalborg University (PDI -2) and Roskilde University (PDI 3). Turning to the education area Copenhagen Business School has the largest share of managers assessing managerial space (PDI 38) while University of Copenhagen and Aalborg University have the lowest share of managers assessing managerial space to make decisions (PDI-scores at 3 and 4 respectively).

Additionally, there is significant difference between managers from universities that have been involved in the mergers and managers from universities that have not with regard to the research area.

Taking a closer look at the areas with the lowest overall PDI-scores (finances, personnel resources and other resources) the IT University of Copenhagen on one hand, and University of Copenhagen, Aalborg University and Roskilde University at the other hand, stand out. For example, the IT University of Copenhagen have a PDI 0 concerning managerial space regarding finances whereas the PDI-scores are between -32 to -42 for the three other universities. Regarding personnel resources the IT University of Copenhagen receives a PDI 26 while the other three universities have PDI-scores between -29 and -37.

Some variance appears across management levels. Looking across all areas the same tendency can be observed to some extent; the higher level of management, the higher share of managers believes that it is possible to make decisions ensuring goal attainment. As expected, the heads of centres and the head of research units have relatively little saying in these matters, except for research of course.

The areas concerning knowledge dissemination and research-based public-sector service follow the same pattern but the managers' influence and decision-making power concerning research-based public-sector service is generally assessed

slightly lower compared to the other areas with PDI-scores from 64 (Rectorate) to -26 (head of studies).

Furthermore, a relatively large variance is seen within the academic disciplines in this regard and in particular within managerial opportunities concerning research and education. Whereas Humanities assess relatively small managerial space concerning research (PDI 13), managers from Technical science assess a somewhat higher managerial space (PDI 34). Along with Social science (PDI 30) the managers from Technical science assess their opportunities to make decisions concerning education a fairly good (PDI 29), whereas managers from Health and medical science to a much lower extent assess their opportunities as being good (PDI 4).

Seniority also appears to be related to the assessment of managerial space, but there are two different trends. In research and education there seems to be a tendency towards the higher seniority, the higher assessment of managerial freedom. However, the opposite trend seems to be the case for the remaining areas. Thus, the evaluation of the managerial space to make decisions concerning finance, personnel resources and other resources seems to be better for the managers with low seniority whereas the managerial space is evaluated more negatively by managers with more seniority.

Finally, one can observe some differences between the assessment by female managers and male managers, in particular the areas research and education. The female managers in general assess their managerial space more poorly than the male managers. This is the case for all areas.

There is no notable difference as to whether or not the researcher is participating in RPS (figures not reported).

Table 3 shows the results from the question concerning possibilities to develop independent strategic objectives. The table reports the PDI-scores.

Table 3. To what extent is it possible for you to develop independent strategic objectives at your management level concerning ...? PDI -score.

	Research strategy	Education strategy	Finances	Personnel resources	Other resources	N
Aalborg University	33	11	-14	-19	-14	297
Aarhus University	36	20	0	6	3	686
Technical University of Denmark	41	18	3	11	5	571
Copenhagen Business School	20	31	-6	-1	-4	161
IT University of Copenhagen	3	41	-6	35	9	34
University of Copenhagen	28	13	-6	-4	-4	942
Roskilde University	23	19	-33	-27	-25	113
University of Southern Denmark	22	28	-16	-6	-11	340
Director/rector/pro rector	75	75	54	54	63	24
Dean/pro Dean	74	86	52	60	54	50
Head of department	93	65	33	48	40	129
Head of centre	69	34	10	1	2	154
Head of research unit	70	16	-15	-17	-18	765
Head of studies	23	67	-30	-32	-27	265
Administrative leader	-15	-2	15	30	19	759
Other management responsibility	21	9	-20	-14	-13	998
Humanities	46	31	-40	-35	-31	322
Natural science	58	22	-12	-18	-17	657
Social science	54	36	-29	-20	-21	413
Health and medical science	69	24	-6	-8	-8	359
Technical science	62	36	-15	-18	-19	332
Seniority 0 - 5 years	6	1	7	14	11	539
Seniority 6 -15 years	31	22	-8	-2	-6	1142
Seniority 16 years or more	39	22	-9	-5	-6	1463
Man	39	20	-4	-2	-3	2153
Woman	13	13	-10	0	-5	991
All	31	18	-6	-1	-3	3144

Note: Calculation of the PDI: $PDI = ('to\ a\ great\ extent' + 'to\ some\ extent') - ('to\ a\ slight\ extent' + 'not\ at\ all')$.

In general, one can observe some variance between the different areas in table 3. It is interesting to notice that the areas research and education are assessed relatively more positively than the remaining three areas. Whereas the majority of managers report that it is possible for them to develop independent strategic

objectives at their management level concerning research and education, the majority of managers state conversely that they have poor opportunities to develop independent strategic objectives concerning finances, personnel and other resources.

Looking across the different areas it is worth noticing that the University of Aarhus is the only university receiving positive or neutral PDI-scores. Regarding research strategy managers at the Technical University of Denmark (PDI 41), and to some extent also Aarhus University (PDI 36), assess the managerial opportunities to make decisions better than the remaining universities and especially the IT University of Copenhagen (PDI 3).

Regarding the managerial possibilities to develop strategies at the education area, it is on the contrary the IT University of Copenhagen that has the largest share of managers assessing managerial space (PDI 41) while the Technical University of Denmark and Aalborg University that have the lowest share of managers assessing managerial space to make decisions concerning education strategy (PDI 13 and 11, respectively).

Additionally, there is significant difference between managers from universities that have been involved in the mergers and managers from universities that have not with regard to research strategy and finances.

Looking closer at the areas with the lowest overall PDI-scores (finances, personnel resources and other resources) the IT University of Copenhagen, Aarhus University and the Technical University of Denmark on the one hand stand out because of high shares of positive assessment, whereas Aalborg University, University of Southern Denmark and Roskilde University at the other hand stand out because of the somewhat negative assessment of the managerial space to develop independent strategies.

Especially Roskilde University receives relatively low PDI-scores in these three areas (between -25 and -33) which indicate that the majority of managers do not think that they have the possibilities to develop independent strategic objectives at their own management level regarding these matters.

Furthermore, there seems to be the same tendency regarding the management level as in table 1 and 2: The higher level of management, the higher share of managers believes that it is possible to develop individual strategic objectives at

their own management level. The heads of departments are the group of managers with the largest share of managers saying that they have the possibilities to develop research strategies (PDI 93), whereas the Deans and pro-Deans are the group of managers with the largest share of managers saying that it is possible to make individual strategic objectives concerning education (PDI 86).

Regarding finance, personnel resources and other resources the assessments are more widespread. As expected, the heads of centres and research units have relatively little saying in these areas (finances, personnel resources and other resources) whereas the administrative leaders have more saying.

Seniority also appears to be connected with the assessment of managerial space, but there are two different trends as was the case in table 2. Regarding the areas research and education there seems to be a tendency towards the higher seniority, the higher assessment of managerial freedom to make independent strategies. However, the opposite trend seems to be the case for the remaining areas. Thus, the evaluation of the managerial space concerning finance, personnel resources and other resources to make decisions seems to be better for the managers with low seniority, whereas the managerial space is evaluated more negatively by managers with more seniority.

The gender differences are generally relatively small but some do exist within the areas of research and to some extent education. The female managers in general assess their managerial space to develop independent strategies concerning research and education more poorly than the male managers.

There is no notable difference as to whether or not the researcher is participating in RPS (figures not reported).

Table 4 shows the results from an OLS regression, concerning the question of managerial room to make decisions. The table reports standardized Beta Coefficients.

Table 4. To what extent is it possible for you to develop independent strategic objectives at your management level concerning...?. OLS-regression. Standardized Beta coefficient.

	Research strategy	Education strategy	Finances	Personnel resources	Other resources
Aalborg University	-0.035	-0.065**	-0.061**	-0.078**	-0.063**
Technical University of Denmark	0.011	-0.012	-0.011	0.023	0.005
Copenhagen Business School	0.002	0.048***	-0.012	-0.015	-0.010
IT University of Copenhagen	-0.023	0.032	-0.010	0.022	-0.010
University of Copenhagen	-0.065**	-0.040	-0.079*	-0.102*	-0.068**
Roskilde University	-0.057**	-0.013	-0.060*	-0.054**	-0.067*
University of Southern Denmark	-0.043	0.033	-0.053**	-0.055**	-0.060**
Social science	0.053	0.029	0.068**	0.071**	0.076**
Health and medical science	0.162*	0.016	0.176*	0.128*	0.149*
Technical science	0.098*	0.060	0.132*	0.063***	0.075***
Natural science	0.090*	-0.028	0.153*	0.077**	0.078**
Interdisciplinary	0.096*	0.097*	0.207*	0.203*	0.226*
Member of a decision-making or advisory board	0.037	0.145*	0.049**	0.072*	0.073*
Participant in RPS	0.013	-0.056**	0.029	0.068*	0.053**
Gender (man)	0.033	-0.001	0.054**	0.053**	0.073*
Seniority	-0.024	0.003	-0.001	-0.037	0.000
Model statistics:					
R ² _{adjusted}	0.02	0.04	0.05	0.06	0.06
F-value	3.7*	5.6*	7.4*	8.8*	7.6*
N	1889	1857	1877	1877	1558

Note 1: Reference categories: Aarhus University, Humanities, Non-members of decision-making/advisory board, Not participating in RPS, Woman.

Note 2: ***p<0.10, ** p<0.05, *p<0.01 (two-tailed).

Note 3: A positive beta-coefficient value indicates a positive answer regarding the possibilities to develop independent strategic objectives. Note 4: The category 'Interdisciplinary' exists of researchers who work at with more than one faculty.

The overall conclusion from table 4 is that the background variables are poor predictors of the level of satisfaction with the different debates. This can be observed from the relatively low R²_{adjusted} and F-values. That said some interesting results do appear in table 4 all though the differences are relatively small.

First, significant differences do exist within the academic disciplines. There is an independent significant effect of operating within the disciplines Humanities, Technical Science, Health and Medical Science, Natural Science and interdisciplinary researchers at this topic, when all other relevant background variables are taken into account. Thus, managers from Humanities are more likely to assess the possibilities to develop independent strategic objectives poorly, whereas Natural Science, Technical Science, Health and Medical Science and interdisciplinary researchers (and to some extent Social Science) assess a positive view which counts for all types of strategies, except for education strategy.

Second, significant differences do exist between the universities. When all other relevant background variables are taken into account there is an independent significant effect of coming from a specific university with regards to the managerial room to develop strategies. Employees from Roskilde University, Aalborg University and University of Copenhagen are more dissatisfied with the managerial room, and this stands out for all areas, except for research strategy.

5. The regulation of the universities

The connection between the political objectives and the concrete regulation has been subject to intense debate both in the public and internally at the universities.

In general, the managers are opposing strongly against what they experience as a very detailed regulation from the politicians, and thus the Ministry. The managers perceive the regulation as an expression of lack of trust in the universities' own judgement, and it feels somewhat ironic that The University Act in fact intended to give the universities more degrees of freedom.

Furthermore, many managers observe that The University Act has generated a massive administrative burden due to the numerous rules. "They are controlling us by rules when they should be formulating overall objectives for us to realise for ourselves", a Head of study puts it.

There is a particular dissatisfaction with the disposal of the Governmental co-financing in external research projects (used to be around 15 pct.), as with the problem of the university buildings not being owned by the universities themselves, despite the universities' new, independent status. Additionally, the universities are not themselves in control of the employee's salary level with the consequence that it is difficult to attract foreign top researchers.

The external stakeholders supported The University Act because they wanted to give the universities more autonomy and "freedom within responsibility". Yet, today they feel that the universities have not got sufficient degrees of freedom, despite the political promises.

Some managers perceive The University Act as a wish for standardization within the resort. "Through rules, regulation, and controlling you can force the universities to move in a given direction – but you cannot force original, innovative thoughts or Nobel prizes", a Head of department argues.

Moreover, some managers feel somewhat provoked by the Minister's (lack of) role in the public debate as they think he should be more visible and stand up for his

dispositions and arguments. Examples count the mergers and the dissolve of research centres.

The managers take two very different standpoints regarding the universities' development contracts. Some find the contracts very useful in giving a university direction. Despite too detailed, the contracts are seen as a positive instrument that works well at all managerial levels, and suggestions for content or improvements might as well may come from the bottom since it is a joint contract for the whole university.

Others think of the development contracts as useless and can best describe it as "an exercise for bureaucrats". They do not oppose setting up means and end – but it has to be the right kind. If not, the university will just write something to satisfy the Ministry and not use the contract actively in the daily business. Therefore, the Ministry should take a step back and only give general directions, and then let it be up to the universities to find a way to realise the ambitions.

One of the critical managers give the example of the fixed number of PhD scholarships a university can be obliged to occupy with candidates. "What if there aren't enough qualified candidates for the scholarships? Then you undermine the quality of the research and that's hardly the intention", a Head of department formulates it.

A further point is the yearly '2 percentage cut' in the financing (as in the remaining of the public sector) which systematically undermines the economic basis at the universities. As a consequence, studies need to have larger and fewer classes which will inevitably have an impact on the quality of the education. Another example from the education area is the discard of group examines by political regulation.

Accreditation is by some viewed as a reasonable initiative, and they argue that it is only fair that the publically paid educations are subject to evaluation. Others think of it as unnecessary, partly because students and teachers will abandon an education anyway if the standards are unsatisfactory, and partly because there is too little focus on outcome (and not only output) in the accreditation procedure.

In general, the managers have a good relation to the Ministry. However, problems occur when the game gets political, and the Ministry is caught in the middle between the Minister and the universities, and the Ministry for obvious reasons has to defend the political line. Furthermore, some managers have a problem with the

so-called 'independent' relation between the universities and the Ministry, as they by no means think of it as an equal relation.

In the quantitative survey managers were asked about the clarity of the political objectives within different areas cf. table 5 below.

Table 5. To what extent do you experience that the political objectives are clear concerning your universities...? PDI-score.

	Research strategy	Education strategy	Finances	Personnel resources	Other resources	N
Aalborg University	-1	5	-8	-29	-23	297
Aarhus University	7	6	-13	-19	-15	686
Technical University of Denmark	17	18	-6	-17	-11	571
Copenhagen Business School	29	13	-4	-15	-13	161
IT University of Copenhagen	53	47	24	12	21	34
University of Copenhagen	-2	-2	-20	-29	-22	942
Roskilde University	-8	-2	-23	-42	-27	113
University of Southern Denmark	9	14	-7	-17	-14	340
Director/rector/pro rector	33	33	25	17	13	24
Dean/pro Dean	44	52	22	18	16	50
Head of department	29	29	9	10	3	129
Head of centre	2	5	-26	-31	-25	154
Head of research unit	-2	-3	-28	-40	-32	765
Head of studies	14	21	-8	-18	-11	265
Administrative leader	17	18	8	-7	-3	759
Other management responsibility	-2	-2	-20	-27	-22	998
Humanities	5	3	-20	-32	-25	322
Natural science	-10	-5	-26	-39	-27	657
Social science	-1	0	-20	-31	-24	413
Health and medical science	1	2	-28	-35	-29	359
Technical science	7	7	-15	-28	-19	332
Seniority 0 - 5 years	12	16	6	-6	-5	539
Seniority 6 -15 years	6	5	-14	-25	-18	1.142
Seniority 16 years or more	4	6	-18	-27	-20	1.463
Man	4	6	-13	-23	-17	2.153
Woman	12	11	-10	-21	-17	991
All	6	7	-12	-22	-17	3144

Note: Calculation of the PDI: PDI = ('to a great extent' + 'to some extent') minus ('to a slight extent' + 'not at all').

In general, the table shows that relatively few managers think the political objectives are clear. This is especially the case for the areas finance, personnel

resources and other resources, all negative with PDI-scores indicating that the majority of managers have stated that they do not think that the objectives are very clear. The political objectives concerning research and finance are assessed as more clear, however the PDI-scores are relatively low and close to 0 which indicates that it is only a small majority thinking the objectives are clear.

Looking closer at first differences among the universities table 5 shows some interesting differences. First of all, it is worth noticing that the IT University of Copenhagen has only positive PDI-scores. Thus, the majority of managers at this university think the political objectives are clear. On the contrary, the majority of managers from the University of Copenhagen and Roskilde University think the political objectives are unclear within all areas, as indicated from the negative PDI-scores.

Furthermore, only moderate differences can be seen from table 5 across the academic disciplines. In general, Natural science assesses the political objectives as more unclear than the remaining faculties, whereas Technical science thinks of the political objectives as more clear.

Finally, there seems to be makeable differences between managers with high seniority and managers with low seniority. Thus, a somewhat larger part of managers and leaders who have been employed at a Danish university for 16 years or more assesses the political objectives as less clear than managers and leaders with lower seniority. This tendency can be seen for all areas, especially the areas concerning personnel resources and other resources where the gap in opinions is at its largest.

There is no notable difference as to whether or not the researcher is participating in RPS, or whether the researcher has been involved in a merger (figures not reported).

Table 6 shows the results concerning the experienced coherence between on one hand the political objectives, and on the other the financial regulation, the development contracts, and Acts and other rules from the Government. The table reports the PDI-score.

Table 6. To what extent do you experience coherence between political objectives and...? PDI -score.

	Financial regulation	Development contracts	Acts and other rules from the Government	N
Aalborg University	-16	-6	-7	297
Aarhus University	-20	-3	-5	686
Technical University of Denmark	-9	9	9	571
Copenhagen Business School	-20	-6	-12	161
IT University of Copenhagen	29	47	44	34
University of Copenhagen	-19	-4	-1	942
Roskilde University	-22	7	11	113
University of Southern Denmark	-5	11	12	340
Director/rector/pro rector	25	42	8	24
Dean/pro Dean	-6	18	-14	50
Head of department	-12	21	3	129
Head of centre	-22	-12	-8	154
Head of research unit	-20	-8	-5	765
Head of studies	-9	8	8	265
Administrative leader	-7	13	14	759
Other management responsibility	-20	-7	-4	998
Humanities	-13	3	1	322
Natural science	-17	-6	-5	657
Social science	-26	-11	-15	413
Health and medical science	-27	-9	-1	359
Technical science	-2	11	8	332
Seniority 0 - 5 years	-1	6	8	539
Seniority 6 -15 years	-14	1	3	1142
Seniority 16 years or more	-21	-2	-3	1463
Man	-12	1	1	2153
Woman	-23	1	3	991
All	-15	1	1	3144

Note: Calculation of the PDI: $PDI = ('to\ a\ great\ extent' + 'to\ some\ extent') - ('to\ a\ slight\ extent' + 'not\ at\ all')$.

In general, the managers assess the coherence between the political objectives and the different forms of regulation relatively poor. The coherence between the financial regulation and the political objectives adds to -15 PDI which indicates that they majority of managers believes that the coherence is poor. The coherence between on one hand the political objectives, and on the other hand the development contract and the Act and other rules from the Government is also evaluated relatively negatively with a PDI 1 for both questions.

Taking a closer look at the differences across universities, one can observe an interesting tendency; the managers from the IT University of Copenhagen assess the coherence as very good compared to the remaining managers. This is indicated with the relatively highly positive PDI-scores from 29 to 44. On the contrary, Aalborg University, Aarhus University and Copenhagen Business School are the ones receiving the most negative PDI-scores, because the majority of managers within these universities believe the coherence is poor.

Furthermore, some differences can be observed between the academic disciplines in table 6. Social science, in general, assesses the coherence less strong than the remaining faculties. Technical science assesses the coherence stronger, followed by Humanities.

There also seems to be notable differences on managers with high seniority and managers with low seniority. A somewhat bigger part of managers and leaders who have been employed at a Danish university for 16 years or more, assesses the coherence between the different regulations and the political objectives less strong than the managers and leaders with lower seniority. This tendency can be seen for all areas and especially the areas concerning financial regulation where the gap in opinions is at its biggest.

Finally, one can observe some gender differences concerning the assessment of the coherence between political objectives and financial regulation. The female managers experience to a lower extent a coherence between those two things compared to the male managers (PDI-scores at -12 and -23).

There is no notable difference as to whether or not the researcher is participating in RPS, or whether the researcher has been involved in a merger (figures not reported).