

Destroying Creativity - Universities and The New Public Management

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1. Introduction

- ∅ We analyse the university as an economic organisation.
- ∅ We ask whether recent reforms within the universities make economic sense?
- ∅ The public sector is believed to become more efficient if all activities, including the universities, are run as a profit maximising firms.
- ∅ This approach is associated with the so called *new public management* (see also Frey and Benz, *EJ* 2005).

- ∅ We have the academic staff rather than support functions in mind.
- ∅ We claim that the reforms in question are counter-productive and based on an inability to understand what a university is and how its staff is motivated.
- ∅ **We focus on the impact of the reforms that are supposed to make the universities more efficient, in the spirit of the new public management.**

2. What is a university?

∅ A university is *not*

- 1 a school, because academic teaching relies on research.
- 1 a government department, although universities are state-owned in many countries.
- 1 a governmental or other research institute, despite the fact that universities also do commissioned research.
- 1 a firm, because most basic and applied research is initiated by the academic staff and cannot be sold to paying customers

2. What is a university?

∅ A university has of course a superficial resemblance to many other types of organisations and we want in particular to emphasise so called **knowledge-based firms**, like consulting firms, architectural agencies, medical centres or newspapers, which are led by experts rather than by professional administrators.

2. What is a university?

- ∅ However, a university is multidisciplinary, while most knowledge-based firms are highly specialised. It is impossible to find a leader that is an expert in all its fields.
- ∅ **The activity must instead be based on creative cooperation (Sveiby and Risling, 1987).**
- ∅ In a university, decisions on teaching are usually made by department or faculty boards, and their research is governed by themselves – no authority should decide on behalf of the researchers on whether the earth moves around the sun or *vice versa*.

2. What is a university?

- ∅ Academic researchers are experts in their fields and cannot therefore have superiors as in a firm.
- ∅ **According to the definition of a boss in the organisation theory, vice-chancellors/presidents, deans and heads of departments are not bosses/managers but elected representatives.**
- ∅ Traditional universities can therefore be characterised as **producer-cooperatives** (as can many knowledge-based private-sector companies; see Sveiby and Risling, 1987).

2. What is a university?

- ∅ We therefore consider a university as a **multi-disciplinary organisation** for independent research and teaching, characterised by **academic freedom**, by **autonomy** in its relations to the authorities, and by **decentralisation and participatory decision-making**.
- ∅ It can be questioned whether a university that is transformed by the new public management can conform to this definition.

3. Sticks, carrots and competition

3.1. *The economic man*

- ∅ Economic model building is usually based on a simplistic behavioural assumptions like profit- and utility maximisation.
- ∅ In the spirit of the new public management, the university is believed to need sticks and carrots in order to motivate its lazy and greedy staff, which are not disciplined by competition.
- ∅ In some countries, the university budgets are therefore linked to earlier results, especially in the form of diplomas or exams, and individual negotiations are replacing the fixed salaries of the old system.

3. Sticks, carrots and competition

3.1. The economic man

- ∅ Since the budget is given in the short run, the system then becomes a zero-sum game where universities, departments and individuals are forced to compete in a way that may jeopardise the cooperation that is necessary for successful research.
- ∅ If on the other hand the academic staff are genuinely interested in their activity and work as hard as they are able, there is a very limited scope for any positive effects of sticks and carrots.

3.2. *Multidimensional efforts and short-term decisions*

- ∅ We can characterise universities as organisations where efforts are multidimensional and where they affect the results with differing time-horizons.
- ∅ It has been shown that rewards and penalties based only on those criteria that can be observed in the short run can lead to distortion (Holmström and Milgrom, *JLEO* 1991).

3. Sticks, carrots and competition

- ∅ Paying universities or their departments by results can for example force the academic staff to neglect such necessary activities that do not affect the number of diplomas in the short run.

3.3. Intrinsic motivation

- ∅ Recent economic research emphasises that many employees and tasks are associated with so called *intrinsic motivation*. Focusing on the economic man only leads to a biased analysis (Fehr and Falk, *EER* 2002).

- ∅ An employee can **consider the organisation's (in a university mostly the department's) success as a driving force or can find satisfaction by performing the tasks** (Frey, *IJIO* 1997).
- ∅ Intrinsic motivation is **not always beneficial for the employer**, because it can make the employees opinionated and hence less cooperative than those who are driven by greed and hence can be bought.
- ∅ A significant part of the literature on intrinsic motivation has dealt with commercial enterprises rather than universities and other non-profit organisations (Minkler, *IJIO* 2004).

- ∅ A significant part of the employees are characterised by **reciprocity**: an employer that is perceived as honest makes the employees honest (Fehr and Fischbacher, *EJ* 2001; Fehr and Falk, *EER* 2002).
- ∅ Shirking is not therefore such a problem as perceived in traditional principal-agent theory.
- ∅ A related phenomenon: members of a **producer cooperative** (for example a traditional university) tend to work hard if they expect other members to do the same, as when there are non-zero conjectural variations in an oligopoly (Guttman and Schnytzer, *EJ* 1989).

3. Sticks, carrots and competition
3.3. Intrinsic motivation

- ∅ It is desirable that certain goods and services are supplied as public goods, without a profit motive, but an economy cannot rely on only voluntary work, so there has to be non-profit organisations that pay an appropriate salary.
- ∅ Intrinsic motivation can make employees vulnerable, so that their enthusiasm leads to a lower salary or no salary at all.
- ∅ The intrinsic motivation can also be misused in another way, if it **causes the employer to invest less in other inputs than labour** (Glazer, *IJIO* 2004).

3.4. *When is the intrinsic motivation crowded out?*

- ∅ In the presence of intrinsic motivation economic incentives may at best be unnecessary and at worst they may **crowd out** the intrinsic motivation or decrease the employee's ability to perform (Frey, *IJIO* 1997; Fehr and Falk, *EER* 2002; Minkler, *IJIO* 2004).
- ∅ Payments that are unrelated to performance is a way of signalling confidence, and hence of strengthening the intrinsic motivation (Bénabou and Tirole, *QJE* 2002; *RES* 2003).

3. Sticks, carrots and competition

3.4. When is the intrinsic motivation crowded out?

- ∅ But the employer can also use rewards and punishments to make a task less attractive. This might encourage the employee in the short run, but would in the long run reduce her enthusiasm for the job and can be part of a power struggle (Bénabou and Tirole, *RES* 2003).
- ∅ The power struggle may include concealing crucial information, underrating work assignments and ego-bashing.

3. Sticks, carrots and competition

3.4. When is the intrinsic motivation crowded out?

- ∅ There is still academic freedom in most universities, and rules against firing oppositional researchers, in contrast to the business community (see Hodgkinson, *NS* 2006), and there is usually some form of democracy.
- ∅ But there are worrying tendencies **towards a more managerial leadership**, and towards economic incentives via output funding and individual wage-setting.
- ∅ Researchers are similar to artists and other creative professionals which are also driven by **non-pecuniary rewards**, and whose pride might be hurt by being subject to manipulation.

3.5. Competition

- ∅ Since the new public administration is based on the belief that employees are greedy and lazy and lacks the discipline associated with competition on a market, they become subject to sticks and carrots.
- ∅ If university is to resemble a company, there will be at least as much competition between individuals about positions as there will be between universities and their units.

3. Sticks, carrots and competition

3.5. Competition

- ∅ However, the budget cuts that have affected the universities in many countries and sometimes the oversized targets for doctoral degrees creates a competition for permanent posts that may be at least as intense as in the business community.
- ∅ Members of the senior staff must spend a significant part of their time to compete about funds in order to employ young researchers, who are in turn forced to compete about small grants or short assignments.
- ∅ The competition can in other words mean that researchers have less time for research and that they work less efficiently.

- ∅ Excessive competition for funds would also shift the power from the research community to the sponsors and hence jeopardise the academic freedom.
- ∅ There is in other words no lack of competition within the university sector, but the competition is destructive and it diverts energy from research and teaching
- ∅ A university would gain from more cooperation between individuals and departments, but it is difficult to make cooperation coexist with increased competition.

4. A formal analysis of the reorganising of the university

4.1. *The university and its employee*

- ∅ If the New public management works, a policy conforming to its recommendations should follow from a formal economic model that is otherwise conventional but which takes into consideration the distinctive features of a university, such as the **intrinsic motivation** and the fact that the staff receive a **constant monthly salary** (which may or may not be performance-related in the long run).

4. A formal analysis of the reorganising of the university
4.1. The university and its employee

- ∅ We construct such a model in order to contrast a traditional university in the form of a producer cooperative with a university that corresponds to the New public management (the business university) and where the salaries are determined through collective or individual bargaining.
- ∅ Y_i stands for the salary per period, h_i for the labour hours of employee i , and a_i and b_i are positive parameters.

∅ We assume the following quasi-linear utility function:

$$u_i = Y_i + a_i h_i - \frac{b_i h_i^2}{2}$$

4. A formal analysis of the reorganising of the university
4.1. The university and its employee

- ∅ This expression implies that an employee would choose to work $h_i = a_i / b_i$ hours
- ∅ The amount of work depends only on the motivation of the employee, because of the given salary
- ∅ While productivity may differ across individuals, we shall assume that all employees are equally motivated, i.e. that $a_i = a$ and $b_i = b$ holds true for everyone.
- ∅ Every employee has the same outside-option utility u_0 , which works as the fallback-level if there is wage-bargaining.

4. A formal analysis of the reorganising of the university
4.1. The university and its employee

- ∅ The university budget is in the short run given as B , which can also be written as a weighed sum of a fixed component B_0 and a sum of the individuals' output that is proportional to their expected labour hours with the productivity coefficient p_i . The weights are β and $1 - \beta$:

$$B = (1 - \beta)B_0 + \beta \sum_{i=1}^n p_i h_i^E$$

4. A formal analysis of the reorganising of the university

4.2. *The university as a producer cooperative*

- ∅ Universities have several categories of academic staff (lecturers, senior lecturers and professors), but we simplify by assuming that there is only one.
- ∅ This means that the cooperative university is modelled as based on a complete equality despite differences in productivity.
- ∅ It then follows that a higher intrinsic motivation (a higher a) would not lead to lower salaries in the cooperative university, because the salary is independent of a if $\beta=0$, and increasing in a if $\beta>0$.

4. A formal analysis of the reorganising of the university

4.3. *The business university*

- ∅ Next, consider a university which reminds more of a business enterprise than a producer cooperative.
- ∅ It is not governed by its academic staff but by a management that maximise the surplus after that the academic staff have been paid.
- ∅ Salaries are determined by Nash-bargaining on a central or individual level.
- ∅ The employers and the employees' bargaining strengths are described by the exponents α and $1-\alpha$.

4. A formal analysis of the reorganising of the university

4.4. *A comparison*

- ∅ Consider the difference between the salary levels caused by the transition towards individual salaries within the business university.
- ∅ Salaries then become dependent on each individual's productivity, in contrast to the situation under collective bargaining.
- ∅ The transition will in other words create winners and losers.

4. A formal analysis of the reorganising of the university
4.4. A comparison

- ∅ In the model we assume that there will be intrinsic motivation and no scope for increases in efforts through sticks and carrots; note also that the possibility of crowding out is ignored by the model.
- ∅ If $\beta=1$, as when the budget as a whole is result-based, collective and individual bargaining yield the same average wage.
- ∅ But if $\beta<1$, then the individual wage bargaining will result in a lower average wage, despite the fact that we have not taken into consideration the possibility that α changes.

4. A formal analysis of the reorganising of the university

4.4. A comparison

- ∅ The cooperative university yields higher salaries, because in the business university there is a surplus after the academic staff have been paid. This surplus is spent on the management's benefits (managerial slack).
- ∅ The business university is associated by the same output, but output would be reduced if the increased bureaucracy was taken into consideration.
- ∅ While the salary in the cooperative university is non-decreasing in a , the opposite can hold true in the business university.

4. A formal analysis of the reorganising of the university
4.4. A comparison

- ∅ The academic staff's enthusiasm would then be exploited, so that they are punished for their intrinsic motivation.
- ∅ But the model also implies that the university would collapse without the intrinsic motivation, because nothing will be produced if $a=0$.
- ∅ Taking into consideration intrinsic motivation and a given monthly salary in an otherwise conventional economic model suggests that it is far from self-evident that the new public managements improves the activity for a university.

5. Complementary viewpoints

- ∅ The formal analysis has been based on a homogeneous product, with no conflicts about its composition.
- ∅ If however the state emphasises diplomas, the management of a business university might get an incentive to favour teaching at the expense of research, and there might be budgetary clashes between research- and teaching-oriented departments.
- ∅ Participatory democracy would imply boards at different levels consisting of members of its members.
- ∅ Such boards would make hiring decisions, and allocate budgets between departments and faculties.

5. Complementary viewpoints

- Ø But the present top-down management misuses the labour time of the academic staff by its permanent revolution in the form of a never-ending sequence of reforms which either forces the boards to spend time on endless meetings, insofar as they do not imply transferring all power to professional managers.
- Ø In some countries, for example in Finland, the management also try to implement a system where each member of staff has to report how every half of an hour is spent. But if there is intrinsic motivation and all available time is spent on teaching and research, such a bureaucratic system can only reduce the output of the university.

6. Towards a dynamic and creative university

- ∅ The new public management greatly exaggerates the efficiency of the private sector, which has been associated with excessive payments to managers and scandals such as Enron (Frey and Benz, *EJ* 2005).
- ∅ We have criticised simplistic views on private-sector superiority in Björkroth, Grönblom and Willner, 2006, Willner, 2003 and Willner and Parker, *JE* (forthcoming).

6. Towards a dynamic and creative university

- ∅ This does not mean that a university has nothing to learn from the business community.

- ∅ There exist four ways to destroy a company by destroying work motivation and the pleasure of working:
 1. To introduce competition between individuals and departments.
 2. To introduce rewards and punishments related to variables that are difficult to measure.
 3. To humiliate the employees
 4. To cause fear

(Deming, *Amstat News* 1993)

6. Towards a dynamic and creative university

- ∅ But the business community can also learn from (old-fashioned) public-sector management:
 - 1 fair and thorough hiring rules
 - 1 career paths that discourage materialists
 - 1 autonomous employees within a set of given rules
 - 1 fixed-time contracts and restricted re-election opportunities for the senior management

Frey and Benz (*EJ* 2005)

6. Towards a dynamic and creative university

- ∅ In particular, Frey and Benz emphasise the intrinsic motivation, which should be supported by non-pecuniary rewards and fixed salaries, so as to avoid conflicts caused by difficulties of measurement and monitoring.
- ∅ Wage equality within each category would in addition release energy for common objectives, whereas performance-related pay encourages competition and cheating.
- ∅ Also, role models are important: younger researchers learn from the enthusiasm displayed by their established colleagues (Lagerqvist, 1990).

6. Towards a dynamic and creative university

- ∅ Universities should promote creativity.
- ∅ It has been emphasised that creativity is better encouraged by other instruments than sticks and carrots, such as dialogues within the research group, and the active participation of the project coordinators, which should not be just managers or accountants (Philipson, 1990).

6. Towards a dynamic and creative university

∅ A list of wishes;

- 1 Proper funding is essential.
- 1 The educational targets should be realistic.
- 1 The university should become more autonomous
- 1 The academic freedom should not be abolished but increased.
- 1 Participatory democracy
- 1 Dynamism should be seen in offices, lecture halls and publications, not in administrative buildings and meeting rooms.
- 1 Political decisions on universities should be informed
- 1 Destructive competition and the never-ending questioning of the right to exist for different university departments should stop.
- 1 Creativity should be encouraged by a discussion rather than by sticks and carrots.