

Sonja Grönblom

Non-Profit Maximising Organisations and The Impact of Privatisation, Liberalisation and Public-Sector Reform



Layout and cover illustration by Niklas Grönblom

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and Public-Sector Reform



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Contents

Acknowledgements	i
List of Original Essays	v
Svensk sammanfattning	vii
I Research Summary	1
1 Introduction	5
2 Background	7
2.1 Privatisation and other public-sector reforms	7
2.2 Reasons for privatising	10
3 Theoretical discussion and conceptual framework	13
3.1 Potential reasons for cost differences	13
3.2 Creative industries	16
4 Intrinsic motivation and motivation crowding out	21
4.1 Various aspects of intrinsic motivation	21
4.2 Motivation crowding out: potential causes and effects . .	23
5 Overview of the Essays	27
5.1 Essay I: Privatization and liberalization: costs and benefits in the presence of wage-bargaining	27
5.2 Essay II: Reforming a network industry: consequences for cost efficiency and welfare	28
5.3 Essay III: Organisational form and individual motivation: public ownership, privatisation and fat cats	28
5.4 Essay IV: The impact of budget cuts and incentive wages on academic work	29
5.5 Essay V: Marketization and alienation in academic activity	30
6 Concluding remarks and future research	33
References	36

List of Original Essays

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Svensk sammanfattning

I denna avhandling analyserar jag både offentliga och privata företag och organisationer, inklusive universitet, särskilt när det existerar potentiell inre motivation. Jag behandlar både industriell produktion, inklusive infrastruktursektorer med vertikala relationer, och tjänstesektorn.

Man tänker sig att ägandet kan påverka kostnadseffektiviteten dels genom olika storlek hos lönetillägg och andra förmåner för de anställda (eng. *Internal Rent Capture*), och dels via asymmetrisk information. Jag frågar dessutom om det finns andra faktorer än ägande och konkurrens som kan påverka prestandan hos kommersiella företag och ideella organisationer.

Dessa frågeställningar aktualiseras av pågående reformer inom den offentliga sektorn, särskilt i samband med den så kallade nya offentliga förvaltningen (eng. *New Public Management*). Jag analyserar reformernas inverkan på hur bra en organisation fungerar och på den sociala välfärden. Analysen i denna avhandling är teoretisk, men resultaten är relaterade också till den empiriska litteraturen.

Avhandlingen är uppdelad i del I och II. I del I sammanfattar jag avhandlingen och sätter den i ett sammanhang, medan del II består av fem redan publicerade essäer. De två första (I–II) är mera traditionella, i och med att de baserar sig på *homo economicus* (eng. *the economic man*), utan att beakta den inre motivationen. I **essä I** (publicerad 2008) bedömer vi fördelar och nackdelar av privatisering och avreglering innanför en sådan ram, men med en betoning också på icke återvinningsbara fasta kostnader och vertikala relationer. I **essä II** (publicerad 2012) fokuserar vi oss på vertikal separation, och konkurrensutsättning och privatisering i nätverksindustrier.

I **essäerna III–V** vidgas perspektivet genom att införa potentiell inre motivation i en agentmodell. Analysen i **essä III** (publicerad 2014) tillämpas på offentligt ägande och privatisering. I **essäerna IV** och **V** (publicerade 2009 respektive 2013) utvidgas analysen till att även gälla kreativa branscher, särskilt arbete inom universiteten, där den inre motivationen hos de anställda kan tänkas vara avgörande. I dessa essäer tillämpas en analys som inbegriper ett intra-personellt spel inom ramen för en agentmodell med potentiell inre motivation. Vi analyserar sålunda avvägningen mellan ekonomiska incitament och inre motivation.

Part I

Research Summary

Uprising

*Paranoia is in bloom,
the P.R. transmissions will resume,
they'll try to push drugs that keep us all dumbed down
and hope that we will never see the truth around.
(So come on.)*

*Another promise, another seed,
another packaged lie to keep us trapped in greed,
and all the green belts wrapped around our minds
and endless red tape to keep the truth confined.
(So come on.)*

*They will not force us,
they will stop degrading us.
They will not control us,
we will be victorious.
(So come on.)*

*Interchanging mind control,
come let the revolution takes its toll,
if you could flick the switch and open your third eye,
you'd see that we should never be afraid to die.
(So come on.)*

*Rise up and take the power back,
it's time the fat cats had a heart attack,
they know that their time's coming to an end,
we have to unify and watch our flag ascend.
(So come on.)*

*They will not force us,
they will stop degrading us.
They will not control us,
we will be victorious.
...*

Matthew Bellamy
The Resistance (2009)

1 Introduction

In this dissertation I analyse private and public-sector firms and organisations, including universities, in particular in the presence of potential intrinsic motivation. I deal with both industrial production, including infrastructure industries with vertical relations, and service provision, and in particular in the case of universities. Costs may differ across firms or organisations in both types of industries because of, for example, internal rent capture and agency problems. I also ask whether there are other factors than ownership and competition, such as the approach to employee motivation that may affect the performance of commercial firms and non-profit organisations.

When it comes to public services, I also analyse the rationale behind public-sector reforms and the impact of these reforms on organisational performance and social welfare, with an emphasis on the so called New Public Management. I deliberately use and amend models with standard components such as Cournot oligopoly, Nash bargaining and constant absolute risk aversion.

The dissertation is divided into parts I and II. Part I is a research summary with an introductory background, whereas part II consists of five previously published essays. The two first **essays (I–II)** are more traditional, by being based on *homo economicus* (eng. the economic man) and hence ignoring intrinsic motivation. **Essay I** (2008) assesses the merits of privatisation and liberalisation in such a framework, but with an emphasis also on sunk costs and vertical relations as well. **Essay II** (2012) analyses vertical relations in network industries and the welfare effects of such reforms that require vertical separation.

The analysis in **essays III–V** transcends the framework of the two first essays by including intrinsic motivation. **Essay III** (2014) adds potential intrinsic motivation to an agency model that is applied on public ownership and privatisation. Thus, the common denominator in **essays I–III** is an analysis of the cost and welfare impact of privatisation and liberalisation, primarily with industrial production and infrastructure industries in mind.

In **essays IV** (2009) and **V** (2013), the analysis is extended so as to apply to creative industries, in particular to universities and academic work (although the analysis might be applicable on a number of other

public and private agencies as well). Employee motivation is then crucial. These essays apply an internal-game approach to principal-agent analysis with potential intrinsic motivation. We then analyse the tradeoff between economic incentives and intrinsic motivation.

This research summary focuses on the common denominators of **essays I–V** by starting in section 2 with a presentation of the background of my research topics. Here I especially discuss privatisation and the reasons for privatising, also in the case of vertical relations and natural monopolies.

Section 3 consists of a theoretical discussion of creative industries and possible reasons for cost and performance differences. In section 4 I summarise the previous literature and discuss various aspects of intrinsic motivation. The phenomenon of motivation crowding out, including some of its potential causes, is also addressed. I relate these findings to the empirical literature as well.

In section 5 I introduce the essays of part II by summarising each of them, and by setting them into context. The last section (6) concludes the research summary, with a final paragraph that presents some thoughts on future research.

2 Background

2.1 Privatisation and other public-sector reforms

Public ownership, regulation and privatisation

By privatisation I mean the sale of the entire organisation, or at least of the majority of its shares. However, Matsumura (1998) among others, defines privatisation in terms of behaviour and objectives. Matsumura treats the weight for profits in the objective function as equivalent to the proportion of the shares that are owned by private investors (Matsumura, 1998). However, profits can appear in a firm's objective function also without partial privatisation, whereas many completely private firms and organisations may have wider objectives than profit maximisation. In the essays of this dissertation privatisation means a transition from public to private ownership. We do not consider mixed oligopolies or privatisation in the form of outsourced services.

Natural monopoly industries in the US have usually been private and regulated rather than owned by the public sector, whereas such industries in Europe used to be nationalised (see for example Björkroth, Grönblom, and Willner, 2006). The rationale for public ownership has traditionally been the existence of market failures. For example, some industries such as telecommunications, electricity, railways, gas, and water, are or have been natural monopolies (see for example Newbery, 2001; Björkroth, Grönblom, and Willner, 2006).

When it comes to utilities that are associated with sunk costs and require a network infrastructure, the upstream activity is usually a natural monopoly. Public ownership or alternatively regulation may therefore ensure that there is a sufficient amount of investments and maintenance. The state then sets the rules for the network utilities, either by regulation or by owning the company (Newbery, 2001).

Vertical integration and liberalisation

In what follows liberalisation means replacing a monopoly by competition in the form of Cournot oligopoly without regulation.¹ Nowadays the European approach is to introduce competition even in vertically integrated network industries, by enforcing vertical separation, which is a precondition for competition. The natural monopoly in such a situation has to be isolated from the downstream activity as a separate infrastructure company. The rest of the activities are then to be opened up to competition, sometimes through privatisation with regulation (Florio, 2013; Björkroth, Grönblom, and Willner, 2006; Parker, 2003).

Kay and Thompson (1986) admit in a critical essay on privatisation that scope exists for introducing competition in industries traditionally regarded as natural monopolies². Buehler (2005) on the other hand finds that vertically separating an integrated network industry is likely to increase retail prices because of double marginalisation i.e. profit margins both upstream and downstream. Such a restructuring may not only increase retail prices, but may also lead to lower investments in cost reduction, and hence to adverse welfare effects (Buehler, 2005).

In, for example, Björkroth, Grönblom, and Willner (2006) we have compared privatisation and liberalisation in industries such as telecommunications, electricity, water and public transport in Europe³. We find that public ownership does not appear to be less cost efficient at least when it comes to utilities such as water and electricity. Telecommunications are often seen as a more successful example of liberalisation than electricity and especially railways. However, some established publicly owned incumbents have been technically progressive in themselves, so significant cost reductions even without a reform cannot be ruled out (see for example Björkroth, Grönblom, and Willner, 2006; Björkroth, 2003)⁴.

When it comes to electricity, there have also been concerns both about excessive market power and such fragmentation that may jeopardise system reliability and the benefits of vertical integration (see for example

¹However, liberalisation can in practice mean stricter regulation as when for example a welfare-maximising monopoly is replaced by competition between profit-maximisers that must be monitored.

²In their analysis competition could be introduced in particular through franchising.

³I am not comparing reforms of different industries from different part of the world in this dissertation. For overviews see for example Parker (2003) and Florio (2013) on the EU, Boardman, Laurin, and Vining (2003) and Crew and Kleindorfer (2003) on the North America, and Hodge (2003) on Australia.

⁴The performance improvement occurred before privatisation in the water industry as well (see for example Shaoul, 1997)

Björkroth, Grönblom, and Willner, 2006). In the railway industry, a series of accidents in the UK have raised questions about proper maintenance and coordination (Newbery, 2001). In bus transport, costs have been reduced, but partly at the expense of staff and in some countries also by reducing the quality of the service (Willner, 2006, 2003).

In Björkroth, Grönblom, and Willner (2006) we also suggest that a liberalisation of, for example, the electricity market can lead to either disadvantages related to vertical disintegration, diseconomies of scale and reliability, consolidation, or a combination of these. Consolidation can raise prices and hand over strategic decisions to a limited number of very large companies (Björkroth, Grönblom, and Willner, 2006). Vertical foreclosure might not be profitable from the integrated firm's point of view either. This is because the integrated firm may find it more profitable to divert the competitor's demand by lowering its retail price rather than raising the competitor's access charge, even if the access prices would not be regulated (Buehler, 2005).

Vickers (1995) finds that vertical integration in the presence of imperfect information and imperfect competition makes the regulator's task harder if the upstream monopolist has anticompetitive incentives to raise rivals' costs. However, it is well known that vertical integration has advantages as well. Vickers (1995) argues for example that integration may lead to fewer firms in the deregulated sector and hence less duplication of fixed costs. The overall welfare comparison between separation and integration can therefore in the end remain ambiguous (Vickers, 1995).

However, **essay II** (Willner and Grönblom, 2012), which deals with vertical relations, competition and privatisation addresses this issue. We apply a principal-agent analysis on cost efficiency and welfare. We find that the popular notion that competition through vertical separation has cost advantages and welfare effects that overshadow the advantages of vertical integration is in general not true in such a setting. Moreover, in **essay I** (Grönblom and Willner, 2008), we find that the same applies when cost differences are caused by internal rent capture.

Competition

It is well known that a combination of privatisation and liberalisation can improve welfare, provided that costs are reduced. Liberalisation is therefore inspired by the notion that perfect competition would be superior even to a welfare-maximising public monopoly because of lower costs (Björkroth, Grönblom, and Willner, 2006; Willner, 2003; Robinson, 2003). Insofar as efficiency gains are primarily caused by competition,

privatisation can, however, be seen as a part of a liberalisation process, rather than an end in itself (Newbery, 2001). However, free entry can also lead to social costs related to unnecessary duplication in the presence of high sunk costs, which would mean that too many firms will in fact enter (Mankiw and Whinston, 1986).

Parker (2006) finds that changes in ownership lead to improvements in performance in the presence of appropriate changes in the competitive or regulatory environments. He argues that competition (or effective state regulation) is important if privatisation is to lead to performance improvements, including lower production costs and prices and improved services. That is, ownership changes do not appear to have significant effect in improving economic performance, especially in terms of welfare gains to consumers (Parker, 2006). Improvements after privatisation might then have been caused by competition rather than by ownership (Vickers and Yarrow, 1988; Parker, 2006; Borchering, Pommerehne, and Schneider, 1982).

In Björkroth, Grönblom, and Willner (2006) we address the fundamental question of when competition in a market is preferable to a public monopoly when all firms have sunk costs. We identify the magnitude of the cost savings that are necessary for competition to be superior, and we address this also in the presence of network externalities (Björkroth, Grönblom, and Willner, 2006). In **essay I** (Grönblom and Willner, 2008), we analyse these issues in a model when there is also wage-bargaining, which can give rise to internal rent capture, and compare the market situation before and after liberalisation and privatisation in the presence of sunk costs and vertical integration.

2.2 Reasons for privatising

The perceived justification for privatising is that public ownership is believed to be more expensive, in particular when it comes to traditional public-sector activities, because of for example soft budget constraints, and lack of sticks and carrots (Dixit, 1997). It has also been argued that privatisation might increase the quality of goods and services, but this has taken place in general when public production is underfunded. This suggests that some problems that occurred before privatisation, such as underinvestments in the British water industry, might have been addressed also without privatisation (Saal and Parker, 2000)⁵.

⁵The quality improvement could be possible for example if a quality improvement in one output reduces the cost of producing another, i.e. some sort of a "quality-driven scope economy" (Saal and Parker, 2000).

State-owned companies and public utilities have been privatised for different reasons, for example in order to obtain sales revenues, to achieve popular capitalism, or as part of a modernisation process (see for example Parker, 2009). The predominant motive amongst economists has however been the belief that public ownership is less cost efficient. Parker (2009) challenges this notion. He argues that the motive among decision-makers was more about obtaining sales revenue, despite their rhetoric of efficiency gains. In for, example, the UK, the most efficient companies were the first to be sold (Parker, 2009). Thus, the belief that policy-makers have always strived for efficiency seems to be exaggerated. From an economist's point of view however, increased costs efficiency is usually a necessary but not sufficient condition for privatisation to be beneficial.

Willner (2006) in turn finds no systematic improvements after privatisation in Finland. Moreover, private ownership can lead to underprovision (Willner, 2001). This is because western state-owned firms have typically operated in imperfectly competitive markets, and sometimes even in natural monopolies. The social costs of imperfect competition can then in fact dominate also after privatisation even if production costs are reduced (Willner, 2003, 1996)⁶.

The impact of ownership on cost efficiency

When it comes to the impact of ownership on costs, Megginson and Netter (2001) summarise the empirical literature as favouring private ownership. An earlier overview by Borcharding, Pommerehne, and Schneider (1982) compare the efficiency of private and public production in five countries (USA, Germany, Australia, Canada and Switzerland). They find that private production tended to yield higher cost efficiency. However, they also find that there were no significant differences in unit cost if there was sufficient competition and neither discriminative regulations nor subsidies.

Other extensive studies about the effects of privatisation on cost efficiency are presented by for example Martin and Parker (1997); Florio (2006) and Parker (2006), who analysed the UK privatisation situation, and Hodge (2000), who made an international survey. They have shown, also empirically, that privatisation does not always improve an organisation's cost efficiency, or even financial performance.

Another overview by Millward (1982) finds no broad support for the superiority of either form of ownership, but Millward found that

⁶Political interference may be beneficial even in a seemingly perfect market if effort affects utility (Willner, 2001).

unit costs in some industries were lower in private firms, whereas the reverse was true in other industries. Millward did not, however, find support for lower managerial efficiency in public firms (Millward, 1982). The overview by Boyd (1986) gives a similar impression. Differences in the efficiency between firms in public and private ownership go both ways, and cost efficiency does not necessarily depend on ownership (Boyd, 1986).

These studies might suggest that the reason for the observed differences in cost efficiency might be explained by other facts than ownership. However, there are still questions that have remained unanswered. Could there be other factors than ownership or competition that might affect the performance of commercial and non-profit organisations? What impact have privatisation, liberalisation and vertical separation on costs and welfare, in a principal-agent framework or in the presence of sunk costs?

We address these questions in **essays I–III** (Grönblom and Willner, 2008; Willner and Grönblom, 2012; Grönblom and Willner, 2014). The cost-differences in **essay I** are caused by endogenous internal rent capture through wage-bargaining with and without vertical integration. There are vertical integration and endogenous cost-differences through a principal-agent problem in **essay II**. In **essay III** on the other hand we try to answer these questions by modifying the agency problem by including intrinsic motivation.

3 Theoretical discussion and conceptual framework

3.1 Potential reasons for cost differences

Internal rent capture

Such profits that are explained by imperfect competition are often referred to as rents. Internal rent capture (IRC) is caused by successful “rent-seeking” within an organisation and stands for that part of the rents that are captured by other stakeholders within the firms, in general by the employees (Bradburd, Pugel, and Pugh, 1991).

The presence of IRC then implies a challenge to the efficiency comparisons, because it can raise the costs in the case of a public monopoly even if the price-cost margin is zero. Such rents cause a dead-weight loss in the same way as price-cost margins, but the excess wages or benefits are not part of the dead-weight loss but part of the total surplus. Suppose that there are no other sources of cost differences than IRC. The measure of the social benefits of privatisation and liberalisation can then be smaller than usually believed (see for example Willner, 1996). We develop this idea further in **essay I** where we use a standard Nash bargaining model for analysing IRC. (Grönblom and Willner, 2008).

Workers can benefit from IRC not only because of explicit wage-bargaining, but also because of efficiency wages. This happens for example when the employer wishes to achieve low labour turnover rates, maintain work morale and motivation, or discourage workers from shirking. The employer can also pay higher wages in order to prevent unionisation (Bradburd, Pugel, and Pugh, 1991). Also, the size of the mark-ups depends on the bargaining power of the union (Haskel and Szymanski, 1993)⁷.

It is, however, not necessarily the case that the public sector or state-owned firms would by default be more generous to their employees.

⁷IRC and fat-cat salaries in the form of post-privatisation efficiency wages when intrinsic motivation is crowded out (see **essay III**: Grönblom and Willner, 2014), may be difficult to distinguish. In what follows we use the term IRC only when there is wage-bargaining.

Econometric studies have provided contradictory results. For example Adamchik and Bedi (2000) and Dustmann and Soest (1998) find that wages are higher in the private sector while, for example, Mueller (1998) and Christofides and Pashardes (2002) find that IRC is higher within the public sector in Canada and Cyprus respectively. Blackaby, Murphy, and O'Leary (1999) find that any rent differences are small and higher for women than for men in the public sector. The public sector pays more generously in the lower tail of the wage distribution, while the opposite is true in the higher end, as also in Mueller (1998). As will be presented in **essay I** (Grönblom and Willner, 2008), public-sector generosity would not as such mean lower allocative efficiency, unless the differences in salaries and fringe benefits are large enough to overshadow the profits that would be gained after privatisation.

The principal-agent problem

Economists often build up models according to a simplified picture of economic behaviour. Individuals are assumed to maximise their utility and firms to maximise their profit. Such models have their limitations, but they have nevertheless contributed to our understanding of consumer behaviour, demand in different markets, or markets with only limited competition⁸.

When it comes to managers, Williamson argues that managers (agents) maximise utility and not profits (Williamson, 1963). This is possible because of the separation of ownership and control. The agent can then use discretion to maximise utility rather than to act in the interests of the shareholders (and subject to a constraint that profits should reach a minimum level). This kind of *discretionary behaviour* or *managerial slack* is essential for the principal-agent problem (Williamson, 1963). As for policy makers, a similar argument suggests that they are only interested in being re-elected.

Privatisation and other public-sector reforms have often been inspired by agency theory and public-choice. Therefore, it is paradoxical that the public sector will actually become more efficient if we assume that the managers are just lazy and greedy (like all economic agents), as in the agency theory. The explanation is that wider objectives (as usually assumed in the case of public ownership) means a stronger incentive to pay such an agent for reductions in managerial slack (De Fraja, 1993).

⁸Some economists however have pushed such reasoning to its extreme by applying them to all areas of life, such as spouse selection, prostitution and sports, or the behaviour in politics and administration (see for example McKenzie and Tullock, 2012).

I take Raith (2003)'s version of an agency model as a point of departure in the technical analysis found in **Essays II–IV** (Willner and Grönblom, 2012; Grönblom and Willner, 2014; Willner and Grönblom, 2009). This standard model is based on normally distributed shocks, constant absolute risk aversion (CARA) and a linear reward system (see also Holmstrom and Milgrom, 1987). This means that we use a function of the expected value and variance of the wage instead of the director's or the agent's original utility function (for more details see Grönblom and Willner, 2013, pp 4–5). The principal-agent problem is ignored in **essay I** (Grönblom and Willner, 2008) but is present in the other essays.

Criticism against the economic man

The traditional principal-agent theory states that the agent should be compensated for the disutility of effort. The assumption is then that the agent does not get any benefit at all from performing tasks given by the employer. However, many authors, such as Frey (1997) have argued that individuals have more complex motives than what the principal-agent theory assumes.

Alger and Weibull (2013) give one explanation why individuals might have more complex motives than *homo economicus*. They show that there may be other factors than selfishness that drives a human being, for instance morality and a sense of doing what is right. An other extension is based on social preferences. These matter according to Fehr and Fischbacher (2002), who have conducted an experimental study; economists fail to understand fundamental economic questions if they ignore social preferences (Fehr and Fischbacher, 2002).

Other research results that suggest a need of a re-examination of traditional assumptions are related to the *homo ludens* payoff (also referred to as the play value of an activity) that some authors associate with the development of for example open source software (OSS) (see for example Bitzer, Schrettl, and Schröder, 2007). The phenomenon of *homo ludens* payoff indicates that individuals may have *intrinsic motivation* (see for example Frey, 1997; Frey and Benz, 2005; Murdock, 2002).

In the **essays IV–V** (Willner and Grönblom, 2009; Grönblom and Willner, 2013) we apply a principal-agent analysis that includes an intra-personal game with a potential intrinsic motivation (see section 4 for more details about intrinsic motivation).

3.2 Creative industries

New public management and universities

The arguments that are usually presented in favour of managerialism (stronger leadership), performance management, individual salaries and monitoring of how the working time is allocated, are generally economic. This thinking is related to the discussion of privatisation, in the sense that inefficiency under public ownership is derived from the lack of high-powered incentives (see Dixit, 1997). However, some activities cannot be privatised. The approach that is believed to increase cost efficiency in such cases is usually called the *New Public Management* (NPM) (see Frey and Benz, 2005). Creative industries are of special interest, because they have been affected by the NPM, despite the questionable relevance of the assumption of no intrinsic motivation (see Frey and Benz, 2005)⁹.

There are several reasons why policy makers are trying to reform creative organisations such as the universities. An ideology that sees a reduction in public spending as an end in itself has become dominant. The rationale for cuts in universities and other public-sector organisations is partly tax competition with other countries, and partly the notion that taxes because of high public spending reduce an individual's propensity to work. It is argued that the public sector, including the universities, would become cheaper and more effective if their activity was organised as in profit-maximising firms.

Marketisation of universities can be seen as an application of NPM (see Lynch, 2006). In **essay V** (Grönblom and Willner, 2013) we analyse marketisation (in the form of extrinsic incentives, managerialism and redundancies) and how it might affect the performance of the university, the work efforts, and employment.

The NPM is ultimately based on a neoliberal or Thatcherist vision that ignores externalities or the existence of public goods. Such views are based on the notion that all costs are allocated to the appropriate payer, because of the alleged equality between private and social costs and benefits. Profit maximising firms can under such conditions be allowed to act in their self-interest, but this does not mean that other organisations can mimic their behaviour without causing harm. The Thatcherist vision, however, implies no room for activities that are not self-supporting (or that are not meeting such quantitative targets that are set for services that are not sold on a market). But public production

⁹Agency theory is strained in such a context also because of problems related to multidimensional efforts (Holmstrom and Milgrom, 1991). See below for more details.

is needed precisely when the social benefits overshadow the potential customers' willingness to pay. This means, for example, that there can be departments within a university that may have to be cross-subsidised by other more financially successful activities, as some departments have lesser ability to attract external funding.

According to the thinking behind NPM, universities are in need of sticks and carrots, because of the alleged laziness and greediness of its employees. Allocative efficiency is usually improved in an oligopoly by competition in the form of new entrants, but this may not be feasible in the university sector. The budget of each departments is therefore often linked to past performance, often in the form of degrees. Many universities have in addition implemented individual financial incentives in the form of performance-related pay. Insofar as the state allocates a given budget to the university sector as a whole, the system means a zero-sum game where universities, departments and individuals are forced to compete with each other, possibly jeopardising research co-operation and innovation. There is also a risk that universities might compromise quality in order to achieve higher examination targets.

A more positive inclined empirical contribution on NPM is Schubert (2009), who analyses NPM and its efforts to increase efficiency in the public-sector research, including universities. He admits that there probably exists intrinsic motivation within universities. *Moral hazard* may not then apply to research, but to other tasks such as for example supervision and refereeing. However, while it may be true that NPM can increase publishing activity, this may happen at the expense of such tasks that involve disutility of effort.

In so far as academics are driven by a genuine interest in most of their work assignments, the question is, can sticks and carrots then really have a positive effect on the effort of the employee? If not, are the costs caused by continuous performance assessment and individual bargaining too high, and can they lead to short-termism or even reduce intrinsic motivation?¹⁰ We address these issues in **essays IV-V** (Willner and Grönblom, 2009; Grönblom and Willner, 2013), where we analyse such organisational reforms of the university system that have taken place in the spirit of the NPM. We argue that such reforms might be counter-productive, because of a failure to understand the mission of the university and the nature of the motivation of their employees.

¹⁰I discuss motivation crowding out in section 4 in more detail.

Definition of a university

Universities are often compared to other organisations, like primary or secondary schools, research institutes or business enterprises. But a university is not a school, despite a strong focus on teaching. Teaching is particularly at higher levels given by innovative and creative scholars, who, to remain experts in their fields, should do research. A university is not a research institute either, despite the fact that some of its research is often commissioned by outside forces such as business enterprises or the public sector. Ideally the researchers should be able to initiate research without the influence of other powers in the society¹¹. The university should, in other words, be characterised by *academic freedom*.

The university is today however perceived as akin to a firm, and the authorities try to impose control methods that are believed to be used within business enterprises (Frey and Benz, 2005). Universities therefore get managers who formulate performance requirements in terms of publications and interpersonal skills, or who decide on the prioritisation between research and teaching according to how resources are allocated by the state and by external sponsors.

The fact that most analogies are misleading does not mean that there are no similarities at all between universities and other types of organisations. In for example knowledge-based activities, such as in consultancy, architectural planning, hospitals, media, or performing arts, the leader is often a professional who not only manages but who also participates in the actual work (Sveiby and Risling, 1986). An editor in chief is, for example, therefore often a qualified journalist who writes editorials, and who should be able to enjoy respect and inspire confidence. Such activities should therefore be managed in spirit of creative cooperation (see Sveiby and Risling, 1986).

Although universities are in some way similar to knowledge-based companies, no university leader can be an expert in all its fields. Traditional universities are therefore characterised by collegiality, which means that they are governed by bodies (senates, congregations and councils on the faculty and departmental level) consisting of faculty, i.e. of the academic staff. Such universities can therefore also be characterised as producer cooperatives, like many knowledge-based private-sector companies (see for example Glaeser, 2002; Sveiby and Risling, 1986; James and Neuberger, 1981).

The employees' efforts are generally multidimensional in a university and they affect the organisation's performance either in the short or the

¹¹Note also that it might be more challenging to attract external funding to basic than to applied research.

long term. Rewards and punishments based on what can be observed in the short term might therefore lead to distortions (Holmstrom and Milgrom, 1987). Payment by result and other sticks and carrots related to observable performance measures can force employees to neglect such essential activities that are not immediately visible in numbers of exams.

Such problems are of course not unique just for creative industries. Business enterprises may face similar choices. It may for example be important for the long-run competitiveness of a firm to maintain a department for research and development. Some American companies were in fact earlier characterised as workplaces without external incentives (Holmstrom and Milgrom, 1991; Jensen and Murphy, 1990)¹².

Researchers are usually employees in an organisation rather than sellers of labour hours on a competitive spot market. According to theories based on *homo economicus*, employees are greedy and lazy and have to be exposed to economic incentives in order to make them perform as desired. However, commercial firms are also employers and not just buyers on a spot market. In other words, they are planned islands in the market, like public-sector organisations. They are applying organisation rather than market solutions when it comes to their own employees. It may be argued that commercial firms are exposed to competitive pressures that contribute to higher efforts among their employees. Such competition might not be feasible among non-commercial organisations. But this does not necessarily mean a lack of economic incentives, because of the competition that has always existed in such organisations, in the form of for example competition for positions and funding.

¹²This seems no longer to be the case. The CEO compensation has increased rapidly since 1995 (Bergstresser and Philippon, 2006).

4 Intrinsic motivation and motivation crowding out

4.1 Various aspects of intrinsic motivation

Intrinsic motivation for tasks and goals

The fact that economic research has drawn attention also to intrinsic motivation means that theory now recognises that an employee can perceive his or her organisation's success as a driving force. This is referred to as an *goal orientation* or *goal identification* (see for example Frey and Benz (2005); Murdock (2002)). This means that the employee cares about what the organisation stands for.

The employee can also find satisfaction in the work itself. This is referred to as *task involvement*, in which case performing the task provides satisfaction in itself (Frey, 1997; Fehr and Falk, Fehr and Falk; Frey and Benz, 2005; Murdock, 2002). Effort causes in other words no disutility. Goal identification and task involvement can also occur at the same time, but in the **essays III-IV** (Willner and Grönblom, 2009; Grönblom and Willner, 2013, 2014) we emphasise task involvement.

In **essay III** (Grönblom and Willner, 2014) we combine an agency model with the established intrinsic motivation model in James (2005). The model is otherwise compatible with standard microeconomic theory, but does take into account intrinsic motivation. There is no uncertainty in the model, but utility is derived from over-performing relatively to a norm (for more details see Grönblom and Willner, 2014, p.7). The intrinsic motivation analysis is then applied on a comparison of the performance of public ownership and privatisation.

Empirical findings

When it comes to the production of goods and services, Minkler (2004) finds that employees would work according to what they have agreed with the employer even without supervision (Minkler, 2004). He analysed worker motivation in an extensive US survey. Most of his respondents reported that they are very likely to work hard, even if it

was almost impossible for their employer to monitor them. The reasons for working hard was morale, intrinsic motivation, peer pressure, and positive incentives (such as promotions or wage increase). The most important of these were work morale and intrinsic motivation. Fairness considerations were important as well, and agreements with honest employers were more likely to be honoured. This suggests that economists might need to re-examine a fundamental assumption of the theory of the firm (Minkler, 2004).

The respondents' work motivation may have been exaggerated, but these results are consistent with experimental studies that indicate that a large proportion of individuals are characterised by *reciprocity*. This means that an employee is honest and follows an agreement to make the desired effort, provided that the employer is perceived as honest as well (Fehr and Fischbacher, 2002; Fehr and Falk, Fehr and Falk).

A phenomenon which resembles reciprocity is when people who are active in a producer cooperative (such as a university) are working harder if they expect other employees to do so too. They might, for example, react not as Cournot competitors, but rather by taking each other's reactions into account, like when there are non-zero conjectural variations in an oligopoly. Guttman and Schnytzer (1989) use this phenomenon to explain why Israeli kibbutzim, with no performance-related income, have generally been more effective than Soviet collective farms, which contrary to a common belief paid wages according to performance (Guttman and Schnytzer, 1989).

The development of OSS, which work as a public good and is (or was) developed freely by relatively young, motivated, and trained people is another interesting example. The play value of such an activity is associated to a desire to give a gift to the community (Bitzer, Schrettl, and Schröder, 2007)¹³. Software developers' work rarely provide any significant economic payoff, so the economic motive cannot be significant. The driving force is rather the ambition to address the lack of good software and make it freely available.

An internet-based questionnaire conducted by Hertel, Niedner, and Herrmann (2003) on the motivation of 141 software developers within a large OSS-project (the Linux kernel) shows similar results and suggest that the participants' involvement was determined especially by their identification as Linux developers and by pragmatic motives to improve their own software. Part of the software development was

¹³While it is desirable that certain goods and services are offered as public goods without a profit motive, it is often the case that key sectors in a society cannot be based entirely on volunteer work. Non-profit organisations that pay a reasonable wage are therefore also needed.

achieved in teams. The activity of these teams was determined by the participants' evaluation of the team goals as well as by their perceived indispensability and self-efficacy. This kind of behaviour indicates intrinsic motivation.

Drawbacks of intrinsic motivation

The presence of intrinsic motivation suggests that shirking may be a less significant problem than suggested by traditional theory, even in profit maximising business enterprises. But these results can be important especially from the standpoint of academic work, insofar as intrinsic motivation is even more prominent within creative professions. However, intrinsic motivation may not always be experienced as beneficial by the employer. Intrinsically motivated employees are often opinionated. Those who are committed to their work can sometimes be perceived as more difficult to handle than those who are driven solely by economic incentives, and whose loyalty has a price (Frey, 1997).

Intrinsic motivation can, however, make employees vulnerable in particular in profit maximising firms. The employer might abuse such employees by investing less in labour-related costs and more in other activities, in the hope that the employee remains intrinsically motivated. This might occur if efforts are partly substitutable and if the employee cares for the output (Glazer, 2004)¹⁴. This might also be the case in a non-profit maximising organisation that is forced to reduce its costs, for example if it is affected by the NPM. In other words, intrinsic motivation can leave the employees exploited by paying lower wages or no wages at all, while they are expected to complete their tasks anyway (Glazer, 2004; Willner and Grönblom, 2006).

4.2 Motivation crowding out: potential causes and effects

Sticks and carrots and other reasons for motivation crowding out

While economic incentives can improve employee performance in the right context (Prendergast, 1999), they can also crowd out intrinsic motivation or reduce the employee's performance (Frey, 1997; Fehr and Falk, Fehr and Falk; Minkler, 2004). It was earlier believed that the presence of intrinsic motivation would cause no fundamental change

¹⁴The motivated employees wage is decreased when their effort is increased.

to an agency model. For example Holmstrom and Milgrom (1987) argue that intrinsic motivation does not matter as long as the employer wants higher effort than what is optimal for the worker¹⁵. However, the presence of potential intrinsic motivation matters if it is incompatible with high-powered incentives¹⁶.

Bénabou and Tirole (2003) take into account mechanisms that cause such *motivation crowding out* (MCO), by assuming that employees have incomplete information about their own abilities and the requirement level of their tasks. They can partly be influenced by payments, but also by the manner in which the employer interferes in their work assignments. Such factors affect the employees' self-image and perception of the nature of their tasks, and hence their self-confidence, which has been shown to affect their intrinsic motivation (Bénabou and Tirole, 2002).

Employers often have a vested interest in their employees carrying out tasks successfully, and can therefore manipulate information so as to improve their self-confidence (Bénabou and Tirole, 2003). A sufficiently high wage that is fixed and unrelated to performance can be a way to signal trust, which in turn reinforces employee motivation. However, the employer can also use rewards and punishments to make a task seem less desirable. This might encourage efforts in the short term, but the rewards and punishments reduce the willingness to exert efforts voluntarily in medium term. According to Bénabou and Tirole (2003), such a leadership style might be a part of a power struggle in which the employer deliberately tries to undermine the employees' self-esteem (i.e. ego-bashing), perhaps in order to make the employees easier to control. The employer may, for example, fail to communicate crucial information or belittle the employee by undervaluing the perception of his or her tasks or duties. In the first case, the damage can be repaired if the agent receives the crucial information later, but the damage is irreversible in the latter case (Bénabou and Tirole, 2003).

When it comes to activities within creative industries such as research, visual arts, writing, and performing arts where material incentives are not in the foreground, employees might be subdued by exposure to sticks and carrots. Their pride might get wounded when perceiving themselves as manipulated. Insofar as intrinsic motivation is seen as linked to a propensity for trouble-making, leaders might be tempted

¹⁵The workers' optimal effort would be $\frac{k_1}{k_2}$ if the utility of effort is of the form $u = k_1e - \frac{1}{2}k_2e^2$, where k stands for disutility of effort, and e for efforts, and where k_1 and k_2 are positive parameters. Noting essential changes in the agency model provided that the employer desires an effort that is higher than $\frac{k_1}{k_2}$.

¹⁶There might also be an upper limit of effort that can not be exceeded. I do not discuss this in this dissertation, but the issue is important for future research.

to reform their organisation in a way that would crowd out intrinsic motivation, to make the organisation and its employees easier to control (see Frey, 1997). Therefore, to introduce sticks and carrots might be part of adapting the organisation to new goals, by making the employees feel manipulated and indifferent to their work (Bénabou and Tirole, 2003).

Bearing in mind the pitfalls of using false analogies, it nevertheless seems that universities and other organisations within creative industries might learn something from the business community as well. According to Deming (1993), there are four effective ways to kill a business enterprise: [1] by introducing competition among staff and between different departments; [2] by using rewards and punishments according to performances criteria that are difficult or impossible to measure; [3] by humiliating the personnel; [4] by creating fear. These methods would destroy job satisfaction and motivation (Deming, 1993).

In **essays III–IV** (Grönblom and Willner, 2014; Willner and Grönblom, 2009; Grönblom and Willner, 2013) we analyse models where performance-related pay can cause MCO. Insofar as there is strong intrinsic motivation in universities, economic incentives might be at best unnecessary (see Willner and Grönblom, 2009; Grönblom and Willner, 2013). In **essay V** (Grönblom and Willner, 2013) we treat MCO as similar to alienation, i.e. estrangement from work, task or duties. Note however also the counterintuitive results that are reached in the more conventional models of **essays I–II** (Grönblom and Willner, 2008; Willner and Grönblom, 2012)

Red tape

Employees in creative organisations tend to be involved in some necessary administrative duties, in addition to their proper work assignments. For example, collegial governance in universities involves senates, congregations, faculty councils, and departmental councils that are mostly composed of representatives of the academic staff. Other examples are curriculum planning and appointment decisions.

A rationale for managerialism has often been to streamline the decision-making and hence to reduce bureaucracy or red tape, but it seems that universities and other public-sector organisations have in fact become more bureaucratic by managerialism. For example, the reform activity in universities over the past two decades in Finland has meant less time for research and teaching, and an increasing number administrative tasks and administrators (see for example Professorit and Tieteentekijät, 2010).

Some red tape, such as time monitoring (“work-time allocation”), is imposed by external funders, such as the EU. However, if researchers are already working as much as they are able to, reporting and monitoring do not provide any value-added in the form of higher efforts, but can instead reduce the time for research, teaching and necessary administration. Such bureaucracy might also contribute to MCO, or at least to a feeling that the work has lost its meaning (Grönblom and Willner, 2009; Willner and Grönblom, 2006).

Fat cats

The label fat cats is generally used for, among others, managers enjoying bonuses and/or salaries and/or fringe benefits that are perceived as conspicuously high. These top executives also receive generous pensions and retirement packages, consisting of extra compensation not available to other company employees¹⁷. Such compensations can represent IRC, but fat-cat salaries that are sky-rocketing because of MCO also lead to genuine inefficiency, because of higher costs than without MCO.

The fact that NPM means mimicking alleged private-sector practices has attracted criticism in light of fat-cat salaries and other benefits that are unrelated to actual performance, or scandals such as the Enron-case (see Frey and Benz, 2005), but also recent stock-market crashes.

Earlier agency models of privatisation have not explained the fat-cat phenomenon¹⁸. The same is true with models that take potential intrinsic motivation into account. We find in **Essay III** (Grönblom and Willner, 2014) that fat-cat salaries can occur when a company in public ownership with intrinsic motivation and a fixed wage is privatised. The fat-cat salary is then a result of MCO, performance-related wages and a lower effort after privatisation.

¹⁷For a definition see for example Investopedia (2014). For studies on fat cats see for example Cammett (2005).

¹⁸Earlier agency models suggest that salaries would increase after privatisation and the introduction of performance-related pay, but this can be seen as an efficiency wage. The higher salary because of MCO is on the other hand a source of inefficiency.

5 Overview of the Essays

5.1 Essay I: Privatization and liberalization: costs and benefits in the presence of wage-bargaining

One of the main economic motives for privatisation and liberalisation is to reduce costs that are believed to be higher in a public monopoly. Examples of mechanisms that are believed to lead to higher costs are based on internal rent capture (Robinson, 2003; Bradburd, 1995; Bradburd, Pugel, and Pugh, 1991), interference from self-interested politicians (Boycko, Shleifer, and Vishny, 1996), and managerial inefficiency (Vickers and Yarrow, 1988). However, lower cost efficiency is not equivalent to lower welfare as expressed by the total surplus. The question is then whether higher costs overshadow the possible benefits of public ownership.

In this essay we analyse the welfare changes caused by privatisation and liberalisation when there is wage bargaining. Privatisation and liberalisation are then assumed to mean that welfare maximisation is replaced by profit maximisation in a Cournot-oligopoly with a given number of firms or with free-entry and in the presence of sunk costs. We also analyse the case of vertical separation. There is some amount of internal rent capture (IRC) both before and after privatisation and liberalisation. The model can be applied on labour intensive firms and organisations, such as in the service sector, but also on industrial production and infrastructure industries.

We find that wages after liberalisation will in most cases decrease, but not because of privatisation as such. Competition has a stronger impact on costs than ownership. Social welfare may increase after liberalisation with decentralised wage bargaining and free entry, if the employees' bargaining power is high, and if there is no need for vertical separation. The social costs of privatisation and liberalisation are more likely to dominate if sunk costs are high in the case of free entry, and will always dominate if there is central wage bargaining or if liberalisation requires vertical separation.

5.2 Essay II: Reforming a network industry: consequences for cost efficiency and welfare

Network industries such as electricity, gas, telecommunications and railways usually have an upstream natural monopoly infrastructure. Competition in such an industry cannot be achieved without vertical separation. Because of the benefits of vertical integration, vertical separation with liberalisation does not necessarily increase welfare, even if marginal costs are reduced. To increase welfare, the cost reductions have to overshadow the drawbacks of separation, such as excessive network charges and double marginalisation.

In this essay we analyse the social costs and benefits of restructuring a network industry through vertical separation, privatisation and downstream competition when potential cost differences are caused by managerial inefficiency rather than IRC (contrary to the focus of **essay I**). We ask whether the downstream activity really becomes more cost efficient, but we extend the analysis to upstream cost efficiency as well. We approach cost efficiency using an agency model.

We find that such a restructuring of a network industry generally reduces welfare. It turns out that market entry leads to higher marginal costs and to ambiguous welfare effects in the presence of a downstream agency problem. Even a profit-maximising monopoly is superior to vertical separation and competition in such an industry. A welfare maximising vertically integrated monopoly is the most cost effective solution, which also provides the highest welfare. Market entry on the other hand reduces marginal costs and enhances welfare if the agency problem occurs upstream, but the results are otherwise similar.

5.3 Essay III: Organisational form and individual motivation: public ownership, privatisation and fat cats

As discussed earlier, employees (including managers) may not be driven only by a desire to get high payments and to exert low efforts. They may also be driven by intrinsic motivation and this can affect the welfare comparison. In this essay we focus on the case of intrinsic motivation, mainly in the form of task involvement (see for example Frey, 1997; Fehr and Falk, Fehr and Falk; Frey and Benz, 2005; Murdock, 2002). However, an employee may also be driven by goal orientation or goal

identification (see for example Frey and Benz, 2005; Murdock, 2002). We consider this possibility in an extension.

We have industrial companies and the service sector in mind, but not organisations within creative industries (contrary to our focus in **essays IV-V**). Like in **essay II**, we apply agency analysis on public and private ownership, comparing costs and welfare under different regimes. But in this set-up we combine intrinsic motivation as modelled by James (2005) with an agency model. Employees then derive utility from overperforming relative to a social norm or target. Motivation crowding out (MCO) can occur if these are too high or too stringent, because it might then become impossible to overperform.

Conventional agency theory suggests that private ownership outperforms public ownership if wages are performance-related only in the former (it would follow for example from De Fraja, 1993). However, as explained in more detail in this essay, the ranking is reversed if both types of firms have performance-based pay. By contrast, we find that the possibility of intrinsic motivation and MCO can cause performance differences in both directions. Fat-cat salaries can occur if public ownership with intrinsic motivation and a fixed salary is followed by privatisation, performance-related pay, a lower effort, and MCO. We can conclude that no market structure nor ownership form is then superior under all circumstances. Other factors than ownership, such as how the employers handle motivation, can therefore have a greater impact on performance. The analysis also mentions factors that might influence the outcome of a particular type of organisation. For example, firms with wider objectives might be more likely to attract motivated workers. A high level of demand would also lead to higher intrinsic motivation.

5.4 Essay IV: The impact of budget cuts and incentive wages on academic work

In this and the next essay we proceed to analyse the academic world, assuming potential intrinsic motivation among its employees, as this is a reasonable assumption in creative industries. In recent years, universities have in most countries been exposed to a series of reforms that are supposed to address their alleged inefficiency. In the same way as in public-sector organisations in general, inefficiency is generally believed to be explained by a lack of high powered incentives (Dixit, 1997). Performance-based pay is then often justified by the notion that agents would not make sufficient efforts if their salary is fixed. According to the New Public Management (NPM), universities should

resemble private firms as much as possible (Newberry and Pallot, 2004; Hood, 1995)¹⁹. NPM has usually meant budget cuts, auditing, top-down management and hence lost professional autonomy, user charges (or vouchers), accountability for performance, management with an emphasis on economic incentives, and an erosion of tenure (see for example Gruening, 2001; Hood, 1995; Schimank, 2005). However, such reforms might not work as expected insofar as employers in creative industries do not conform to the assumptions of public-choice theory and agency theory.

In this essay we include intrinsic motivation in the form of task involvement into the utility function. We introduce intrinsic motivation as one side of the employee with a *multiple self* (see for example Elster, 1986; Schelling, 1980, 1983). One side is then assumed to be intrinsically motivated, whereas the other appreciates income and low efforts, like *homo economicus*. We then ask what kind of environment gives the intrinsic motivation the upper hand. We ask in particular whether intrinsic motivation can survive if employees are exposed to for example red tape, budget cuts, and extrinsic rewards and punishments.

It turns out that a fixed salary may under reasonable conditions (for example when the intrinsic motivation is strong) lead to higher creative efforts and a higher output per worker. We also find that budget cuts or output funding can reduce the effort. Performance-based pay leads to motivation crowding out if the salary is approaching the threshold level for quitting.

5.5 Essay V: Marketization and alienation in academic activity

This final essay is a book chapter in which we analyse the impact of marketisation of a university on work motivation, employment and performance. Marketisation represents an attempt to improve economic performance, by adopting private-sector principles on the public sector and on non-profit organisations (see for example Lynch, 2006). It is believed that marketisation would strengthen customer orientation and cost awareness (see for example Jongbloed, 2003). Only few studies have seriously questioned the benefits of such reforms by applying microeconomics.

In this essay we analyse how marketisation affects the performance of a university, by including potential intrinsic motivation in a

¹⁹In the US, the same phenomenon is referred to as the corporatisation of universities (Scheurman and Kriger, 2004).

principal-agent model in a similar way as in **essay IV**. We ask whether marketisation in the form of budget cuts, extrinsic rewards and punishment, as well as managerialism and eroded tenure, might lead to alienation in the sense of MCO. We ask whether these kinds of reforms would affect effort and employment, and in particular whether a leader with a strong position as consistent with managerialism would prefer employees with stronger or weaker intrinsic motivation.

The analysis suggests that rewards and punishments can be effective if the intrinsic motivation is weak, but otherwise they just lead to MCO. There is also MCO if the participation constraint is binding, because the employee then works as if without intrinsic motivation. The introduction of managerialism results in cost-cutting efforts, instead of a focus on the university's main tasks. The administration is more expensive because of increased top salaries. The leader would prefer employees with weaker intrinsic motivation and a possibility to make redundancies, because of rewards that are given for cost-cutting actions. Weaker intrinsic motivation can be achieved by increasing those tasks for which the employee has weak intrinsic motivation, such as bureaucracy or changes in the working environment. On the other hand, if the participation constraint is not binding, the wage would increase depending on the strength of the workers intrinsic motivation. We also find that there is a possibility that marketisation can erode the tenure system indirectly, because of the higher budget proportion that goes to the top-management salaries. The leader might also hire fewer employees with high intrinsic motivation or low disutility of effort after marketisation.

6 Concluding remarks and future research

My essays on privatisation and liberalisation challenge conventional views about how industrial production and infrastructure industries should be organised. The findings might be summarised as suggesting that no form of organisation is superior under all circumstances when it comes to cost performance and social welfare (see for example **essay I, II and III**).

My essays on universities and creative industries are not just about industries where privatisation and entry might not be feasible (see for example **essays IV–V**). Universities are interesting also because it has been suggested that traditional universities and other public-sector organisations can serve as role models also for the business community. Frey and Benz (2005) mention thorough and fair selection processes, career paths that discourage opportunists, employee autonomy within given rules, fixed-term leadership assignments, and restrictions on re-election and other constraints for the Executive Committee. They particularly emphasise that the intrinsic motivation should be supported by non-economic means of recognition and by fixed wages, to be able to avoid disagreements related to monitoring and measuring of the employees' performance (Frey and Benz, 2005).

The importance of a fair and transparent reward system cannot be emphasised enough. It is also essential for the motivated employee to be appreciated, and not rewarded exclusively through monetary benefits (and sometimes not even that), when the goals are reached. A system with a fixed salary, where all the workers know about the rules of the game, can provide a relaxing atmosphere for demanding work assignments and for striving towards common goals. The only way to get a higher wage is then to advance along the career ladder. A seemingly performance-based system that involves individual negotiations that will not affect the wages after all can on the other hand be perceived as frustrating and unjust. This might happen if the organisation cannot afford any increases, if the employer is out of touch with the employees' work assignments, or if wages have a ceiling and a floor. Such seemingly performance-based wages might encourage shirking and competition

among staff. It might also crowd out the intrinsic motivation (see for example **essay IV and V**).

Universities should promote creativity. Insofar as sticks and carrots do not work, other mechanisms should be used to encourage creativity. Dialogues between research teams, and with department management might enhance motivation (Philipson, 1990). The ability of senior staff to set an example for younger colleagues might also be utilised more often (Lagerkvist, 1990). To experience repeated reforms and a constant questioning of the university's right to exist is on the other hand tiresome, as is such competition that undermines fruitful cooperation between individuals and departments. The analysis in **essays IV-V** suggests that creativity should therefore be promoted through an open discussion climate rather than through sticks and carrots (see also for example Grönblom and Willner, 2009; Willner and Grönblom, 2006).

My analysis also suggests a number of future research questions. For example, it might be useful to extend the analysis to differential goods, for example in the case of Bertrand competition. Moreover, it would be interesting to analyse a potential trade-off between measures that decrease asymmetric information between management and employees (such as monitoring) and measures that strengthen the employee's intrinsic motivation. It would also be interesting to analyse how organisations that rely on different types of motivation compete against each other.

Another interesting future project would be to link the study of intrinsic motivation to Maslow's hierarchies of needs. I would ask what needs that have to be met before an organisation can rely on the employee's need of self-fulfilment or intrinsic motivation. In particular, would higher insecurity, which may work as part of a high-powered incentive scheme, crowd out the intrinsic motivation, which comes higher up in the hierarchy of needs?

I would also like to perform an empirical study of the problems of management in public and private companies in particular when it comes to potential intrinsic motivation. Self-selection is another interesting issue. What kind of workers are likely to be hired by the public respective private sector, and who is attracted by self-employment (see for example Christofides and Pashardes, 2002)?

When it comes to universities, it would be interesting to analyse how career predictability affects the gender balance. Would a US-style tenure-track for example imply a disadvantage for women? Other topics of interest that are missing from this dissertation are wider objectives that relate to more than the consumer surplus. The status of women can for example be included among the organisation's objectives (see for

example Stinson, 2004; Zetterberg, 1992). For example, Miettinen (2000) finds that wider objectives, including consumer welfare and gender balance, mattered among Finnish state-owned companies in the late 80s and in the 90s. The previous literature also suggest that privatisation may have implications for several socially relevant questions, including gender issues.

References

- Adamchik, V. and A. Bedi (2000). Wage differentials between the public and the private sectors: evidence from an economy in transition. *Labour Economics* 7, 203–224.
- Alger, I. and J. Weibull (2013). Homo Moralis — preference evolution under incomplete information and assortative matching. *Econometrica* 81(6), 2269–2302.
- Bénabou, R. and J. Tirole (2002). Self-confidence and personal motivation. *Quarterly Journal of Economics* 117(3), 871–915.
- Bénabou, R. and J. Tirole (2003). Intrinsic and Extrinsic Motivation. *Review of Economic Studies* 70(3), 489–520.
- Bergstresser, D. and T. Philippon (2006). CEO incentives and earnings management. *Journal of Financial Economics* 80, 511–529.
- Bitzer, J., W. Schrettl, and P. Schröder (2007). Intrinsic motivation in open source software development. *Journal of Comparative Economics* 35(1), 160–169.
- Björkroth, T. (2003). *Engine or Wheels of Our Prosperity? Infrastructure and Economic Growth and Effects of Liberalisation of the Finnish Telecommunications Market*. Åbo Akademi University Press.
- Björkroth, T., S. Grönblom, and J. Willner (2006). Liberalization and regulation of public utility sectors: theories and practice. In P. Bianchi and S. Labory (Eds.), *International Handbook on Industrial Policy*, pp. 188–197. Edward Elgar.
- Blackaby, D., P. Murphy, and N. O’Leary (1999). The payment of public sector workers in the UK: reconciliation with North American findings. *Economics Letters* 5, 239–243.
- Boardman, A., C. Laurin, and A. Vining (2003). Privatization in North America. In D. Parker and D. Saal (Eds.), *International Handbook on Privatization*, pp. 129–160. Edward Elgar.

- Borcherding, T., W. Pommerehne, and F. Schneider (1982). Comparing the efficiency of private and public production: the evidence from five countries. *Zeitschrift für Nationalökonomie Suppl.2*, 127–156.
- Boycko, M., A. Shleifer, and R. Vishny (1996, March). A Theory of Privatisation. *The Economic Journal* 106(435), 309–319.
- Boyd, C. (1986). The comparative efficiency of state owned enterprises. In A. Negandhi, H. Thomas, and K. Rao (Eds.), *Research in international business and international relations. Multinational Corporations and State-Owned Enterprises: A New Challenge in International Business*, Volume 1, pp. 179–194. Greenwich CT and Jai press.
- Bradburd, R. (1995). Privatization of Natural Monopoly Public Enterprises: The Regulation Issue. *Review of Industrial Organization* 10(3), 247–267.
- Bradburd, R., T. Pugel, and K. Pugh (1991, August). Internal Rent Capture and the Profit-Concentration Relation. *The Review of Economics and Statistics* 73(3), 432–440.
- Buehler, S. (2005). The Promise and Pitfalls of Restructuring Network Industries. *German Economic Review* 6(2), 205–228.
- Cammett, M. (2005, July). Fat Cats and Self-Made Men: Globalization and the Paradoxes of Collective Action. *Comparative Politics* 37(4), 379–400.
- Christofides, L. and P. Pashardes (2002). Self/paid-employment, public/private sector selection, and wage differentials. *Labour Economics* 9, 737–762.
- Crew, M. and P. Kleindorfer (2003). Postal privatization in the United States. In D. Parker and D. Saal (Eds.), *International Handbook on Privatization*, pp. 187–205. Edward Elgar.
- De Fraja, G. (1993). Productive efficiency in public and private firms. *Journal of Public Economics* 50(1), 15–30.
- Deming, E. (1993). Presidential Address: Systems must rely on cooperation to reach winning outcomes. *Amstat News, American Statistical Association* 202 (October).
- Dixit, A. (1997, May). Power of Incentives in Private versus Public Organizations. *American Economic Review* 87(2), 378–382.

- Dustmann, C. and A. Soest (1998). Public and private sector wages of male workers in Germany. *European Economic Review* 42, 1417–1441.
- Elster, J. (1986). Introduction. In J. Elster (Ed.), *The multiple self*, pp. 1–34. Cambridge University Press.
- Fehr, E. and A. Falk. Psychological foundations of incentives. *European Economic Review* 46(4–5), 687–724.
- Fehr, E. and U. Fischbacher (2002). Why social preferences matter — the impact of non-selfish motives on competition, cooperation and incentives. *Economic Journal* 112(March), C1–C33.
- Florio, M. (2006). *The Great Divestiture. Evaluating the Impact of the British Privatization 1979–1997*. The MIT Press.
- Florio, M. (2013). *Network Industries and Social Welfare. The Experiment that Reshuffled European Utilities*. Oxford University Press.
- Frey, B. (1997). On the relationship between intrinsic and extrinsic work motivation. *International Journal of Industrial Organization* 15(4), 427–439.
- Frey, B. and M. Benz (2005). Can private learn from public governance? *The Economic Journal* 115(507), F377–F396.
- Glaeser, E. L. (2002). The governance of not-for-profit firms. Technical report. Working Paper 8921.
- Glazer, A. (2004, March). Motivating devoted workers. *International Journal of Industrial Organization* 22(3), 427–440.
- Grönblom, S. and J. Willner (2008). Privatization and liberalization: Costs and benefits in the presence of wage-bargaining. *Annals of Public and Cooperative Economics* 79(1), 133–160.
- Grönblom, S. and J. Willner (2009). Destroying creativity? Universities and the new public management. In S. Sacchetti and R. Sugden (Eds.), *Knowledge in the Development of Economics*, pp. 115–133. Edward Elgar Publishing.
- Grönblom, S. and J. Willner (2013). Marketization and alienation in academic activity. In R. Sugden, M. Valania, and J. Wilson (Eds.), *Leadership and Cooperation in Academia*, pp. 88–106. Edward Elgar Publishing.

- Grönblom, S. and J. Willner (2014). Organisational form and individual motivation: public ownership, privatisation and fat cats. *Journal of Economic Policy Reform* 17(1).
- Gruening, G. (2001). Origin and theoretical basis of New Public Management. *International Public Management Journal* 4, 1–25.
- Guttman, J. and A. Schnytzer (1989, September). Strategic Work Interaction and the Kibbutz-Kolkhoz Paradox. *The Economic Journal* 99(397), 689–699.
- Haskel, J. and S. Szymanski (1993, May). Privatization, Liberalization, Wages and Employment: Theory and Evidence for the UK. *Economica, New Series* 60(238), 161–181.
- Hertel, G., S. Niedner, and S. Herrmann (2003). Motivation of software developers in Open Source projects: an Internet-based survey of contributors to the Linux kernel. *Research Policy* 32(7), 1159–1177.
- Hodge, G. (2000). *Privatization: An International Review of Performance*. Westview Press.
- Hodge, G. (2003). Privatization: the Australian experience. In D. Parker and D. Saal (Eds.), *International Handbook on Privatization*, pp. 161–186. Edward Elgar.
- Holmstrom, B. and P. Milgrom (1987, March). Aggregation and Linearity in the Provision of Intertemporal Incentives. *Econometrica* 55(2), 303–328.
- Holmstrom, B. and P. Milgrom (1991). Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design. *Journal of Law, Economics, & Organization* 7(Special Issue), 24–52.
- Hood, C. (1995). The “New Public Management” in the 1980s: variations on a theme. *Accounting, Organizations and Society* 20(2), 93–109.
- Investopedia (2014). Dictionary. www.investopedia.com.
- James, E. and E. Neuberger (1981). The university department as a non-profit labor cooperative. *Public Choice* 36, 585–612.
- James, H. (2005). Why did you do that? An economic examination of the effect of extrinsic compensation on intrinsic motivation and performance. *Journal of Economic Psychology* 26(4), 549–566.

- Jensen, M. and K. Murphy (1990). Performance Pay and Top-Management Incentives. *Journal of Political Economy* 98(2), 225–264.
- Jongbloed, B. (2003). Marketisation in higher education. Clark's triangle and the essential ingredients of markets. *Higher Education Quarterly* 57(2), 110–135.
- Kay, J. and D. Thompson (1986). A Policy in Search of a Rationale. *The Economic Journal* 96(381), 18–32.
- Lagerkvist, U. (1990). Den undanglidande gnistan. In G. Klein (Ed.), *Om kreativitet och flow*, pp. 26–39. Värnamo: Brombergs.
- Lynch, K. (2006). Neo-liberalism and Marketisation: the implications for higher educations. *European Educational Research Journal* 5(1), 1–17.
- Mankiw, G. and M. D. Whinston (1986). Free Entry and Social Inefficiency. *The RAND Journal of Economics* 17(1), 48–58.
- Martin, S. and D. Parker (1997). *The impact of privatisation. Ownership and corporate performance in the UK*. Routledge.
- Matsumura, T. (1998). Partial privatization in mixed duopoly. *Journal of Public Economics* 70, 473–483.
- McKenzie, R. and G. Tullock (2012). *The New World of Economics* (6th ed.). Mcgraw-Hill College.
- Meggison, W. and J. Netter (2001). From State to Market: A Survey of Empirical Studies on Privatization. *Journal of Economic Literature* 39(2), 321–389.
- Miettinen, T. (2000). Poikkeavatko valtionyhtiöt yksityisistä? Discussion papers no. 730. Research Institute of the Finnish Economy.
- Millward, R. (1982). The comparative performance of public and private ownership. In Lord Roll of Ipsden (Ed.), *The Mixed Economy*, pp. 58–112. Macmillan.
- Minkler, L. (2004). Shirking and motivation in firms: survey evidence on worker attitudes. *International Journal of Industrial Organization* 22(6), 863–884.
- Mueller, R. (1998). Public-private sector wage differentials in Canada: evidence from quantile regressions. *Economic Letters* 60, 229–235.

- Murdock, K. (2002). Intrinsic Motivation and Optimal Incentive Contracts. *RAND Journal of Economics* 33(4), 650–671.
- Newberry, S. and J. Pallot (2004). Freedom or coercion? NPM incentives in New Zealand central government departments. *Management Accounting Research* 15, 247–266.
- Newbery, D. (2001). *Privatization, Restructuring, and Regulation of Network Utilities*. The MIT Press.
- Parker, D. (2003). Privatization in the European Union. In D. Parker and D. Saal (Eds.), *International Handbook on Privatization*, pp. 105–128. Edward Elgar.
- Parker, D. (2006). The United Kingdom's privatisation experiment: the passage of time permits a sober assessment. In M. Köthenbürger, H.-W. Sinn, and J. Whalley (Eds.), *Privatization Experiences in the European Union*, pp. 365–399. The MIT press and CESinfo.
- Parker, D. (2009). *The Official History of Privatisation*, Volume I. Routledge.
- Philipson, L. (1990). Den kreativa gruppen. In G. Klein (Ed.), *Om kreativitet och flow*, pp. 116–122. Värnamo: Brombergs.
- Prendergast, C. (1999). The Provision on Incentives in Firms. *Journal of Economic Literature* 37(1), 7–63.
- Professorit and Tieteentekijät (2010). Yliopistouudistusta koskeva kysely 2010. Report. Helsinki: Innolink Research Oy.
- Raith, M. (2003). Competition, Risk, and Managerial Incentives. *The American Economic Review* 93(4), 1425–1436.
- Robinson, C. (2003). Privatization: analysing the benefits. In D. Parker and D. Saal (Eds.), *International handbook of Privatization*, pp. 41–59. Edward Elgar.
- Saal, P. and D. Parker (2000). The Impact of Privatization and Regulation on the Water and Sewerage Industry in England and Wales: A Translog Cost Function Model. *Managerial and Decision Economics* 21, 253–268.
- Schelling, T. (1980). The intimate contest for self-command. *The Public Interest* 60(Summer), 94–118.

- Schelling, T. (1983). Ethics, Law and the Exercise of Self-Command. In S. McMurrin (Ed.), *The Tanner Lectures on Human Values IV*, pp. 43–79. Salt Lake City: University of Utah Press.
- Scheuerman, W. and T. Kriger (2004). Introduction — The Concept of Corporatization: A Useful Tool or Feel-Good Slogan. *American Academic* 1, 7–19.
- Schimank, U. (2005). "New public management" and the Academic Profession: Reflections on the German Situation. *Minerva* 43, 361–376.
- Schubert, T. (2009). Empirical observations on New Public Management to increase efficiency in public research — Boon or bane? *Research Policy* 38, 1225–1234.
- Shaoul, J. (1997). A critical financial analysis of the performance of privatised industries: the case of the water industry in England and Wales. *Critical Perspectives on Accounting* 8, 479–505.
- Stinson, J. (2004). Why Privatization is a Women's Issue. *Canadian Woman Studies* 3–4.
- Sveiby, K. E. and A. Risling (1986). *Kunskapsföretaget — seklets viktigaste ledarutmaning?* Liber.
- Vickers, J. (1995). Competition and Regulation in Vertically Related Markets. *The Review of Economic Studies* 62(1), 1–17.
- Vickers, J. and G. Yarrow (1988). *Privatisation: An Economic Analysis*. The MIT press.
- Williamson, O. (1963). Managerial discretion and business behavior. *The American Economic Review* 53, 1032–1057.
- Willner, J. (1996). A Comment on Bradburd. "Privatisation of Natural Monopolies". *Review of Industrial Organization* 11(6), 869–882.
- Willner, J. (2001). Ownership, efficiency, and political interference. *European Journal of Political Economy* 17(4), 723–748.
- Willner, J. (2003). Privatization: a sceptical analysis. In D. Parker and D. Saal (Eds.), *International Handbook on Privatization*, pp. 60–86. Edward Elgar.
- Willner, J. (2006). Privatisation and public ownership in Finland. In M. Köthenbürger, H.-W. Sinn, and J. Whalley (Eds.), *Privatization Experiences in the European Union*, pp. 141–162. The MIT press and CESinfo.

- Willner, J. and S. Grönblom (2006). Hur påverkar den nya offentliga förvaltningen forskningen och undervisningen? In P. Anckar (Ed.), *Economics, Education and Evolution. Essays in Honor of Olle Anckar*, pp. 116–135. Åbo Akademi University Press.
- Willner, J. and S. Grönblom (2009). The impact of budget cuts and incentive wages on academic work. *International Review of Applied Economics* 23(6), 673–689.
- Willner, J. and S. Grönblom (2012). Reforming a network industry: Consequences for cost efficiency and welfare. *International Review of Applied Economics* 27(2), 265–284.
- Zetterberg, J. (1992). Effects of changed wage setting conditions on male-female wage differentials in the swedish public sector. Working paper.

Sonja Grönblom

Non-Profit Maximising Organisations and The Impact of Privatisation, Liberalisation and Public-Sector Reform

In this dissertation I analyse private and public-sector firms and organisations, including universities, in particular in the presence of potential intrinsic motivation. I deal with both industrial productions, including infrastructure industries with vertical relations, and service provision, and in particular in the case of universities. Costs may differ across firms or organisations in both types of industries because of, for example, internal rent capture and agency problems. I also ask whether there are other factors than ownership and competition, such as the approach to employee motivation that may affect the performance of commercial firms and non-profit organisations. When it comes to public services, I also analyse the rationale behind public-sector reforms and the impact of these reforms on organisational performance and social welfare, with an emphasis on the so-called New Public Management. I deliberately use and amend models with standard components such as Cournot oligopoly, Nash bargaining and constant absolute risk aversion.



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