



# The corporate governance of Benedictine abbeys

## What can stock corporations learn from monasteries?

Katja Rost, Emil Inauen and Margit Osterloh

*Institute of Organization and Administrative Science, University of Zurich,  
Zurich, Switzerland, and*

Bruno S. Frey

*Institute for Empirical Research in Economics, University of Zurich,  
Zurich, Switzerland*

### Abstract

**Purpose** – This paper aims to analyse the governance structure of monasteries to gain new insights and apply them to solve agency problems of modern corporations. In an historic analysis of crises and closures it asks, if Benedictine monasteries were and are capable of solving agency problems. The analysis shows that monasteries established basic governance instruments very early and therefore were able to survive for centuries.

**Design/methodology/approach** – The paper uses a dataset of all Benedictine abbeys that ever existed in Bavaria, Baden-Württemberg, and German-speaking Switzerland to determine their lifespan and the reasons for closures. The governance mechanisms are analyzed in detail. Finally, it draws conclusions relevant to the modern corporation. The theoretical foundations are based upon principal agency theory, psychological economics, as well as embeddedness theory.

**Findings** – The monasteries that are examined show an average lifetime of almost 500 years and only a quarter of them dissolved as a result of agency problems. This paper argues that this success is due to an appropriate governance structure that relies strongly on internal control mechanisms.

**Research limitations/implications** – Benedictine monasteries and stock corporations differ fundamentally regarding their goals. Additional limitations of the monastic approach are the tendency to promote groupthink, the danger of dictatorship and the life long commitment.

**Practical implications** – The paper adds new insights into the corporate governance debate designed to solve current agency problems and facilitate better control.

**Originality/value** – By analyzing monasteries, a new approach is offered to understand the efficiency of internal behavioral incentives and their combination with external control mechanisms in corporate governance.

**Keywords** Corporate governance, Non-profit organizations, Religion, Germany, Switzerland

**Paper type** Research paper



The authors are grateful for most helpful support by Patdre Gregor Jäggi, Reto Krismer, Padre Wolfgang Renz (Monastery Einsiedeln), Prior Guido Muff (Monastery Engelberg), Abbot Benno Malfer (Monastery Muri-Gries), Wolfgang Gehra (Monastery Plankstetten), Padre Nestor Werlen (Capuchin Monastery Brig) Philip R. P. Coelho (Ball State University), Mathias Erlei (Clausthal University of Technology), Nicolai J. Foss (Copenhagen Business School), Donald C. Hambrick (Pennsylvania State University), Martin Held (Protestant Academy Tutzing), Alfred Kieser (University of Mannheim), and Kent D. Miller (Michigan State University) and for most helpful comments by two anonymous reviewers. The authors thank Robert Findlow for improving the English.

---

### Why are monasteries of interest for management?

The corporate sector has been plagued by huge scandals related to excessive manager compensation and fraudulent bookkeeping. Agency theory – the dominant theoretical approach within the corporate governance literature – derives its strength from being able to predict how people change their behavior in response to changes in incentives. The theory suggests that external control mechanisms will act on behalf of absentee firm owners by linking the interest of the owners with the interest of the chief executive officers (CEOs) and thus preventing such scandals (Fama and Jensen, 1983; Jensen and Meckling, 1976; Jensen and Murphy, 1990a, b). While agency theory provides powerful theoretical tools for predicting the effects of changes in incentives, at the same time, however, the theory tend to constrain their attention to a narrow and empirically questionable view of human motivation, the classical homo oeconomicus (Frey, 1999). This paper intends to show that this narrow view of human motivation may severely limit progress in understanding incentives and that it is useful to learn how institutions beyond corporations – in our case monasteries – undertake their governance. Religious orders provide an interesting environment to deepen the understanding of governance since they have been successful through time and history. Some of these institutions provided structural models for the organization of factories and business administrations (Kieser, 1987, p. 105; Weber, 1930, p. 154) and are extremely stable. In the principal agent analysis of monastic governance we are investigating a new field.

In fact, for modern stock corporations many of the suggested external incentives have led to new problems (Bebchuk and Fried, 2004; Jensen *et al.*, 2004; Stefani, 2008). Performance-related executive compensation has contributed significantly to a lack of transparency in pay policy and in some cases even to a loss of control through manipulation of incentives (Aboody and Kasznik, 2000; Efendi *et al.*, 2006; Johnson *et al.*, 2006; Frey and Osterloh, 2005; Yermack, 1997). The draconian sanctions of the Sarbanes-Oxley Act are bound to lead to an explosion in costs without slowing the explosion in salaries and fraudulent bookkeeping (Romano, 2005). According to the majority of findings, independent boards have not prevented the fact that managers can expropriate shareholders by also entrenching themselves (Boyd, 1994; Core *et al.*, 1999; David *et al.*, 1998; Lambert *et al.*, 1993; Main, J., 1991; Westphal and Zajac, 1994).

These weaknesses of actual corporate governance practice suggest that it might be useful to approach these issues from alternate perspectives (Benz and Frey, 2007). In the following, corporate governance is understood to be the set of processes, customs, policies, laws, and institutions affecting the way corporations are directed, administered and controlled. From this point of view internal and external control mechanism are an essential element of corporate governance. Recent literature suggests that external discipline should be complemented by internal behavioral incentives (Davis *et al.*, 1997; Frey and Osterloh, 2002, 2006; Osterloh and Frey, 2006; Reberrioux, 2007; Sundaramurthy and Lewis, 2003; Wiseman and Gomez-Mejia, 1998). Internal behavioral incentives like the desire to reciprocate, or the desire to avoid social disapproval also shape human behavior. By neglecting these motives authors may fail to understand the levels and the changes in behavior. Moreover, internal behavioral incentives interact in important ways with external control mechanisms. As a consequence, economists may even fail to understand the effect of external control on behavior if they neglect internal behavioral incentives. In particular, psychological

---

economics (Frey and Benz, 2004), motivation psychology (Deci and Ryan, 2000), embeddedness theory (Baker, 1990; Granovetter, 1985) or prospect theory (Kahneman and Tversky, 1979) show that because of the existence of internal behavioral incentives, external control may backfire and reduce the agents' performance or compliance with rules.

Analyzing the efficiency of internal control mechanisms represents an important gap within the corporate governance literature, since compelling empirical evidence is still rare. The control mechanisms presently used to govern modern stock corporations are strongly reminiscent of Adam Smith's "invisible hand" theory, in which buyers, i.e. shareholders, sellers, CEOs, or employees, are free to move silently through the market, constantly creating, and destroying relationships. With this approach, economic actors act outside a social context and therefore react almost slavishly to external incentives (Granovetter, 1985). Such governance does not include internal arrangements, such as "voice" (Hirschman, 1970), expressed as democratic participation rights. It also does not consider loyalty and trust (Granovetter, 1985; Hirschman, 1970), expressed in the protection of firm-specific investments, or in the image of the CEO as the steward of the firm, or in the belief that rare managerial talents will make efforts for a fixed compensation. However, internal arrangements can guard against trouble and facilitate better control (Baker, 1990; Granovetter, 1985; Lubatkin *et al.*, 2007; Uzzi, 1996). In this paper, we will discuss the efficiency of internal control mechanisms by empirically analyzing how Benedictine monasteries have historically approached their specific governance problems. Monasteries can be viewed as pioneers of governance which have had a major impact on the development of the economy in Europe. On the one hand, the great economic success of numerous monasteries in medieval times serves as an example of efficient organization of commercial enterprises. On the other hand the creation of wealth led to the temptation of misuse. In a seminal paper, Kieser (1987, p. 103) analyses the monasteries as "first deliberately designed organization in the Occident." They became enormously rich through their rational labor organization (e.g. the division of labor) and their work morale. The resulting wealth was a significant reason why governance became this important: for example, some abbots and monks lined their own pockets and certain monasteries were undisciplined. In a historic analysis of crises and closures we ask, if Benedictine monasteries were and are capable of solving agency problems. We show that monasteries not only developed special systems to check these excesses but also established these basic governance instruments very early in their history and therefore were able to survive for centuries.

Studying the governance of monasteries offers the following advantages: first, monasteries were, and still are, confronted with similar principal agency problems as stock corporations: a core problem is that individuals occupying leading positions tend to accumulate uncontrolled discretion. However, monasteries address agency problems differently from stock corporations. Monastic leaders are disciplined either through members exerting their participation rights, or through internal control mechanisms, like the development of value systems and special supervisory concepts. Second, monasteries are experts in internal control mechanisms: their organizational members are committed to one institution for their entire lives. Limited exit-options are compensated by more "voice." When members perceive a decrease in the quality of their organization, they have the possibility of improving the situation. Furthermore, there are hardly any institutions which have implemented and tested normative

---

systems to this degree. Third, Benedictine monasteries, with over 1,000 years' history, have more experience in solving agency problems than stock corporations. They offer an extensive set of tools, tested in practice over several centuries, for exploring the theories mentioned above.

We work with a dataset of all Benedictine abbeys[1] that have ever existed in Bavaria, Baden-Württemberg, and German-speaking Switzerland. In a historic analysis of crises and closures we ask, if Benedictine monasteries were and are capable of solving agency problems. If so, how are they doing this, and what are the insights for other organizational forms? Building on the historical context (the fundamental principles have all been present since the late Middle Age) we analyze in detail the current shape of Benedictine Governance to gain new insights for modern corporate management theory and practice. Our analysis seeks to contribute to the corporate governance literature by providing a set of empirical results to understand the efficiency of internal behavioral incentives and their combination with external control mechanisms. The Benedictine monasteries are analyzed from an economic perspective, enhanced by psychological and behavioral aspects. The theoretical foundations are principal agency theory, psychological, and political economics, as well as embeddedness theory. This constitutes a new approach for analyzing monasteries.

### **Are monasteries capable of solving agency problems?**

When asking what stock corporations can learn from Benedictine monasteries, the aim is not to compare and appraise the two institutions as a whole. Stock corporations are for-profit organizations, i.e. economic communities, while monasteries are non-profit organizations, i.e. life partnerships. The objectives of the two organizational forms differ fundamentally. The main objective in stock corporations is financial value added. The main objective in monasteries is to operate as a steward of god (Galbraith and Galbraith, 2004; Regula Benedicti, 2006). In monasteries, economic success is not an aim in itself, but a precondition for the search and glorification of god (Schweizer Benediktinerkongregation, 1986). The product, capital, and personal markets developed in different ways[2]. Despite these obvious differences, they have many similar problems in common, making it possible to fruitfully learn from each other.

#### *Agency problems in stock corporations and monasteries*

Both organizations have the core problem that persons occupying leading positions tend to exercise uncontrolled discretion (Berle and Means, 1932). In stock corporations, managers can expropriate shareholders by entrenching themselves in their positions and staying on the job, even if they are no longer competent or qualified to run the firm (Shleifer and Vishny, 1989). In monasteries, there is no possibility of distributing the wealth (Hansmann, 1980), but there is a strong incentive to make life as luxurious and enjoyable as possible. In the long history of monasteries, it was not uncommon for abbots and even entire monasteries to live a life of luxury (Sacra, 1986; Kieser, 1987). The next section empirically investigates whether monasteries succeeded in developing efficient governance mechanisms against bad abbots and their exercise of uncontrolled discretion.

*Empirical analysis: did monasteries solve their agency problems?*

An important function of corporate governance is to control and discipline management (Daily *et al.*, 2003). The same goal is shared by the Holy See and the umbrella organizations of the religious orders, where disciplining abbots and their convents is a central task (Schmidtchen and Mayer, 1997). There are at least two indicators of good corporate governance common to firms and monasteries: the survival rate and the reasons for liquidation. A long average lifetime, coupled with minimal control problems, indicates crisis-proof, effective governance mechanisms.

In order to analyze the survival rate of monasteries and the reasons for liquidation, we have collected data on all Benedictine abbeys that ever existed in Baden-Württemberg, Bavaria, and German speaking Switzerland. The sample covers a total of 134 monasteries: 19 in Switzerland, 35 in Baden-Württemberg and 80 in Bavaria[3]. The empirical examination is limited to Benedictines with one common language, since the governance of monasteries varies between the different religious orders, gender, regions, and cultural areas. Benedictines are one of the largest orders and have greatly influenced the development of western economics and work ethics (Faust, 1997; Kieser, 1987). Data for this analysis were obtained from historical chronicles (Germania Benedictina, 1970, 1975, 1999; Helvetia Sacra, 1986) and the web site of the House of Bavarian History (2007).

As of 2008, the 134 monasteries have an average lifetime of almost exactly 600 years[3]. We have modified this average lifetime in three ways. First, the period before 1000AD is ignored because a specific Benedictine monasticism had not evolved until then (Helvetia Sacra, 1986). Second, temporary closures are excluded because a monastic community can survive for years without actually having a monastery building: the time during the 30 Years' War or the Third Reich being prominent examples. Third, abbeys, which were completely closed and then reopened, are counted as separate organizations. With these modifications, the lifespan is reduced to 463 years, while the number of monasteries is increased to 151[3]. This is a first indication of efficient governance in Benedictine monasteries.

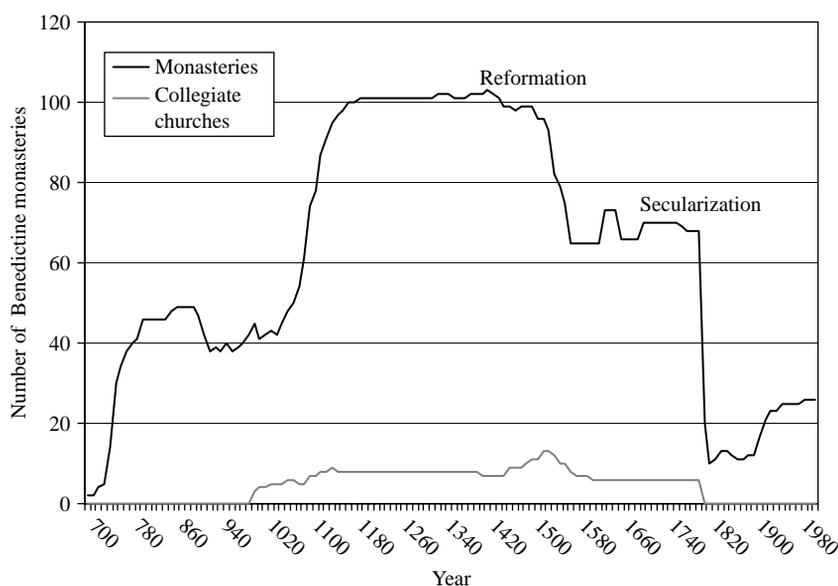
Table I analyzes the reasons for closures. The table lists 119 institutions after the year 1000AD, and disregards temporary closures, which implies 151 foundations.

Reason for closures	Number of Benedictine monasteries	In %	Average lifetime in years	Year of the last event
No closure	26	17.2	277	–
<i>Non agency problem-related closures</i>				
Voluntary closure	6	4	540	1883
External institutional factors	79	52.3	568	1862
	85	56.3	–	–
<i>Agency problem related closures</i>				
Mismanagement	20	13.2	387	1862
Change into other organizational form	11	7.3	313	1763
Control failure	9	6	325	1773
	40	26.5	–	–
Total closures	125	82.8	–	–

**Table I.**  
Survival and closure  
of monasteries

17.2 percent of the monasteries were never closed down; these institutions still exist today. About 4 percent of the monasteries were voluntarily closed. A large proportion of all monasteries, 52.3 percent, broke up due to institutional factors. These monasteries fell victim to secularization or were violently closed during the reformation. Beside these outstanding events, a revolt of the peasants or the plague could also lead to break ups and forced shutdowns. Endogenous factors, e.g. excessive wealth during secularization, or a loss of reputation during the reformation, might have influenced the political climate against the monasteries and thus contributed to the closures. In the end, the monastic institutions and their members had little or no influence on the outcome of these incidents. Closures occurred regardless of how good the monastic management was. Hence, we simply speak of external institutional factors. The massive influence of these forces is also visible in Figure 1, which shows the number of existing monasteries and collegiate churches over time. It can be seen that the Benedictines never recovered from the reformation in the sixteenth century and Secularization in the nineteenth century. In the twentieth century, the number of monasteries was slowly on the rise again.

Focusing on agency problems, 13.2 percent of the monasteries broke up due to mismanagement, including lack of discipline, insolvency, or recruitment problems. An analysis of the particular monasteries shows that the breakups were mainly due to a combination of all three factors. About 6 percent disappeared due to control failures, including hostile takeovers. The changes in governance structures are revealing: over 7 percent of the monasteries studied changed into collegiate churches. To a large extent, these changes indicate the monastic leaders' desire for wealth, since collegiate churches permit private ownership and other liberties. As shown in Figure 1, governance changes were most prominent when the monasteries were economically weak and discipline failed, such as occurred during the wars of the tenth century and



**Figure 1.**  
Absolute number of  
Benedictine monasteries  
and collegiate churches  
over time

---

the reformation period. As further shown in Table I, monasteries unable to survive due to agency problems (40 monasteries or 26.5 percent) have a shorter average lifetime (387, 313, and 325 years) than those that broke down due to external institutional influences or were liquidated voluntarily (568 and 540 years). The most recent agency problems date back to the years 1763 (changing into a collegiate church), 1773 (control failure) and 1862 (mismanagement). Thus, in the last 150 years, agency problems were of little importance, which is consistent with the development of efficient governance in Benedictine monasteries.

The findings on the reasons for closures indicate that a maximum of one quarter (26.5 percent) of the monasteries studied were unable to survive due to agency problems. The vast majority of monastic houses were closed due to external institutional factors, or they still exist today. On average, monasteries survived 460 years, which suggests that agency problems in Benedictine monasteries are relatively small. These institutions are extremely stable.

In order to substantiate that Benedictine governance significantly contributes to the stability of monasteries, three aspects are of great importance:

- (1) the basic governance model was formed very early and has been more or less constant over time;
- (2) the adherence to a codex prevents the Benedictines from drifting away into other governance structures; and
- (3) the external governance mechanisms of the Benedictine Order contribute to this stability, without removing autonomy and tradition from the individual monasteries.

These three aspects are now discussed in turn.

The cornerstones of monastic governance can be dated back to the first millennium. Since then, the organizational structure has hardly been modified and is composed of the following positions: abbot and prior (the “CEOs”), officials (the “executive board”), the Convent (the religious community of a monastery, including padres and spiritual brothers), Consilium (the “advisory board”), donators (the “financiers”) and employees. Other stable elements of Benedictine governance are the autonomy of the institutions and their adaptability to time and region, their non-profit orientation, and the lifelong tenure of the monks to a particular monastery.

There are some discontinuous elements in Benedictine governance. They refer to disputes over the structured routine, including the time allotted to prayer, reading and work, the culture of learning, including selection processes, education, and the value system of the Benedictines. There are also disputes over the compensation system, which varied from little collective ownership to excessive individual ownership. Of course, the historical horizon and current affairs influence the management culture and life in the monastery too. Nevertheless, the Benedictines have always returned to the ideals set out by holy Benedict and his rules, a book of precepts written for monks living in a community (Eckert, 2000; *Regula Benedicti*, 2006). Adherence to a codex kept the monasteries from drifting away into other governance structures and helped them to master difficult times.

The external control mechanisms of the Benedictine governance were continuously developed. The external controllers, i.e. umbrella organizations, as well as the legal sequence of courts, show constant refinement and perfection, whether they were

---

dealing with the total autonomy of a monastery or a friendly exchange and loose ties, or subsequent organization into congregations and the confederation. The Benedictines have developed sophisticated mechanisms of governance, in particular carefully planned “visitations” from members of the order outside the monastery in question. The next section examines these governance mechanisms. Agency problems seem to be negligible in today’s Benedictine monasteries. This can be attributed to external control and its interplay with internal control[4].

### **How the Benedictines solve principal-agency problems**

Why do Benedictine monasteries survive so well and seldom fall prey to mismanagement, hostile takeovers or change of governance? This section introduces the specific governance of the Benedictines in detail in order to contrast it with the governance of modern stock corporations. Since there is hardly any literature on the governance of monasteries, the following sources are used: rule, law and constitutions of abbeys and congregations, and expert interviews with Guido Muff (Prior of the Abbey of Engelberg), Reto Krismer (Managing Director of the Abbey of Einsiedeln), Wolfgang Gehra (Managing Director of the Abbey of Plankstetten), and Benno Malfèr (archabbot and supreme visitor of the Swiss Benedictine Congregation and abbot of the Abbey of Muri Gries). While the following chapter refers to an exemplary monastery today, the historical analysis shows that the basic governance instruments were established very early on (Inauen and Frey, 2008). With the formation of the umbrella organizations, their jurisdiction and visitations (starting from the thirteenth century) the foundations of Benedictine Governance were laid. This detailed analysis is a current picture of an extremely stable and approved institution. The first paragraph argues that monasteries build on strong internal control through a common value system, careful selection, socialization, participation, and monitoring. The second paragraph points out that the Benedictines backed up their internal arrangements with external arrangements, e.g. periodical monitoring or jurisdiction. Figure 2 shows a graphical overview of the governance of a Benedictine monastery.

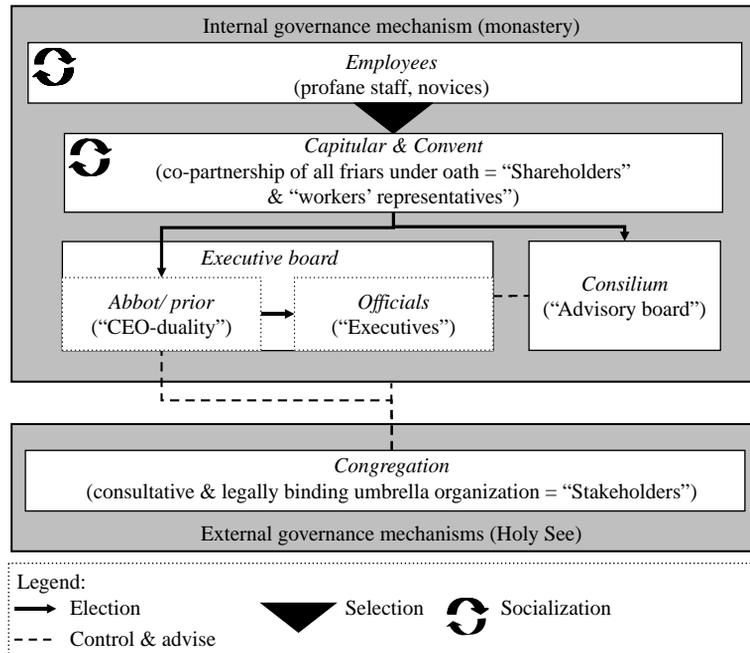
#### *Internal governance mechanisms*

Internal control in the Benedictine monasteries can be divided into two main categories. First, monasteries build on common value systems, careful selection and rigorous socialization processes. These arrangements can be explained by embeddedness theory and psychological economics. Second, monasteries grant participation rights to their monks and build largely on internal monitoring processes. Participation rights are in line with the recommendations of political economics. These internal monitoring processes in monasteries reduce agency problems.

##### *Embeddedness in common value systems*

If the novice wants to stay, he shall be led to the above mentioned room of the novices and there be scrutinized again very patiently (Regula Benedicti, 2006)[5].

While stock corporations establish control and supervisory institutions in order to monitor decision-making, monasteries refer to common value systems in order to discuss possible solutions and come to conclusions (McGrath, 2007). These value systems go far beyond “codes of best practice.” The Benedictine value system is based on three cornerstones: the bible, the rule of St Benedict, and the tradition of a particular



**Figure 2.**  
Governance mechanisms  
of the Benedictines

monastery. Besides, being based on the bible, the rule of St Benedict is the most important influence in the daily life of a monastery. It contains universal rules similar to, e.g. the categorical imperative of Kant. Benedict's writings reverberate in personal and economic interactions. Its universal character prevents bureaucratic decisions and actions. Only when problems arise, does monastic or canon law come into effect.

The emphasis of Benedictines on implementing value systems, instead of using control- and supervisory institutions, is in line with the assumptions of psychological economics, therein in particular with behavioral economics, e.g. fairness-reciprocity theory (Dufwenberg and Kirchsteiger, 2004; Falk *et al.*, 2003; Rabin, 1993) or the relevance of social (dis)approval (e.g. Akerlof, 1980; Fehr and Falk, 2002). Individuals react to a large extent based on their beliefs about other people's intentions. From this perspective, common value systems signal friendly intentions and "people feel obligated to respond to positive behavior received with positive behavior in return" (Groves *et al.*, 1992, p. 480). Control and supervisory institutions, on the other hand, are more likely to signal neutral (economic exchange related) or even "unfriendly" intentions, in the sense that these might signal distrust or insinuate the selfish nature of the employees (McGregor, 1960; Osterloh and Weibel, 2006). The empirical literature supports these insights. For example, Falk *et al.* (2003) show in an experiment that proposers of fair intentions are met with more voluntary co-operation by responders than unfair intentions. Further evidence comes to the same conclusion: beliefs about fairness matter (Blount, 1995; Cox, 2004; Sobel, 2005). The effect of social (dis)approval and its interaction with social norms and incentives has to be mentioned. An appropriate design of values, which fosters social approval, makes individuals happier and affects their behavior (Fehr and Falk, 2002; Gächter and Fehr, 1999).

---

To ensure that common value systems are suitable in guiding the individual behavior of the members of a monastery, the Benedictines build on careful selection and rigorous socialization processes.

*Selection.* Candidates for a monastic career go through a tight selection process in order to test their suitability. The selection process is more or less identical in every Benedictine monastery. There are four stages: every candidate, independent of application credentials, is welcome to live in a monastery for a few months. During these months, the candidate learns about the value system of the Benedictines and has the opportunity to consider his motives carefully before becoming a full member. Thus, instead of pre-selecting employees, monasteries make use of self-selection. The decision to stay is, in part, handed back to the candidate. One could argue that today's selection process is less important, because only individuals with the right motives choose a monastic career. However, many aspirants do not fulfill the requirements. One year probation follows. Within this year, the novice learns the background of the value system, the Holy Scripture and church law. The other monks scrutinize his suitability.

Temporary profession follows, lasting three years, and containing a monastic apprenticeship, or the beginning of studies. The underlying reason is that human beings sometimes change their minds. Profound education is required to provide a sound basis for decision making. Only then can full membership, called solemn profession, be celebrated. Solemn profession involves the unconditional commitment of both parties. In each case, the Convent, i.e. the religious community of a monastery, has to give its blessing (Schweizer Benediktinerkongregation, 1986). Following the final oath to obey the Benedictine way of life, the new entrant becomes a full member of the monastic community and has broad participation rights.

The selection process of monasteries is in line with the theoretical assumptions of the embeddedness approach (Baker, 1990; Granovetter, 1985; Lubatkin *et al.*, 2007; Uzzi, 1996). Since purposive actions are embedded in ongoing systems of social relations, such systems contain valuable information about one's own past. This happens in collaboration with the individual or through information from a trusted source that has dealt with that person and found him or her trustworthy. In contrast to second-hand information, e.g. certifications or testimonials, this information is cheaper, richer, more detailed and accurate. First-hand information therefore enables the selection of trustworthy individuals. Empirical studies also suggest that CEOs promoted internally, compared to CEOs hired from outside, not only increase the future performance of a firm (Furtado and Rozeff, 1987; Rost *et al.*, 2008; Worrell and Davidson, 1987; Zajac, 1990), but also earn approximately 15.3 percent less (Murphy and Zábojník, 2004). Finally, professional service firms, like the Boston Consulting Group or McKinsey, successfully practice the embeddedness approach as a selection tool in order to find suitable, trustworthy employees. Promotion decisions are fully dependent on first-hand information from numerous individuals about the behavior of a candidate.

*Socialization.* In order to ensure living and working together successfully, careful socialization, and the composition of an organizational identity is crucial. Two rules are essential: first, with respect to the Benedictine values, dialogue among the monks is fostered, and any disagreements are addressed and solved. Second, a monastic partnership depends on a fulfilling life environment. Regarding the monks' professional lives, the Benedictines see work as a vocation and not only a professional activity;

work is considered part of one's personal growth. This ethic has its sources in the first millennium, where Benedict saw work as a way of finding inner peace (Kieser, 1987).

The Benedictines promote equality of treatment in daily life in order to integrate new members. From the very beginning, the novice is a part of the community; he participates in the same structures, including the daily routine, prayers, and meals. Being treated as an equal in a life and work community facilitates the establishment of common values (Wenger and Snyder, 2000).

The Benedictines also use extensive learning programs, in which their codex and their knowledge are used to shape a common identity and facilitate the growth and development of all members (Reiber, 2003). Apart from joint prayers, monasteries have implemented other learning practices, like daily readings at the communal dinner table. These readings deal with diverse topics, like the bible, politics, philosophy, or the history of the Benedictines and the respective monastery. Besides, education, these institutions strengthen the awareness of belonging to something bigger than the particular monastery. The socialization lasts a lifetime and encourages an intrinsic transfer of the overall value system.

According to psychological economics, the socialization principles of the Benedictines increase the purpose and the intrinsic motivation of each organizational member, and thus the welfare of the whole organization (Deci, 1975; Frey and Osterloh, 2002). The incomplete contract literature emphasizes that, in complex environments, such as organizations, complete contracts cannot be written or enforced (Milgrom and Roberts, 1992). Therefore, honesty, intrinsic job satisfaction, and intrinsic motivation lead to better results from the contracted parties than relying on monitoring or on monetary incentives (Gintis and Khurana, 2006; Jensen, 2006). Experiments confirm that employees exert more effort if labor contracts are regarded primarily as a "gift exchange" rather than as a disciplinary tool (Akerlof, 1982; Irlenbusch and Sliwka, 2003). As far as knowledge work is concerned, "management by intrinsic motivation" (Frey and Osterloh, 2002; Osterloh *et al.*, 2002) might even become the most important factor in sustaining a competitive advantage.

*Members' voice.* The abbot (the "CEO" of a monastery) carries the main responsibility for spiritual and economic concerns, represents the monastery in external affairs, delegates duties, and is in charge of the well-being of every friar. Unlike stock corporations, the monks possess substantial participation rights and monitor the management (Schweizer Benediktinerkongregation, 1986; St Ottilien Benediktinerkongregation, 2004):

Decisive for election and nomination [of the abbot] shall be the merit of his life and the wisdom of his doctrine (Regula Benedicti, 2006).

*Participation.* The Convent consists of all padres and brothers with a solemn profession. Every one of these monks has equal rights and may vote in elections. The Convent has four major tasks: first, the Convent is responsible for decision making in important business affairs, e.g. the acceptance of a novice as a full member or the expansion of a monastery through acquisition. Second, the Convent democratically elects the Abbot (recently, the tenure of an abbot in some abbeys has been restricted to 12 years instead of being lifelong) and employee representatives for the "advisory board," i.e. the Consilium. Third, the Convent evaluates whether a proposed Prior (the vice "CEO") is eligible. However, in order to make sure that the team in charge

---

works in harmony, the Prior is selected and nominated by the Abbot. Fourth, members of the Convent have the right to advance requests and to give opinions. Additionally the dialogue among the monks is fostered today (Eckert, 2000):

He (the abbot) shall hear the advice of the brothers and then ponder the matter by himself (Regula Benedicti, 2006).

*Monitoring.* Monasteries complement participation processes with internal monitoring processes. Similar to some stock corporations, monasteries have a two-tier board structure, i.e. there is a management board (all executive directors, i.e. the abbot and the officials) and a separate advisory board (some executive and some “non-executive” directors, i.e. the Consilium). In contrast to stock corporations, the Consilium is a supervisory board consulting the management team. It has the power to decide in rare, specific cases only. The Consilium’s main task is to consult with the management. They discuss contentious issues without having the final responsibility for major business decisions. The Consilium exclusively consists of insiders, i.e. elected members of the Convent (employee representatives) and nominated members of the management team (officials) (Schweizer Benediktinerkongregation, 1986). The reliance on insiders stands in sharp contrast to agency theory (Lorsch and Maciver, 1989; Mizruchi, 1983; Zahra and Pearce, 1989), where only outsiders are believed to be independent of the firm management and thus are taken to be able to prevent agency problems (Fleischer *et al.*, 1988; Waldo, 1985).

According to political economics, the voice of employees, i.e. relying on inside monitoring and comprehensive participation rights, is important in preventing agency problems. Employees have personal experience with managers and are thus highly suitable for selecting and controlling the management (Benz and Frey, 2007; Hirschman, 1970). Employees invest in firm-specific knowledge (Osterloh and Frey, 2006). These investments cannot be protected, or only at high cost, by contracts *ex ante* when the parties enter into a relationship. As a consequence, employees have no incentive to undertake firm-specific investments if their bargaining position is not protected after they enter into the labor contract (Blair and Stout, 1999; Freeman and Lazear, 1996; Zingales, 1998). However, the most relevant asset for a company’s sustained competitive advantage is firm-specific knowledge, which needs to be generated, accumulated, transferred, and protected (Foss and Foss, 2000; Grandori and Kogut, 2002; Penrose, 1959). Democratic election systems create strong competition for filling unfilled positions (Benz and Frey, 2007; Schelker and Eichenberger, 2004). Democratic constitutions actively promote the principle of checks and balances. This does not prevent one person or branch from dominating for a period of time, but it ensures that the other persons or branches can reassert themselves in due time (Frey, 1983).

The substantial participation rights in monasteries stand in sharp contrast to the principle of hire and fire that exists in many stock corporations: padres and brothers have a voice in running the monastery, they can discipline the abbot and the management team (the officials) and thus prevent fraudulent behavior. The (lifelong) tenure of monks is compensated by considerable voting rights and co-determination. They provide a strong incentive to invest in firm-specific know-how (Osterloh and Frey, 2006).

---

A large literature emphasizes the importance of these ideas for stock corporations. The advantages of inside control are empirically supported. Contrary to the argument that outside directors are more effective in defending the interests of shareholders, most research finds that a higher proportion of outside directors increases executive pay and, along with it, agency problems (Boyd, 1994; Conyon and Peck, 1998; Core *et al.*, 1999; David *et al.*, 1998; Lambert *et al.*, 1993; Main, B.G., 1991; Westphal and Zajac, 1994). Some authors argue that, due to a higher extent of firm-specific knowledge, insiders can control the management more effectively (Baysinger and Hoskisson, 1990; Baysinger *et al.*, 1991). The idea of democratic institutions and participation rights has been transferred to stock corporations (Hansmann, 1990). The case of monasteries suggests that CEO duality does not necessarily weaken corporate governance. Agency theory argues that CEO duality generally promotes CEO entrenchment by reducing the effectiveness of board monitoring (Finkelstein and Daveni, 1994). Advocates of stewardship theory argue that the joint structure provides unified firm leadership and removes any internal or external ambiguity with respect to who is responsible for firm processes and outcomes (Anderson and Anthony, 1986; Donaldson, 1990; Lipton and Lorsch, 1993). The empirical evidence is accordingly mixed: some empirical studies support that CEO duality is positively related to executive compensation and thus increase agency problems (Beatty and Zajac, 1994; Boyd, 1994; Core *et al.*, 1999; Fiss, 2006; Gray and Cannella, 1997; Sridharan, 1996). Other studies show a negative effect on executive compensation; thus, CEO duality weakens agency problems (Conyon and Peck, 1998; Westphal and Zajac, 1994). Benedictine monasteries suggest that a combination of both theories may solve agency problems best: on the one hand, the responsibility of the abbot in monasteries is extensive. He has to act like an “entrepreneur” because he cannot shift his responsibility to the board. On the other hand, his power is reduced through competitive elections and extensive internal monitoring.

#### *External governance mechanisms*

The interplay between internal and external control mechanisms in Benedictine monasteries is of particular interest for stock companies. History shows that the internal control mechanisms of monasteries sometimes fail. For example, in situations where the abbot and the Convent join in enriching themselves, or simply do not care about the economic situation, external control is important. The external control is hierarchically organized and consists of jurisdiction and periodical monitoring. Each monastery is embedded in a hierarchical structure of Congregations, the Benedictine Confederation and the Holy See. The Congregation is the umbrella organization of the monasteries, in most cases within a geographical region. It is responsible for the monitoring of a monastery in its area of accountability. Abbots and some delegates of the respective houses represent each Congregation. These representatives form the Congregational chapter and elect the archabbot as president. The archabbot is recruited from an associated monastery to guarantee internal know-how. Each Congregation is a part of the Benedictine Confederation. The Confederation is an independent institution and facilitates the exchange of experiences between Congregations and the Holy See, but has no direct influence on the decision process.

*Jurisdiction.* Benedictine monasteries belong to the Catholic Church and its law, and depend on the Holy See. Besides, church and constitutional law, the legal norms

---

of the Congregation are binding for a particular monastery. The jurisdiction of the Congregation is the first instance outside the monastery where disputes are settled. The Congregation supervises the election of abbots and organizes the “visitations” of monasteries. They complement this law with their own statutes, the so-called *Consuetudines* (1991).

*Periodical monitoring.* As the legal rules are very general with respect to economic issues, the so-called “visitation” is the most important tool for disciplining the Convents. Every four to five years, delegates of the Congregation visit a community to evaluate the condition of the monastery. The visitation considers not only the economic situation of a monastery and its fields of activity, but also the spirit and the discipline of the community and their members, the personal relationships between monks and their superiors, and the abuse of authority (Schweizer Benediktinerkongregation, 1986). In addition to auditing, the visitors make use of questionnaires and interviews to detect any problems and failures. They analyze processes in-depth, ask specific questions and refer to aspects, which pass unnoticed in the normal daily routine. Archabbot and first “visitor” of the Swiss Congregation Benno Malfer says: “The most important function of “visitations” is to induce reflection, and not to exercise control and discipline. Visitations contribute assistance and exchange between the monasteries”[6]:

Should he [the foreign monk] speak out a reasonable critique, [...] the abbot shall consider wisely, if God probably had sent him exactly for just that reason (Regula Benedicti, 2006).

The organization of the external control in monasteries corresponds to insights in political economics. In democratic public government, independent institutions control the heads of government and the members of the cabinet – the court of accounts or, in the USA, the General Accounting Office (Benz and Frey, 2007). These courts are usually part of the judicial branch, but are sometimes directly elected by the citizens. Empirical evidence indicates that such courts successfully restrain local governments from abusing their power and induce them to act more in accordance with the citizens’ interests (Schelker and Eichenberger, 2004). In contrast to other forms of external control mechanisms, e.g. the elimination of CEO duality, independent boards of directors, pay-for-performance, or draconic punishments envisaged by the Sarbanes-Oxley Act, this kind of external control does not reduce intrinsic motivation of the management or the employees. Crowding-out of intrinsic motivation only occurs if people perceive an external intervention as controlling and hence as reducing their self-determination (Deci *et al.*, 1999; Frey and Jegen, 2001).

### **Discussion: what can stock corporations learn?**

Our paper starts with the observation of unsolved agency problems in stock corporations. While monasteries pursue a twofold strategy, which utilizes both external and internal control elements since medieval times, the modern corporation focuses on an accentuation and tightening of external control mechanisms. Historically, corporate governance has relied mainly on external regulations enforced by the government to resolve corporate governance issues (Grant, 2003). For example, in 1916 the taxation of corporate profits and in 1919 the requirement of creating profits for shareholders became a law. As a result simple book keeping developed into more complex accounting issues and a new challenge was created for

---

managers to maximize profits for the shareholders while at the same time reducing the tax liability. These early rulings did not reduce agency-problems in stock corporations and ultimately ended with the stock market crash of 1929. Later, the 1933/1934 Securities Act attempted to protect shareholders by regulating initial security offerings and secondary security trading, e.g. registration at the securities and exchange commission (SEC), financial disclosure, audited initial and periodic financial statements, and prohibition of manipulative practices. Once again, the illusion of good corporate governance prevailed and ended with the stock market crash of 2001, a string of corporate implosions and scandals resulting in record bankruptcies and millionaire severance packages for executives (e.g. Bratton, 2002). Frauds were stemming from accounting misclassification (e.g. WorldCom), complex partnership arrangements (e.g. Enron) or inflating revenues (e.g. Global Crossing).

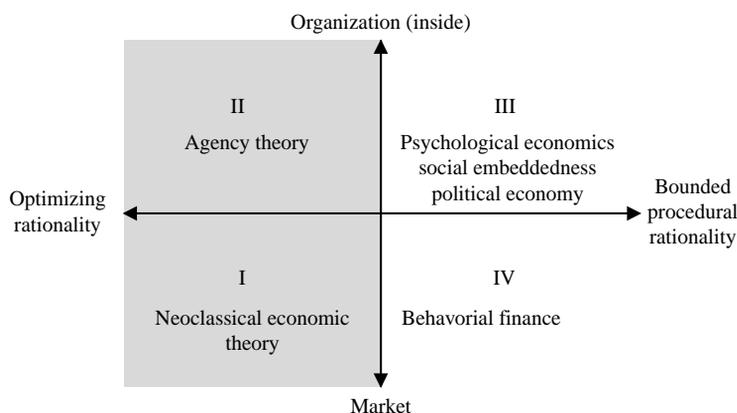
In 2002, the Sarbanes-Oxley-Act was almost unanimously approved by Congress and aims to protect shareholders once again. As in the past the act focuses exclusively on external governance mechanisms.

Even more external measurements are planned. For example, the SEC currently considers a proposal that would abolish the rule that shareholder resolutions relating to the day-to-day operation of the company are prohibited from proxy statements in order to make companies more transparent. It is highly questionable whether this measure makes companies more effective because it could result in poor company profits by destroying the autonomy of firms and thus firm specific knowledge. However, the history of corporate governance has shown that to rely solely on external measures is ineffective. A culture of self-policing, integrity and honesty will be necessary to bring public confidence back into the culture. “[...] To clean up their act, CEOs don’t need independent directors, oversight committees or auditors absolutely free of conflicts of interest, but simply need to do what’s right [...]” (Buffett, 2002, p. 19).

As a consequence, applied governance still disregards internal control mechanisms, such as voice, and intrinsic motives, such as loyalty or trust. This disregard is surprising because in recent times the control of internal behavior is even discussed in the economic literature which neglected it before. Figure 3 shows the historical development of economic theory by using two concepts of the neo-classical model (Rojot, 2002, p. 284):

The first of the individual economic agent maximizing under constraints and the second of the market as a global mechanism of aggregation and adjustment of individual decisions making them mutually compatible.

The figure conceptualizes both concepts as the far ends of two different axes (Rojot, 2002). The *x*-axis refers to the rationality of individual behavior and runs from the full rationality of the homo oeconomicus (i.e. individuals can be expected to be objectively rational when faced with a choice) to procedural bounded rationality (i.e. individual behavior is also a function of sociological and psychological processes of the individual facing the choice) at the other end. The *y*-axis refers to the coordination of individual behavior and runs from the market (i.e. the market is the only mode of allocation of resources by mutually adjusting individual decisions) to the organization (i.e. hierarchies are other modes of coordinating behavior and are important to understand what occurs in markets). The two axes result in a matrix with four



Source: Rojot (2002)

**Figure 3.**  
Recent expansions of  
economic theory in order  
to explain rationality of  
behavior and mechanism  
of coordination

quadrants. Quadrants I and II contain traditional economic theories, i.e. neoclassical economic theory in Quadrant I and agency theory in Quadrant II. Both theories keep the postulate of individual full rationality. They solely recommend external measurements, notably for corporate governance. Quadrants III and IV indicate new developments in economic theory by adopting a concept of procedural bounded rationality. Quadrant IV shows a traditional model of the market. It has no room for what occurs inside organizations. The most innovative and surprising approach in terms of economic theory, is located in Quadrant III. These recent developments in economic theories, e.g. psychological economics, relax both constraints of neo-classical theory. Two important consequences follow. First, economic markets are socially embedded in pre-existing rules and devices. Second, coordination between individuals can take other forms than the ones on markets. For these reasons the exclusive coordination between individuals by prices is insufficient and contracts are needed to support markets. However, contracts are incomplete and not self-enforcing. That is why theories of Quadrant III recommend new tools: external control mechanisms have to be supplemented by internal control mechanisms which guide appropriate social behavior, e.g. by collective rules which are considered as legitimate and fair. These internal mechanisms must be applied in a flexible way because no rule is able to exhaustively foresee all its practical applications. Therefore, internal control works differently than external control. It operates at two levels: first, there exists a generally known rule-convention which guides appropriate social behavior. Second, since all cases of application cannot be foreseen the rule has to be supplemented by collective decision processes identifying the correct application of the rule-convention.

The monastery approach shows that such internal arrangements help to avoid problems and facilitate better control. Monasteries build on generally known rule-convention, e.g. the rule of St Benedict and the tradition of a particular monastery. They supplement these rules by collective institutions, e.g. the Convent or the Consilium. The corporate governance of stock corporations can learn from monasteries, which emphasize these internal mechanisms and demonstrate their operability in their history. These historically evolved governance mechanisms are in line with new developments of economic theories in Quadrant III, e.g. new proposals by

psychological or political economics and embeddedness theory. In view of current corporate scandals, monasteries show that alternative models serve to enhance corporate governance. Beside the plea to find new ways of solving agency problems, the example of monasteries offers concrete ideas and applications.

Hardly any organizations exist which internalize value systems in such a profound and perfect way. Corporations may refer to their own tradition. Many companies are proud of their “firm culture.” It serves to attract suitable employees, customers and shareholders, and should guide their behavior. Monasteries demonstrate that common values can be fostered if they are an integral part of living and working together. This requires rigorous and credible selection criteria and continuous socialization processes. Stock corporations could learn by relying more on first-hand information instead of relying on second-hand information, like grades, testimonials, or multiple-choice aptitude tests. Many companies hire top managers from outside. The example of monasteries shows that internal promotions can take advantage of comprehensive information about a candidate’s past behavior. Companies often engage in sporadic “team building” measures, such as corporate parties, corporate excursions, or corporate training. Firms can learn from monasteries to socialize, inform and educate their employees with regular and sustainable tools, such as lunch seminars or the examination of their own identity. Companies often fill vacancies based on job advertisements and precise job descriptions. The example of monasteries shows that work is more than a career – it is seen as a vocation that fosters one’s personal and spiritual growth, emphasizes cooperation rather than competition and focuses on increasing work effort and efficiency.

Monasteries are specialists in the accumulation of internal know-how. While tenure of employees within companies is certainly not lifelong, and often quite short, firms should encourage firm-specific investments by giving appropriate incentives to their employees. The monastery approach demonstrates that democratic elections of the CEO, internal monitoring processes, and employee representation on an advisory board foster and protect firm-specific investments by reducing agency problems. Stock corporations could pre-select suitable CEO candidates by relying on first-hand information from numerous individuals about the behavior of these candidates. Before election, these candidates could – like politicians – present their strategic vision for the firm. Such systems create strong competition for unfilled positions and are based on personal experience with the managers. Further, stock corporations could democratically elect employee representatives for an advisory board. Its main task should be to consult with management, i.e. to discuss contentious issues without having the final responsibility for major business decisions. This kind of inside monitoring and participation rights actively promotes the principle of checks and balances and pays attention to firm-specific knowledge without shifting the responsibility from management to employees.

Finally, stock corporations can learn from monasteries regarding the organization of external control. External control institutions in stock corporations should obtain their independency by counting on shareholder representatives. In contrast to monasteries, which operate as life partnerships and thus are mainly responsible for insiders, the main objective in stock corporations is financial value added for shareholders. In stock corporations, shareholder representatives could supervise the election of the CEO and directly elect the members of the audit committee and the

---

auditing firm. Further, shareholder representatives could monitor a stock corporation with periodical “visitations” in order to control the firm culture, the personal relationships between employees and management, and any abuse of authority.

### **Limitations**

When considering what corporations can learn from Benedictine monasteries, it should be kept in mind that the two differ fundamentally. Benedictine practices certainly have to be modified before they can advantageously be put into practice in corporations. Three additional limitations of the monastic approach need to be addressed: the tendency to promote groupthink, the danger of dictatorship and the critical subject of life long commitment.

First, since monasteries build on strong and uniform value systems, individuals not only increase their social identity with the group, but groups also become more cohesive (Tajfel, 1981). The theory of groupthink hypothesizes that cohesive groups are most likely to experience groupthink (Janis, 1972, 1982). Groupthink includes the belief in the inherent morality of the group and stereotypes of out-groups. It leads to the systematic and emotional devaluation of ideas which were not discovered or launched within their own social collective (Turner and Pratkanis, 1998). Second, social comparison theory hypothesizes that cohesive groups are more susceptible to expert power (Festinger, 1954), leading to dictatorship and abuse of power (Coleman, 1990). Thirdly, the life long commitment to a monastery has to be considered. Strong commitment is desirable, but not in such an absolute way as in monastic institutions. While giving voice and developing loyalty, they (consciously or unconsciously) tend to build exit barriers. When exit costs are exorbitant, hindering people from leaving, negative outcomes, like discouragement, will occur (Hirschman, 1970).

For these reasons, stock corporations have to balance the advantages and disadvantages of common value systems and commitment. Value systems should be strong enough to select and socialize appropriate employees and open enough to avoid dogmatism and unbalanced power. Stock corporations can prevent group cohesion by promoting the diversity of their employees and their managers (Flap, 1988). Commitment should be fostered, without implementing exit barriers and constraining the employees too much.

Finally, the monastic constitution has some drawbacks and can learn from stock corporations. Many monastic institutions, which have to face substantial challenges, do so. While we argue that both institutions can learn from each other, we highlight the many aspects in which modern corporations can profit from the history proven monastic organization of Benedictine abbeys.

### **Conclusion**

The monastery approach suggests that stock corporations can prevent agency problems by complementing external discipline with internal behavioral incentives and by utilizing democratic, supportive external control mechanisms. Internal behavioral incentives complement agency theory’s conception of the homo oeconomicus by referring to intrinsically motivated actors, who not slavishly react to external incentives. Internal arrangements facilitate a better control through voice in the form of democratic rights of participation and through loyalty and trust expressed in the protection of firm-specific investments. Democratic, supportive external control

mechanisms expand agency theory's conception of the homo oeconomicus by referring to self-determined actors, who mainly react to external incentives which are in their interest and do not crowd out their intrinsic motivation.

### Notes

1. This analysis refers to Benedictine abbeys, which are autonomous monasteries within the Benedictine order. Where no specific abbeys are mentioned, we use the more common term monastery. This term is broader and also includes affiliated houses.
2. For an analysis, the emerging field of religious economics is a good starting position (e.g. Azzi and Ehrenberg, 1975; Ekelund *et al.*, 2006; Held *et al.*, 2007; Iannaccone, 1992, 1997, 1998; McCleary and Barro, 2006; Miller, 2002; Stark and Finke, 2000a). There are also a few related economic papers about the Catholic Church or even the monastic organizations (e.g. Ekelund *et al.*, 1996; Ferrero, 2002; Padovano and Wintrobe, 2008; Salmon, 2007; Schmidtchen and Mayer, 1997; Stark and Finke, 2000b).
3. More information and the data can be made available by the second author (emilinauen@access.uzh.ch).
4. To substantiate our qualitative historical analysis, we interviewed two experts on this subject: Father Nestor Werlen, historian in the Capuchin Abbey of Brig and Father Dr Gregor Jäggi, historian in the Benedictine Abbey of Einsiedeln. Archabbot Benno Malfer, who has been active for eight years as the supreme "visitator" of the Swiss Benedictine Congregation confirms the good state of today's abbeys. He cannot remember any trouble concerning mismanagement, control failure, or management enrichment. A media analysis of the Benedictine abbeys in Baden-Württemberg, Bavaria, and German speaking Switzerland of recent decades also supports this appraisal.
5. Obviously, the rule of the Saint Benedict cannot be transferred to modern times without modification. Nevertheless, one can feel the 'spirit' of these norms and rules in the abbeys and their governance structures of today.
6. Interview with Archabbot Benno Malfer, November 7, 2007.

### References

- Aboody, D. and Kasznik, R. (2000), "CEO stock option awards and the timing of corporate voluntary disclosures", *Journal of Accounting and Economics*, Vol. 29 No. 1, pp. 73-100.
- Akerlof, G.A. (1980), "A theory of social custom, of which unemployment may be one consequence", *The Quarterly Journal of Economics*, Vol. 94 No. 4, pp. 749-75.
- Akerlof, G.A. (1982), "Labor contracts as partial gift exchange", *Quarterly Journal of Economics*, Vol. 97 No. 4, pp. 543-69.
- Anderson, C.A. and Anthony, R.N. (1986), *The New Corporate Directors: Insights for Board Members and Executives*, Wiley, New York, NY.
- Azzi, C. and Ehrenberg, R. (1975), "Household allocation of time and church attendance", *Journal of Political Economy*, Vol. 83, pp. 27-56.
- Baker, W.E. (1990), "The social structure of a national securities market", *American Journal of Sociology*, Vol. 89 No. 4, pp. 775-811.
- Baysinger, B.D. and Hoskisson, R.E. (1990), "The composition of boards of directors and strategic control – effects on corporate-strategy", *Academy of Management Review*, Vol. 15 No. 1, pp. 72-87.

- 
- Baysinger, B.D., Kosnik, R.D. and Turk, T.A. (1991), "Effects of board and ownership structure on corporate research-and-development strategy", *Academy of Management Journal*, Vol. 34 No. 1, pp. 205-14.
- Beatty, R.P. and Zajac, E.J. (1994), "Managerial incentives, monitoring, and risk bearing – a study of executive-compensation, ownership, and board structure in initial public offerings", *Administrative Science Quarterly*, Vol. 39 No. 2, pp. 313-35.
- Bebchuk, L.A. and Fried, J.M. (2004), *Pay without Performance. The Unfulfilled Promise of Executive Compensation*, Mass, London.
- Benediktinerkongregation, S. (1986), *Satzungen und spirituelle Richtlinien der Schweizer Benediktinerkongregation*, Kloster Engelberg, Engelberg.
- Benz, M. and Frey, B.S. (2007), "Corporate governance: what can we learn from public governance?", *Academy of Management Review*, Vol. 32 No. 1, pp. 92-104.
- Berle, A.A. and Means, G.C. (1932), *The Modern Corporation and Private Property*, Harcourt Brace & World, New York, NY.
- Blair, M.M. and Stout, L.A. (1999), "A team production theory of corporate law", *Virginia Law Review*, Vol. 85 No. 2, pp. 247-328.
- Blount, S. (1995), "When social outcomes aren't fair: the effect of causal attributions on preferences", *Organizational Behavior and Human Decision Processes*, Vol. 63 No. 2, pp. 131-44.
- Boyd, B.K. (1994), "Board control and CEO compensation", *Strategic Management Journal*, Vol. 15 No. 5, pp. 335-44.
- Bratton, W. (2002), "Enron and the dark side of shareholder value", *Tulane Law Review*, Vol. 76, pp. 1275-362.
- Buffet, W. (2002), "Who really cooks the books?", *The New York Times*, July 24, p. 19.
- Coleman, J. (1990), *The Foundations of Social Theory*, Harvard University Press, Cambridge, MA.
- Consuetudines (1991), *Constitution of the Abbey of Engelberg*, Consuetudines, Abbey of Engelberg.
- Canyon, M.J. and Peck, S.L. (1998), "Board control, remuneration committees, and top management compensation", *Academy of Management Journal*, Vol. 41 No. 2, pp. 146-57.
- Core, J.E., Holthausen, R.W. and Larcker, D.F. (1999), "Corporate governance, chief executive officer compensation, and firm performance", *Journal of Financial Economics*, Vol. 51 No. 3, pp. 371-406.
- Cox, J.C. (2004), "How to identify trust and reciprocity", *Games and Economic Behavior*, Vol. 46 No. 2, pp. 260-81.
- Daily, C.M., Dalton, D.R. and Rajagopalan, N. (2003), "Governance through ownership: centuries of practice, decades of research", *Academy of Management Journal*, Vol. 46 No. 2, pp. 151-8.
- David, P., Kochhar, R. and Levitas, E. (1998), "The effect of institutional investors on the level and mix of CEO compensation", *Academy of Management Journal*, Vol. 41 No. 2, pp. 200-8.
- Davis, J.H., Schoorman, F.D. and Donaldson, L. (1997), "The distinctiveness of agency theory and stewardship theory – reply", *Academy of Management Review*, Vol. 22 No. 3, pp. 611-3.
- Deci, E.L. (1975), *Intrinsic Motivation*, Plenum Press, New York, NY.
- Deci, E.L. and Ryan, R.M. (2000), "The 'what' and 'why' of goal pursuits: human needs and the self-determination of behavior", *Psychological Inquiry*, Vol. 11, pp. 227-68.
- Deci, E.L., Koestner, R. and Ryan, R.M. (1999), "A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation", *Psychological Bulletin*, Vol. 125, pp. 627-68.

- Donaldson, L. (1990), "The ethereal hand: organizational economics and management theory", *Academy of Management Review*, Vol. 15 No. 3, pp. 369-81.
- Dufwenberg, M. and Kirchsteiger, G. (2004), "A theory of sequential reciprocity", *Games and Economic Behavior*, Vol. 47 No. 2, pp. 268-98.
- Eckert, J.C. (2000), *Dienen statt herrschen. Unternehmenskultur und Ordensspiritualität: Begegnungen – Herausforderungen – Anregungen*, Schäffer-Poeschel, Stuttgart.
- Efendi, J., Srivastava, A. and Swanson, E.P. (2006), "Why do corporate managers misstate financial statements? The role of option compensation and other factors", SSRN Electronic Paper Collection, pp. 1-62, available at: <http://ssrn.com/abstract=547922>
- Ekelund, R.B., Hébert, R.F. and Tollison, R.D. (2006), *The Marketplace of Christianity*, MIT Press, Cambridge, MA.
- Ekelund, R.B., Hébert, R.F., Tollison, R.D., Anderson, G. and Davidson, A. (1996), *Sacred Trust: The Medieval Church as an Economic Firm*, Oxford University Press, New York, NY.
- Falk, A., Fehr, E. and Fischbacher, U. (2003), "On the nature of fair behavior", *Economic Inquiry*, Vol. 41 No. 1, pp. 20-6.
- Fama, E. and Jensen, M.C. (1983), "Agency problems and residual claims", *Journal of Law & Economics*, Vol. 26, pp. 327-49.
- Faust, U. (1997), "Benediktiner", in Dinzelbacher, P. and Hogg, J.L. (Eds), *Kulturgeschichte der christlichen orden in einzeldarstellungen*, Kröner, Stuttgart, pp. 67-116.
- Fehr, E. and Falk, A. (2002), "Psychological foundations of incentives", *European Economic Review*, Vol. 46, pp. 687-724.
- Ferrero, M. (2002), "Competition for sainthood and the millennial church", *Kyklos*, Vol. 55 No. 3, pp. 335-60.
- Festinger, L. (1954), "A theory of social comparison processes", *Human Relations*, Vol. 7, pp. 117-40.
- Finkelstein, S. and Daveni, R.A. (1994), "CEO duality as a double-edged-sword – how boards of directors balance entrenchment avoidance and unity of command", *Academy of Management Journal*, Vol. 37 No. 5, pp. 1079-108.
- Fiss, P.C. (2006), "Social influence effects and managerial compensation evidence from Germany", *Strategic Management Journal*, Vol. 27 No. 11, pp. 1013-31.
- Flap, H.D. (1988), *Conflict, Loyalty, and Violence. The Effects of Social Networks on Behaviour*, Peter Lang, Frankfurt am Main.
- Fleischer, A., Hazard, G.L. and Klipper, M.Z. (1988), *Boardgames: The Changing Shape of Corporate Power*, Brown & Company, Boston, MA.
- Foss, K. and Foss, N.J. (2000), "The knowledge-based approach and organizational economics: how much do they really differ? And how does it matter?", in Foss, N.J. and Mahnke, V. (Eds), *Competence, Governance, and Entrepreneurship: Advances in Economic Strategy Research*, Oxford University Press, Oxford, pp. 55-79.
- Freeman, R.B. and Lazear, E.P. (1996), "An economic analysis of works councils", in Rogers, J. and Streek, W. (Eds), *Works Councils – Consultation, Representation, and Cooperation in Industrial Relations*, University of Chicago Press, Chicago, IL, pp. 27-49.
- Frey, B.S. (1983), *Democratic Economic Policy*, Blackwell, Oxford.
- Frey, B.S. (1999), *Economics as a Science of Human Behaviour: Towards a New Social Science Paradigm*, Kluwer Academic, Boston, MA.

- 
- Frey, B.S. and Benz, M. (2004), "From imperialism to inspiration: a survey of economics and psychology", in Davis, J.B., Marciano, A. and Runde, J. (Eds), *The Elgar Companion to Economics and Philosophy*, Edward Elgar, Cornwall, pp. 61-84.
- Frey, B.S. and Jegen, R. (2001), "Motivation crowding theory: a survey of empirical evidence", *Journal of Economic Surveys*, Vol. 15 No. 5, pp. 589-611.
- Frey, B.S. and Osterloh, M. (2002), *Successful Management by Motivation. Balancing Intrinsic and Extrinsic Incentives*, Springer, Berlin.
- Frey, B.S. and Osterloh, M. (2005), "Yes, managers should be paid like bureaucrats", *Journal of Management Inquiry*, Vol. 14 No. 1, pp. 96-111.
- Frey, B.S. and Osterloh, M. (2006), "Corporate governance for knowledge production: theoretical foundations and practical implications", *Journal Corporate Ownership and Control*, Vol. 3 No. 4, pp. 163-72.
- Furtado, E.P.H. and Rozeff, M.S. (1987), "The wealth effects of company initiated management changes", *Journal of Financial Economics*, Vol. 18 No. 1, pp. 147-60.
- Gächter, S. and Fehr, E. (1999), "Collective action as a social exchange", *Journal of Economic Behaviour & Organization*, Vol. 39, pp. 341-69.
- Galbraith, C.S. and Galbraith, O.I. (2004), *The Benedictine Rule of Leadership. Classic Management Secrets You can Use Today*, Adamsmedia, Avon.
- Germania Benedictina (1970), *Die Benediktinerklöster in Bayern*, EOS-Verlag, St Ottilien.
- Germania Benedictina (1975), *Die Benediktinerklöster in Baden-Württemberg*, EOS-Verlag, St Ottilien.
- Germania Benedictina (1999), *Die Reformverbände und Kongregationen der Benediktiner im deutschen Sprachraum*, EOS-Verlag, St Ottilien.
- Gintis, H. and Khurana, R. (2006), "Corporate honesty and business education: a behavioral model", in Zak, P.J. (Ed.), *Moral Markets: The Critical Role of Values in the Economy*, Free Enterprise: Values in Action Conference Series, Princeton University Press, Princeton, NJ.
- Grandori, A. and Kogut, B. (2002), "Dialogue on organization and knowledge", *Organization Science*, Vol. 13, pp. 224-32.
- Granovetter, M. (1985), "Economic-action and social-structure – the problem of embeddedness", *American Journal of Sociology*, Vol. 91 No. 3, pp. 481-510.
- Grant, G.H. (2003), "The evolution of corporate governance and its impact on modern corporate America", *Management Decision*, Vol. 41, pp. 923-34.
- Gray, S.R. and Cannella, A.A. (1997), "The role of risk in executive compensation", *Journal of Management*, Vol. 23 No. 4, pp. 517-40.
- Groves, R.M., Cialdini, R.B. and Couper, M.P. (1992), "Understanding the decision to participate in a survey", *Public Opinion Quarterly*, Vol. 56 No. 4, pp. 475-95.
- Hansmann, H.B. (1980), "The role of nonprofit enterprise", *Yale Law Journal*, Vol. 89, pp. 835-901.
- Hansmann, H.B. (1990), "When does worker ownership work? Esops, law firms, codetermination, and economic democracy", *Yale Law Journal*, Vol. 99 No. 8, pp. 1749-816.
- Held, M., Kubon-Gilke, G. and Sturp, R. (Eds) (2007), *Normative und institutionelle Grundfragen der Ökonomik. Jahrbuch 6: Ökonomie der Religion*, Metropolis, Marburg.
- Hirschman, A.O. (1970), *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*, Harvard University Press, Cambridge, MA.
- House of Bavarian History (2007), available at: [www.Datenmatrix.De/projekte/hdbg/kloster/index\\_extern.Shtml](http://www.Datenmatrix.De/projekte/hdbg/kloster/index_extern.Shtml) (accessed September 2, 2007).

- Iannacone, L.R. (1992), "Sacrifice and stigma: reducing free-riding in cults, communes, and other collectives", *Journal of Political Economy*, Vol. 100 No. 2, pp. 271-92.
- Iannacone, L.R. (1997), "Towards an economic theory of 'Fundamentalism'", *Journal of Institutional and Theoretical Economics*, Vol. 153 No. 1, pp. 100-16.
- Iannacone, L.R. (1998), "Introduction to the economics of religion", *Journal of Economic Literature*, Vol. 36, pp. 1465-96.
- Inauen, E. and Frey, B.S. (2008), "Benediktinerabteien aus ökonomischer Sicht. Über die ausserordentliche Stabilität einer besonderen Institution", available at: [www.unizh.ch/iou/orga/ssl-dir/wiki/index.php/Main/WorkingPapers](http://www.unizh.ch/iou/orga/ssl-dir/wiki/index.php/Main/WorkingPapers)
- Irlenbusch, B. and Sliwka, D. (2003), "Incentives, decision frames and motivation crowding out – an experimental investigation", working paper, University of Bonn, Bonn.
- Janis, I.L. (1972), *Victims of Groupthink. A Psychological Study of Foreign Policy Decisions and Fiascos*, Houghton Mifflin, Boston, MA.
- Janis, I.L. (1982), *Groupthink*, Houghton Mifflin, Boston, MA.
- Jensen, M.C. (2006), *Putting Integrity into Finance Theory and Practice: A Positive Approach*, Harvard Business School, Boston, MA.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs, and ownership structure", *Journal of Financial Economics*, Vol. 3, pp. 305-60.
- Jensen, M.C. and Murphy, K.J. (1990a), "CEO incentives: it's not how much you pay, but how", *Harvard Business Review*, Vol. 68, pp. 138-53.
- Jensen, M.C. and Murphy, K.J. (1990b), "Performance, pay and top-management incentives", *Journal of Political Economy*, Vol. 98 No. 2, pp. 225-64.
- Jensen, M.C., Murphy, K.J. and Wruck, E.G. (2004), "Remuneration: where we've been, how we got to here, what are the problems, and how to fix them", working paper, European Corporate Governance Institute, available at: <http://ssrn.com/abstract=561305>
- Johnson, S.A., Ryan, H.E. Jr and Tian, Y.S. (2006), "Managerial incentives and corporate fraud: the sources of incentives matter", SSRN Electronic Paper Collection, pp. 1-36, available at: <http://ssrn.com/abstract=395960>
- Kahneman, D. and Tversky, A. (1979), "Prospect theory – analysis of decision under risk", *Econometrica*, Vol. 47 No. 2, pp. 263-91.
- Kieser, A. (1987), "From asceticism to administration of wealth. Medieval monasteries and the pitfalls of rationalization", *Organization Studies*, Vol. 8 No. 2, pp. 103-23.
- Lambert, R.A., Larcker, D.F. and Weigelt, K. (1993), "The structure of organizational incentives", *Administrative Science Quarterly*, Vol. 38 No. 3, pp. 438-61.
- Lipton, M. and Lorsch, J.W. (1993), "The lead director", *Directors and Board*, Spring, pp. 28-31.
- Lorsch, J.W. and Maciver, E. (1989), *Pawns or Potentates*, Harvard Business School Press, Boston, MA.
- Lubatkin, M., Lane, P.J., Collin, S. and Very, P. (2007), "An embeddedness framing of governance and opportunism: towards a cross-nationally accommodating theory of agency", *Journal of Organizational Behavior*, Vol. 28 No. 1, pp. 43-58.
- McCleary, R.M. and Barro, R.J. (2006), "Religion and economy", *Journal of Economic Perspectives*, Vol. 20 No. 2, pp. 49-72.
- McGrath, P. (2007), "Knowledge management in monastic communities of the medieval Irish celtic church", *Journal of Management History*, Vol. 13 No. 2, pp. 211-23.
- McGregor, D. (1960), *The Human Side of Enterprise*, McGraw-Hill, New York, NY.

- 
- Main, B.G. (1991), "Top executive pay and performance", *Managerial and Decision Economics*, Vol. 12 No. 3, pp. 219-29.
- Main, J. (1991), "The battle over benefits", *Fortune*, Vol. 124 No. 14, pp. 91-6.
- Milgrom, P. and Roberts, J. (1992), *Economics, Organization, and Management*, Prentice-Hall, Englewood Cliffs, NJ.
- Miller, K.D. (2002), "Competitive strategies of religious organizations", *Strategic Management Journal*, Vol. 23, pp. 435-56.
- Mizruchi, M.S. (1983), "Who controls whom – an examination of the relation between management and boards of directors in large American corporations", *Academy of Management Review*, Vol. 8 No. 3, pp. 426-35.
- Murphy, K.J. and Zábajník, J. (2004), "CEO pay and appointments: a market-based explanation for recent trends", *American Economic Review*, Vol. 94 No. 2, pp. 192-6.
- Osterloh, M. and Frey, B.S. (2006), "Shareholders should welcome knowledge workers as directors", *Journal of Management and Governance*, Vol. 10 No. 3, pp. 325-45.
- Osterloh, M. and Weibel, A. (2006), *Investition Vertrauen. Prozesse der Vertrauensentwicklung in Organisationen*, Gabler, Wiesbaden.
- Osterloh, M., Frost, J. and Weibel, A. (2002), "Solving social dilemmas: the dynamics of motivation in the theory of the firm", working paper, Institute of Organization and Administrative Science, University of Zurich, Zurich.
- Padovano, M. and Wintrobe, R. (2008), "The dictatorship of the popes", discussion paper, European Public Choice Society, Jena.
- Penrose, E.T. (1959), *The Theory of the Growth of the Firm*, Oxford University Press, Oxford.
- Rabin, M. (1993), "Incorporating fairness into game-theory and economics", *American Economic Review*, Vol. 83 No. 5, pp. 1281-302.
- Reberiooux, A. (2007), "Does shareholder primacy lead to a decline in managerial accountability?", *Cambridge Journal of Economics*, Vol. 31 No. 4, pp. 507-24.
- Regula Benedicti (2006), *Die Regel des heiligen Benedikt*, Beuron Kunstverlag, Beuron.
- Reiber, K.E. (2003), "Organisation im Spiegel der Regula Benedicti – eine hermeneutische Interpretation der benediktinischen Regel im Kontext der lernenden Organisation", dissertation, Fakultät für Sozial- und Verhaltenswissenschaften, Tübingen.
- Rojot, J. (2002), "Economics and management theory: new developments in France", *International Journal of the Economics of Business*, Vol. 9 No. 2, pp. 283-94.
- Romano, R. (2005), "The sarbanes-oxley act and the making of quack corporate governance", *Yale Law Journal*, Vol. 114 No. 7, pp. 1521-612.
- Rost, K., Salomo, S. and Osterloh, M. (2008), "CEO appointments and the loss of firm-specific knowledge – putting integrity back into hiring decisions", *Corporate Ownership and Control*, Vol. 5 No. 3, pp. 86-98.
- Sacra, H. (1986), *Die Orden mit Benediktinerregel. Frühe Klöster, die Benediktiner und Benediktinerinnen in der Schweiz*, Francke Verlag, Bern.
- Salmon, P. (2007), "Serving god in a largely theocratic society: rivalry and cooperation between church and king", Discussion Paper No. 0719, UCSIA, Antwerpen.
- Schelker, M. and Eichenberger, R. (2004), "Independent and competing institutions: an effective way to control government", working paper, University of Fribourg, Fribourg.
- Schmidtchen, D. and Mayer, A. (1997), "Established clergy, friars and the pope: some institutional economics of the medieval church", *Journal of Institutional and Theoretical Economics*, Vol. 153 No. 1, pp. 122-49.

- Shleifer, A. and Vishny, R. (1989), "Management entrenchment: the case of manager specific investments", *Journal of Financial Economics*, Vol. 25, pp. 123-40.
- Sobel, J. (2005), "Interdependent preferences and reciprocity", *Journal of Economic Literature*, Vol. 43 No. 2, pp. 392-436.
- Sridharan, U.V. (1996), "CEO influence and executive compensation", *Financial Review*, Vol. 31 No. 1, pp. 51-66.
- Stark, R. and Finke, R. (2000a), *Acts of Faith: Explaining the Human Side of Religion*, University of California Press, Berkeley, CA.
- Stark, R. and Finke, R. (2000b), "Catholic religious vocations: decline and revival", *Review of Religious Research*, Vol. 42 No. 2, pp. 125-45.
- Stefani, U. (2008), "Discussion of 'bonus and malus in principal agent relations with fixed pay and real effort'", *Schmalenbach Business Review*, Vol. 3, pp. 304-18.
- St Ottilien Benediktinerkongregation (2004), *Eigenrecht der Bendiktinerkongregation St Ottilien*, St Ottilien Benediktinerkongregation, St Ottilien.
- Sundaramurthy, C. and Lewis, M. (2003), "Control and collaboration: paradoxes of governance", *Academy of Management Review*, Vol. 28 No. 3, pp. 397-415.
- Tajfel, H. (1981), *Human Groups and Social Categories: Studies in Social Psychology*, Cambridge University Press, Cambridge.
- Turner, M.E. and Pratkanis, A.R. (1998), "Twenty-five years of groupthink theory and research: lessons from the evaluation of a theory", *Organizational Behavior and Human Decision Processes*, Vol. 73, pp. 105-15.
- Uzzi, B. (1996), "The sources and consequences of embeddedness for the economic performance of organizations: the network effect", *American Sociological Review*, Vol. 61 No. 4, pp. 674-98.
- Waldo, C.N. (1985), *Boards of Directors: Their Changing Roles, Structure, and Information Needs*, Quorum Books, Westport, CT.
- Weber, M. (1930), *The Protestant Ethic and the Spirit of Capitalism*, George Allen and Unwin, London.
- Wenger, E.C. and Snyder, W.M. (2000), "Communities of practice: the organizational frontier", *Harvard Business Review*, Vol. 78 No. 1, pp. 139-45.
- Westphal, J.D. and Zajac, E.J. (1994), "Substance and symbolism in CEOs long-term incentive plans", *Administrative Science Quarterly*, Vol. 39 No. 3, pp. 367-90.
- Wiseman, R.M. and Gomez-Mejia, L.R. (1998), "A behavioral agency model of managerial risk taking", *Academy of Management Review*, Vol. 23 No. 1, pp. 133-53.
- Worrell, D.L. and Davidson, W.N. (1987), "The effect of CEO succession on stockholder wealth in large firms following the death of the predecessor", *Journal of Management*, Vol. 13 No. 3, pp. 509-15.
- Yermack, D. (1997), "Good timing: CEO stock option awards and company news announcements", *Journal of Finance*, Vol. 52 No. 2, pp. 449-76.
- Zahra, S.A. and Pearce, J.A. (1989), "Boards of directors and corporate financial performance – a review and integrative model", *Journal of Management*, Vol. 15 No. 2, pp. 291-334.
- Zajac, E.J. (1990), "CEO selection, succession, compensation and firm performance – a theoretical integration and empirical-analysis", *Strategic Management Journal*, Vol. 11 No. 3, pp. 217-30.
- Zingales, L. (1998), *Corporate Governance, in the New Palgrave Dictionary of Economics and the Law*, Palgrave, Basingstoke.

### About the authors

Katja Rost is a Research Assistant at the Institute of Organization and Administrative Science at the University of Zurich. She obtained her PhD in 2006 on the topic of social capital and innovation and currently does her habilitation in the area of corporate governance. Katja Rost is the corresponding author and can be contacted at: [katja.rost@iou.uzh.ch](mailto:katja.rost@iou.uzh.ch)

Emil Inauen is a PhD student at the Institute of Organization and Administrative Science and the Institute for Empirical Research in Economics at the University of Zurich. His primary research interest is the economics of religion. Before starting his study of economics he worked as a teacher of religion for several years and has experienced the monastic life.

Margit Osterloh is a Professor of Organization at the University of Zurich and Research Director of Centre for Research in Economics, Management and the Arts – CREMA, Switzerland. Her primary research interests include organizational theory, knowledge management, corporate governance, and motivation theory.

Bruno S. Frey is a Professor of Economics at the University of Zurich and Research Director of CREMA, Switzerland. He is a Managing Editor of *Kyklos*. He seeks to extend economics beyond standard neo-classics by introducing insights from other disciplines, including political science, psychology, and sociology.