

Emil Inauen, Katja Rost, Margit Osterloh, Bruno S. Frey*

Back to the Future – A Monastic Perspective on Corporate Governance**

The financial crisis is a crisis of governance as well. In search of answers and solutions many scholars and practitioners recommend improved output control, i.e. better external incentives or even stricter regulations. Monasteries demonstrate that alternative models may be more suitable to enhance sustainable governance quality and to reduce agency problems. In the long history of monasteries, some abbots and monks were known to line their own pockets and some monasteries were undisciplined. Monasteries developed special systems to combat these excesses thus ensuring their survival over centuries. We study these features from an economic perspective. Derived from an analysis of the Benedictine monastery of Engelberg we offer three improvements of applied governance designed to reduce agency problems. First, monastic governance emphasizes clan control rather than output control. Monasteries demonstrate that organizations can prevent agency problems by complementing external discipline with internal behavioral incentives, such as value systems and voice. Second, organization members making firm-specific investments are motivated by broad participation rights and co-determination. Third, the Benedictines are able to apply supportive external control mechanisms, which are not perceived as controlling.

Key words: corporate governance, financial crisis, psychological economics, monasteries, principal agency theory, Benedictine Order

* Emil Inauen, Institute of Organization and Administrative Science, University of Zurich, Universitätsstr. 84, 8006 Zurich, Switzerland. E-mail: emilinauen@access.uzh.ch.

Katja Rost, Institute of Organization and Administrative Science, University of Zurich, Universitätsstr. 84, 8006 Zurich, Switzerland. E-mail: katja.rost@iou.uzh.ch.

Margit Osterloh, Institute of Organization and Administrative Science, University of Zurich, Universitätsstr. 84, 8006 Zurich, Switzerland. E-mail: osterloh@iou.uzh.ch.

Bruno S. Frey, Institute for Empirical Research in Economics, University of Zurich, Winterthurerstr. 30, 8006 Zurich, Switzerland. E-mail: bsfrey@iew.uzh.ch.

** The authors are most grateful for the helpful support of Abbot Berchtold Müller and Prior Guido Muff (Monastery Engelberg), Padre Gregor Jäggi and Reto Krismer (Monastery Einsiedeln), Padre Thaddäus Schreiber (Monastery Ettal), Abbot Benno Malfèr (Monastery Muri-Gries), Wolfgang Gehra (Monastery Plankstetten), and for the valuable comments of Mathias Erlei (Clausthal University of Technology), Donald C. Hambrick (Pennsylvania State University), Martin Held (Protestant Academy Tutzing), Alfred Kieser (University of Mannheim), Kent D. Miller (Michigan State University), Wenzel Matiaske (Helmut-Schmidt-University Hamburg) and two anonymous reviewers. We also thank Robert Findlow and Isabel Ellenberger for improving the English..

Article received: July 15, 2009

Revised version accepted after double blind review: October 6, 2009.

Introduction

Religion and religiousness will play an extraordinary role in the future, despite the unremitting prognosis of fading into insignificance. The secularisation thesis - in the last century widely perceived as an irrevocable fact – has these days become highly disputed (e.g. Gäbler 2005; Iannacone 1998). The recognition of the continued relevance of religion has reawakened interest in this subject. The economic perspective¹ allows new insights into the religious aspects of life. Not only is it worth paying attention to such concepts as faith, spirituality and religion in western organizations, but it is also worth taking a look at the religious organizations themselves. Throughout the centuries religious institutions were a decisive factor in the development of the economic system. Therefore, reflecting on the past may be highly relevant when analysing the current economic system.

This article analyzes the governance of the Benedictine Order to gain new insights into good governance. Monasteries can be viewed as pioneers of governance and have had a major impact on the development of the economy in Europe (Zamagni 2008). 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 (Kieser 1987). As a reaction sophisticated governance systems were established within religious orders. The aim of our research is to gain deeper general insights into the functioning of governance structures, processes, and incentives.

Deeper general insights into approved governance structures are important for the field of corporate governance.² Today in particular this field is facing fundamental changes. Not only has the corporate sector been plagued by huge scandals related to excessive manager compensation and fraudulent bookkeeping (Osterloh/Frey 2004), but additionally the financial crisis made apparent the fact that the existing governance structures in stock corporations cannot prevent excessive risk taking and the abuse of power (Rost/Osterloh 2009; Zingales 2009). Agency theory – the dominant theoretical approach within the corporate governance literature – is not able to explain these recent incidents in a conclusive way. The theory suggests that external control mechanisms prevent such scandals by linking the interests of the owners with the interests of the CEOs, i.e. by acting on behalf of absent firm owners (Fama/Jensen 1983; Jensen/Meckling 1976; Jensen/Murphy 1990a; Jensen/Murphy 1990b). However, in contrast to the theories' predictions pay-for-performance, independent directors, or outsiders as CEOs have not prevented the scandals or the financial crisis. Using the conventional *homo oeconomicus* as a theoretical basis may be beneficial when modeling the effects of changes in incentives. At the same time agency theory tends to confine its at-

¹ For the emerging field of religious economics see e.g. Azzi/Ehrenberg 1975; Ekelund et al. 2006; Ferrero 2008; Held et al. 2007; Iannacone 1998; McCleary/Barro 2006; Miller 2002; Stark/Finke 2000.

² We use a broad term of corporate governance. In the following, corporate governance is understood to be the set of processes, customs, policies, laws and institutions affecting the way firms are directed, administered and controlled.

attention to a narrow and empirically questionable view of human motivation (see Frey 1999). History shows that the exclusive use of external measures may be ineffective in addressing governance problems successfully (Grant 2003).³ Furthermore proponents of principal agency theory admit problems in offering wrong incentives as well (e.g. Bebchuk/Fried 2005; Jensen 2003; Jensen et al. 2004). These weaknesses in current corporate governance practice suggest that it may be useful to approach these issues from alternative perspectives (Benz/Frey 2007).

The paper proceeds as follows: the next paragraph analyzes the degree to which the Benedictine governance system is able to solve agency problems. For this purpose, we first present a case study of the Benedictine abbey⁴ of Engelberg to provide a detailed portrait of the monastic governance system. In a second step, we provide quantitative evidence of the efficiency of the monastic corporate governance. In a third step we explain the Benedictine governance system more broadly and connect these findings with a more fundamental perspective on the economic debate about good governance.

The governance system of the Benedictines: a historic example

In choosing the abbey of Engelberg for the analysis, we selected a representative Benedictine monastery. The monastery is located at the foot of the mountain Titlis in central Switzerland and is surrounded by the Alps. Today the monastery accommodates about forty padres and brothers. Founded in 1120 the monastery exhibits typical Benedictine traits, such as a long tradition in educational institutions, a famous scriptorium and an acclaimed library. Until the French Revolution, each abbot of Engelberg was the spiritual as well as the profane ruler of the valley. The history of Engelberg is well documented and therefore provides a good data base for an empirical analysis. We obtained data from the *Helvetia Sacra* (1986) and the local history of

³ For example, in 1916 the taxation of corporate profits and in 1919 the requirement to create profits for shareholders became a law in the US. As a result simple book keeping developed into more complex accounting issues and a new challenge was created for managers to maximize profits for shareholders while at the same time reducing 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 1933/34 Securities Act attempted to protect shareholders by regulating initial security offerings and secondary security trading, e.g. registration at the 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 severance packages amounting to millions for executives (e.g. Bratton 2002). Fraud was accomplished through 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.

⁴ This paper 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.

Engelberg (Heer 1975). These historical chronicles have an excellent reputation for their extensive documentation of the monastic institutions in Switzerland.⁵

Agency problems in Engelberg

The monastery of Engelberg did not remain unscathed from dishonest or incapable abbots. The history of the monastery in Engelberg shows many examples of inadequacies and fraudulent behaviour. Already at the beginning of the 12th century typical principal agency problems occur. However, the excesses of the first three unworthy abbots are only sketchily documented. Abbot Johannes Kummer (1421-29/1431-35) is the first well documented example of luxury consumption. The records show him to be talented but disingenuous, living a lavish lifestyle at the expense of his monastery. Even more reprehensible is the reputation of the abbot Johann Strin (1442-1450), who wasted the fortune of his monastery, spent more time in Lucerne freely associating with women than in his monastery. Strin is described as “vermin” and as an unqualified steward of his community. Abbot Ulrich Stalder (1478-89) is a third example. He has been judged as lazy and careless. Besides selfish consumption, history provides other examples of poor behaviour. For example some abbots infiltrated the monastery for political reasons (Johann Ambühl 1450-58) or were greedy for power (Benedikt Keller 1619-29). Additionally, there are numerous examples of good intentioned, but nonetheless incompetent and overburdened leaders. A contemporary wrote about Andreas Herrsch (1592-1600), that he was lacking in „wisdom, insight, resoluteness” (Heer 1975: 197). Others are described as being too soft (Rudolf Kaufmann 1435-41), melancholic or anxious (Maurus Rinderli 1724-1730). Also to be taken into consideration are external factors such as political pressures or the plague, which had an extraordinary impact on the monastery. The requirements for an abbot in Engelberg in the 16th were considerably higher than in the following centuries.

History shows that such shortcomings and failures of abbots had serious consequences, sometimes even threatening the existence of the monastery. Engelberg, as an outlying monastery in the mountains, financed itself mainly through tenancy and pastoral care. In the short term, the sale of a piece of land or the bailment of property could guarantee the payment of debts. In the long term however, a dissipation of monastic goods, extracting its means of existence, will threaten the stability of a monastery. The serious consequences of such misbehaviour are demonstrated by several closures of Benedictine monasteries in Germany (Germania Benedictina 1970, 1975, 1999), but also by indications from Engelberg. The monastery was confronted with its possible demise on several occasions. For example in the 15th century the level of the accumulated debt had increased to an alarming extent. In 1488 under the incompetent abbot Ulrich Stalder, the people from the valley revolted against the abbey.

⁵ Further, one of the authors lived in the monastery of Engelberg for three month.

Were the Benedictines in the monastery of Engelberg capable of solving their agency problems?

How did the padres and brothers in the monastery of Engelberg deal with their agency problems? The next paragraph empirically investigates whether efficient corporate governance mechanisms have developed over the course of time to cope with poorly performing abbots and their exertion of uncontrolled discretion. We illustrate the general viability of the Benedictine system with different indicators and in a quantitative manner.

Abbots play the key role in our analysis. The distinction between competent and incompetent abbots offers a good starting point for testing the hypotheses. To differentiate between “good” and “poor” abbots, we searched the historical biographies for relevant references. Words and phrases such as ‘incompetent’, ‘dissipation of commodities’, ‘not up to his job’ or ‘irritating’ were classified as poor performance. Phrases such as ‘exemplary’, ‘energetic’, ‘outstanding’ indicate good leadership. Functions and tasks within the umbrella organizations give further evidence of a successful tenure of an abbot. Our dependent indicators can be directly deduced from the chronicles. Appendix 1 shows the data set, table 1 the results of the analysis.⁶

Table 1: Determinants of good and bad abbots

Characteristics of the abbot	Good abbot	Bad abbot	Total	N	F-Value	Sig.
Tenure (yrs)	19.44	7.54	16.29	49	17.70	.000
Not self-determined election	10.71%	63.64%	25.64%	39	15.67	.000
Abbot origin from another holy order	0.00%	20.00%	4.65%	43	2.05	.160
Abbot origin from an outside Benedictine monastery	18.18%	40.00%	23.26%	43	7.87	.008
Bad pre-election performance of abbot	6.45%	70.00%	21.95%	41	29.99	.000

Note: All abbots from the monastery Engelberg in the time period 1120-2009.

Further, we have searched for measurable indicators to analyze the efficiency of the governance structures in Engelberg. Some episodes produce qualitative evidence that in specific cases monastic governance is working well. Notable outstanding abbots seem to have been socialized inside the monastery (e.g. Barnabas Bürki 1505-1546, Jakob Benedikt Sigerist 1603-1619). Deviations from the established governance system are another example. External political pressure on the election of abbots frequently had a negative influence on the stability of the monastery (e.g. Johann Ambühl 1450-1458, Andreas Herrsch 1592-1600). With such cases in mind, three indicators seem appropriate when evaluating the success of the corporate governance system of Engelberg. First, the mean tenure of “good” and “bad” abbots is examined. Second, the performance record of self-determined or heteronomous abbots is analysed. Third, we investigate the internal selection and socialization processes of these leaders.

In accordance with our main hypothesis, suggesting that the monastic corporate governance system prevents agency problems, we tested the following proposition:

⁶ More information and the data can be made available by the first author.

P1 In monasteries the system of dismissal is efficient. Therefore the tenure of poorly performing abbots should be shorter than that of competent abbots.

The first proposition is confirmed by strong evidence. While good abbots have an average tenure of 19.44 years, poor abbots show an average tenure of only 7.54 years. This difference is highly significant ($F=17.70^{***}$). Thus, poor monastic leaders are not able to install themselves at the top of the monastery, even though they are essentially elected for life. The monastic structures facilitate the dismissal of poor abbots because of two mechanisms. First, one of the most obvious instruments is external visitation, i.e. the regular evaluation of the monastery by the umbrella organization to detect irregularities and to support monasteries in trouble. Second, in many cases internal pressure leads to the resignation of an abbot. This pressure is effective within monasteries because an abbot largely depends on the goodwill of his convent.

We analyze a second proposition.

P2 In monasteries a democratic election leads to an increased number of good abbots.

In contrast, we assume that external intervention such as the manipulation of the abbot election undermines internal governance. Monasteries operating under such conditions should see increased number of poor abbots. Table 1 shows that also our second proposition is validated by the data. The results first show that from the good abbots only 11% were not democratically elected, i.e. their election was externally manipulated. In contrast, 67% from the abbots associated with agency problems were not democratically elected. These differences are highly significant ($F=15.67^{***}$). There are two possible explanations. First, external interventions disregard the preferences of the monks and thus ignore the fact that organizational members have the most comprehensive information about the skills, past behaviour, and talent of a contender. Second, externally appointed abbots cause distrust in the community (e.g. Andreas Herrsch 1592-1600). Overall, our analysis suggests that external influence on elections undermines good governance by promoting poorly performing abbots.

We test a third proposition.

P3 In monasteries internal selection and socialization processes are important for good governance. Therefore insiders are better abbots than outsiders.

Proposition 3 postulates that selection and socialization processes are important for good monastic governance. The results first show that in Engelberg there had never been a capable abbot who originated from a holy order outside the Benedictines. In contrast, 20% of the poorly performing abbots came from other holy orders. Hence, if a candidate was not educated and socialised in the Benedictine Order, the occurrence of differences in ideologies and opinions resulted in governance problems. The difference, however, is not significant ($F=2.05$) because the prevailing number of leaders in Engelberg came from the Benedictine Order. Second, we find strong differences among abbots coming from an external Benedictine abbey and abbots coming from the monastery of Engelberg ($F=7.87^{**}$). The results demonstrate that only 18% of the good abbots were outsiders. In contrast, 40% of the poor abbots were outsiders. One additional feature of outside-hires is however worth mentioning. The foreign abbots who gained acceptance and became good leaders had all been nominated either

during the formative years of the monastery or in times of crises, e.g. when the plague decimated the convent. These results are consistent with the CEO literature by indicating that in some situations outside elections make sense (Rost et al. 2008).

Finally, we analyze a fourth proposition.

P4 The pre-election performance of an abbot is a good indicator of his post-election performance.

This proposition is based on the assumption that in monasteries, internal selection and socialization processes are the main drivers of good governance. We searched the historical chronicles for activities and responsibilities of an abbot, which he practiced before his election, i.e. as a common monk. The career steps of abbots are well documented and constitute a good indicator for his managerial abilities. The results support our proposition by showing that only 6% of the competent abbots had a poor or inconspicuous track record while 79% of the poorly performing abbots had a poor or inconspicuous track record ($F=29.99^{***}$). The findings indicate that the internal selection and socialization principles in Engelberg work quite well, even though not all less competent abbots are identifiable by their past performance.

The history of Engelberg suggests that a poor abbot causes a poor successor. It seems considerably more difficult to rescue a damaged monastery, than to govern a well guided institution. Of course, external influences such as the political situation, which can influence the history of a community over decades, also play an important role. However, a look into the neighbouring monasteries of Engelberg like Einsiedeln or Disentis shows that the accumulations of poor abbots in Engelberg do not refer to a common historical background (Einsiedeln 2009; Müller 1971).

Were the Benedictines capable of solving their agency problems?

While the case study of Engelberg gives insights into the history at the level of one specific monastery, the results cannot necessarily be generalized. For this reason we additionally present quantitative evidence on the efficiency of the Benedictine governance (Rost et al. 2009)⁷. Benedictine monasteries in Germany and Switzerland have an average lifetime of almost 500 years. This is a first indication of efficient governance in Benedictine monasteries. Furthermore, table 1 shows the reasons for closures. The findings on the reasons for closure indicate that only one quarter (26.5%) of the monasteries studied were unable to survive due to agency problems. The vast majority of monastic houses were either closed due to external institutional factors, or they still exist today. These results suggest that Benedictine monasteries are extremely stable. On average, monasteries survived 460 years, which indicate that agency problems in Benedictine monasteries are relatively minor.

⁷ We collected data on all Benedictine abbeys that existed in Baden-Württemberg, Bavaria and German speaking Switzerland (Rost et al. 2009). The sample covered a total of 134 monasteries. Data for the analysis was obtained from historical chronicles (Germania Benedictina 1970, Germania Benedictina 1975, Germania Benedictina 1999, Helvetia Sacra 1986) and the Website of the house of Bavarian history (2007).

Table 2: Survival and closure of monasteries (Rost et al. 2009)

Reason for closures	Number of Benedictine Monasteries	in %	Average lifetime in years	Year of the last event
No closure	25	17%	287	-
Non agency problem related closures				
Voluntary closure	6	4%	540	1883
External institutional factors (e.g. secularization)	79	53%	568	1862
	85	57%	-	-
Agency problem related closures				
Mismanagement (incl. insolvency, relaxation of discipline and recruitment problems)	20	13%	387	1862
Change into other organizational form	11	6%	313	1763
Control failure	9	7%	325	1773
	40	26%	-	-
Total closures	125	83%	-	-

In summary, the qualitative and quantitative historical analyses show that the Benedictines are capable of adjusting their institutions with regard to agency problems. As a whole the monastery of Engelberg applied efficient governance mechanisms. These findings are confirmed through looking at the Order, as Benedictine institutions have survived for centuries and seldom fall prey to mismanagement.

The current governance system of the Benedictines

Building on the historical insights we now analyze the *current* shape of Benedictine governance⁸ to gain new insights relevant for the contemporary debate on good governance. The main pillars of monastic governance are surprisingly stable over time. Before introducing the current governance of the Benedictines, we briefly comment on the historical context of Benedictine governance. We discuss if and how the Benedictine governance has changed over time. This knowledge is important when drawing conclusions concerning current governance structures.

Natural disasters, wars, progress of the arts, societal and ecclesiastical fashions have influenced monastic behaviour and governance structures. For example, nowadays deference to the abbot's authority is understood differently than 300 years ago. Nonetheless, we find that with the formation of the umbrella organizations, their jurisdiction and visitations (starting in the 13th century) the foundation of Benedictine governance was laid. The origin goes back to the rule of Saint Benedict of Nursia (Regula Benedicti 2006) in the 6th century. This rule is the pivotal common feature of

⁸ For an analysis 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), Thaddäus Schreiber (padre of the Abbey of Ettal), 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).

Benedictine monasteries (Germania Benedictina 1970: 13) containing the basic principles, which are still valid today. The ability to adapt inherent in this basic constitution is one of the essential secrets of success of the Benedictine institutions. Flexible phrasing, a broad situational openness while applying a clear language, enabled and promoted their interpretation up to the present day (Reiber 2003). Importantly, translations always adhered to the original document, and thus its relevance has endured (Jaspert 1989). In the history of religious orders this flexible system on the one hand produced strongly diverging organizations with local, situational and temporal adaptations, however on the other hand these organizations always relied on similar basic principles (Eckert 2000). The adherence to this flexible codex not only prevented monasteries from converting into other organizational forms (Eckert 2000) but also guaranteed that after more than 1000 years numerous specific traits still can be recognized (for an extensive description see Inauen/Frey 2008).

Today as in the past, Benedictine governance consists of at least three main pillars: First, the embeddedness of the monks in common value systems is essential. Second, the members are provided with considerable voice. Third, internal governance is integrated in the hierarchy of the Order and the Catholic Church. Historical as well as modern evidence exists for all mechanisms (see narrative above). Moreover, these are explicitly stated in the Benedictine constitutions. The basic governance structures approved in different circumstances and epochs but overall are surprisingly consistent independent of time (Inauen/Frey 2008; Moulin 1965). Each of these pillars is explained in the following subsections.

Embeddedness in common value systems

While many other organizations establish controls and supervisory institutions in order to monitor decision making, monasteries apply common value systems in order to discuss possible solutions and come to beneficial conclusions (McGrath 2007). These value systems go far beyond ‘codes of best practice’ and affect the entire life of a monk. The Benedictine value system is based on three cornerstones: the Bible, the rule of St. Benedict and the tradition of a particular monastery. In order to implement these values, the Benedictines developed various selection and socialization practices.

Selection. Candidates for a monastic life go through a stringent selection process in order to ascertain 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 a great deal about the value system of the Benedictines and has the opportunity to carefully consider his motives before becoming a full member. Thus, instead of merely pre-selecting employees, monasteries make use of self-selection. One year probation follows. During this year, the novice learns the background of the value system, the Holy Scripture and church law. Temporary profession follows, lasting three years; containing a monastic apprenticeship or the beginning of studies. The underlying reason for this is that individuals may change their minds. Only after passing through all these steps full membership, known as solemn profession, can be celebrated. Solemn profession involves the unconditional commitment of both parties. For each padre and brother the convent, i.e. the religious com-

munity 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 receives broad participation rights.

Socialization. To ensure successful living and working together, careful socialization and the formation of an organizational identity is crucial. The socialization process lasts a lifetime and encourages an internalized transfer of the overall value system. Values such as trust, hospitality, tradition or work as a vocation are central to the progress of the individual monk. Socialization is implemented in numerous ways: The Benedictines promote just and equal treatment in daily life in order to integrate new members. Being treated as an equal in a life and work community facilitates the establishment of common values (Wenger/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). Monasteries have implemented other learning practices, such as daily readings at the communal dinner table. These readings address numerous topics, such as the Bible, politics, philosophy or the history of the Benedictines and the respective monastery.

Members' Voice

The abbot occupies an extraordinary position within the monastery. He 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. But unlike other institutions the monks themselves possess substantial participation rights and monitor the abbot and his officials (Consuetudines Engelberg 1991; Schweizer Benediktinerkongregation 1986; St.Otilien Benediktinerkongregation 2004).

Participation. The entire convent consists of 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 an expansion of the monastery through acquisition. Second, the convent democratically elects the abbot (recently, in some abbeys the tenure of an abbot has been restricted to 12 years rather than a lifetime) 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, today members of the convent have the right to advance requests and to give opinions. The dialogue among the monks is encouraged (Eckert 2000).

Internal evaluation. Monasteries complement participation processes with internal control 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 e.g. stock corporations, the Consilium is a supervisory board counseling the management team. It has the power to decide in occasional, specific cases only. The members 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).

Integration in the hierarchy of the Catholic Church

The case of the abbey of Engelberg shows that the internal control mechanisms of monasteries are working well. However, in a worst case scenario an external control is indispensable. External institutions took appropriate action if necessary. Engelberg relied on the jurisdiction of the Congregation (Benedikt Keller 1619-29) and the influence of the Holy See (e.g. a sharp condemnation by Pope Innozenz II in the 12th century) (Heer 1975). The external control of the Benedictine Order is hierarchically organized and consists of jurisdiction and periodical external evaluation.

Jurisdiction. Benedictine monasteries belong to the Catholic Church, are governed by its laws, and depend on the Holy See. Besides church and constitutional law, the legal norms of the Congregation are binding for a particular monastery. Monasteries complement this law with their own statutes, the so-called *Consuetudines* (1991). The jurisdiction of the Congregation is the first judicial authority outside the monastery where disputes are settled. The Congregation supervises the election of abbots and organizes the ‘visitations’ of monasteries.

Periodical external evaluation. In the Benedictine Order the subsidiary principle is applied. 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 not only examines 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 possible abuse of authority (Schweizer Benediktinerkongregation 1986). In addition to auditing, the visitors make use of questionnaires and interviews to detect any problems or failures. They analyze processes in-depth, ask specific questions and refer to aspects, which pass unnoticed in the normal daily routine. However, the main function of ‘visitations’ is to induce reflection, and not to exercise control and discipline.⁹

Comparison of Benedictine governance with current concepts

When comparing the Benedictine governance with the governance of non-profit organizations or modern stock corporations, one immediately realizes the different priorities in the respective institutions. Nonetheless, many concepts, which were successfully used by the Benedictines over hundreds of years, can also be found in the established management literature. In the following sections we compare three characteristics of Benedictine governance with concepts in the economic literature: the Benedictine emphasis on internal control, co-determination and supportive external control.

⁹ Interviews carried out in 2007 with Reto Krismer, managing director of the Abbey of Einsiedeln and Archabbot and first ‘visitor’ of the Swiss Congregation Benno Malfer.

Emphasis on internal control

In standard economics, in particular in the principal agency approach, it is assumed that performance measurement and performance pay raises performance. Performance evaluations and in particular output control have become a common procedure of the performance management in many profit-oriented firms but also in non-profit and governmental institutions. Authors refer to an “audit explosion” (Power 1994), leading to an “audit society” (Power 1997) and producing an evaluation industry (Muller-Camen/Salzgeber 2005). Despite these developments, there is a consensus that control cannot function solely with external incentives. The Benedictine Order has implemented this insight in a radical manner. One of the basic objectives of the Benedictines is the ‘search for god’, an excellent example of a non-quantifiable, ambiguous output. Consequently the monastic control differs from standard evaluation processes. The Benedictines choose clan and process control to counteract the trend to only determine relevant performance criteria and to control them ex post. Hence monastic governance supports work motivation in a different way. Through careful selection and socialization practises, a shared understanding of the rules is advanced and correct behaviour promoted (Fong/Tosi 2007). These processes are embedded in structures and rules, which facilitate the internalization of values. Instead of output controls, the convent examines the preconditions of contenders and configures the processes and practices within the monastery. This strategy brings considerable advantages, in particular preventing the unfavourable outcomes created by incorrect incentives (Bebchuk/Fried 2004; Foss et al. 2006; Frey/Osterloh 2005; Frey/Osterloh 2006; Kerr 1975; Osterloh/Frey 2000; Stefani 2008). The focal points of Benedictine governance are in line with managerial control theory (e.g. Eisenhardt 1985; Ouchi 1977, 1979; Thompson 1967). A major finding of which is that the type of control system must fit the characteristics of the knowledge available to the controller. These characteristics are defined by knowledge of measurability and the attributability of outputs. The theory implies that output control is adequate only for some tasks, in particular simple tasks. Complex assignments, e.g. leading an organization, need different control modes such as clan or process control.

The emphasis on internal control is consistent with the assumptions of psychological economics, in particular with fairness-reciprocity theory (Dufwenberg/Kirchsteiger, 2004; Falk et al. 2003; Rabin 1993) or social (dis)approval theory (e.g. Akerlof 1980; Fehr/Falk, 2002). Individuals react according to their interpretation of other people’s intentions. 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: 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 may signal distrust or insinuate the selfish nature of the employees (McGregor 1960). The empirical literature supports these insights: beliefs about fairness matter (Blount 1995; Cox 2004; Sobel 2005).

The Benedictine control system empirically demonstrates that even though output control may be considered a “modern” system of quality management, this method can not successfully be applied everywhere as it is unfortunately being done today.

Emphasis on co-determination

Already in the early Benedictine monasteries the abbot was frequently democratically elected by the padres (Helvetia Sacra 1986). The history of the monastery of Engelberg illustrates further comprehensive participation rights of the convent (Heer 1975), which today are extended even further. In monasteries firm-specific investments of the members are satisfied with extensive participation rights. During a five year period of training, candidates attain the knowledge for their lifelong monastery life. To a large extent this knowledge is only pertinent to a monastic environment. Accordingly, hardly anyone invests more firm-specific than the padres and brothers do. In monasteries the monks are not compensated for their (lifelong) tenure with monetary rewards but with ‘spiritual rewards’ and through obtaining considerable voting rights and co-determination (Hirschman 1970). This provides strong incentives to invest in firm-specific knowledge. The monks are involved in decision making and thus are able to control their officials. They have the power to discipline and supervise the monastic leaders and are capable of shaping the future of their institution.

Co-determination and members’ voice are subject to intense discussions in management research too. For many economists it is indisputable that the key task of corporate governance is to generate, accumulate, transfer and protect valuable knowledge and capability (e.g. Foss/Foss 2000; Grandori/Kogut 2002; Grant 1996; Penrose 1959; Spender 1996; Teece et al. 1997). ‘Knowledge workers’ are essential for guaranteeing good firm performance. But 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). With co-determination such protection can be ensured (Osterloh/Frey 2006). The example of the monastery of Engelberg suggests that this form of knowledge protection is accompanied by improved checks and balances. First, co-determination and the involved exchange of information often lead to an adjustment of interests between the parties. It simultaneously reduces information asymmetries. Second, participation and self-governance is strengthened by the corporate community, as anyone breaking the rules is more easily identified by colleagues. Third, insiders can control the management more effectively because they are less dependent on the information provided by the executives (Osterloh/Frey, 2004). Finally, co-determination facilitates not only the intrinsic motivation of knowledge workers but also raises their loyalty to the firm (Osterloh/Frey 2006).

Emphasis on supportive external control

Another trend in management theory, reinforced by the financial crisis, is the call for rigorous standards and enhanced external incentives (Snider 2009). Against these claims, in the last decades, external control in the Benedictine institutions has developed in another direction. The visitations and the jurisdiction of the Congregation of the Benedictine Order offer another solution. ‘Visitations’ not only help to control the books and the economic situation but also consider firm culture, i.e. the spirit and the discipline of the monks, the personal relationships between monks and their superiors, and investigate the possible abuse of authority. In recent times the focus has rather shifted away from outside control in favour of a system of support and mutual

assistance. This recent form 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 thus as reducing their self-determination (for an overview compare Deci et al. 1999; Frey/Jegen 2001).

The Benedictines heavily rely on internal control and supportive external control. A similar focal point could be a promising path for future governance of firms too. It is highly controversial as to whether tightened regulation and an enhancement of external control lead to satisfactory outcomes. The empirical results on the effectiveness of these measurements are not convincing. First, performance-related executive compensation has contributed significantly to a lack of transparency in pay policy or even to a loss of control through manipulations (Aboody/Kaszniak 2000; Efendi et al. 2006; Johnson et al. 2006; Yermack 1997). Second, independent boards have not prevented managers from expropriating shareholders by entrenching themselves (Boyd 1994; Conyon/Peck 1998; Core et al. 1999; David et al. 1998; Lambert et al. 1993; Main, 1991; Westphal/Zajac 1994). Third, 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). Fourth, instead of gaining control of the reward systems, enhanced regulation and monitoring lead to increasing compensation (Hoskisson 2009). Therefore relying solely on external control is a dangerous strategy.

Limitations of monastic governance

It can be argued that we present an idealized picture of an institution. Such an extreme way of life, as chosen by the Benedictine monks, can suffer serious drawbacks,¹⁰ which are not addressed in this paper. Without doubt a monastic life also has deficits in the area of governance. First, monasteries sometimes are hot spots for gossip and peer control, including lobbying and power games. Second, 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), which can lead to groupthink (Janis 1972; Janis 1982). Third, cohesive groups are more susceptible to expert power (Festinger 1954), which can lead to the support of dictatorship and the abuse of power (Coleman 1990). Such systems increase agency problems as they can result in blind trust and the abuse of dominant positions (Conger/Kanungo 1987). Fourth, the life long commitment to a monastery has to be considered. Strong commitment is desirable in companies, but not in such an absolute way as in monastic institutions. While giving voice and developing loyalty, monasteries also build exit barriers. When exit costs are exorbitant, thus hindering people from leaving, negative outcomes, like discouragement, will occur (Hirschman 1970).

For these reasons, organizations relying on aspects of the monastic governance system have to balance the advantages and disadvantages of the concepts. E.g. value systems should be strong enough to select and socialize appropriate employees, but they should be open enough to avoid dogmatism and unbalanced power, i.e. value systems must also honor new and challenging ideas.

¹⁰ For a criticism see e.g. the discourse about the total institution (Goffman 1961).

Relevance for other organizations

After investigating monastic history in this paper, we cast a brief look into the future. We believe that the characteristics of monastic governance will become more relevant in the coming years. First, weaknesses and perplexity in current corporate governance practice suggest that it may be useful to explore new ground in solving agency problems. Second, the significance of organizations producing knowledge intensive services and products is still growing. Exclusive external incentives do not meet the requirements of these organizations. For that reason governance concepts which consider the importance of firm-specific knowledge should become more relevant. Governance mechanisms such as clan control and co-determination foster and protect firm-specific investments by simultaneously reducing agency problems.

However, is it possible to compare monastic institutions and other organizations in a sensible way? In the following we explain, why such a confrontation is useful. On the one hand, it is obvious that there are fundamental differences between monastic organizations and e.g. modern corporations. To name the most important, the padres and brothers constitute a life partnership, where faith is of crucial relevance (e.g. Reiber 2003). On the other hand, the basic principles of organizing are identical. For Benedictine institutions, as well as for other organizations, the purpose is an efficient achievement of their objectives as set by a principal (Kieser/Walgenbach 2007). To ensure an efficient target achievement¹¹, inefficiencies (agency problems such as luxury consumption, moral decline, fraudulence and inabilities such as overstraining or indulgence) have to be reduced. Our paper refers predominantly to these negative criteria, which show astonishing similarities to the deficits of other organizations. In contrast to the developments and the fashions in the corporate governance sector, monasteries rely on efficient control through a fundamentally different governance approach.

What can we learn from the monastic approach for the current governance debate? First and foremost the Benedictine institutions with over 1000 years of history and experience suggest that new proposals in psychological or political economics and embeddedness theory (Baker 1990; Benz/Frey 2007; Frey 1997; Granovetter 1985; Osterloh 2007) are relevant in practice. Second, the example of monasteries offers concrete ideas and applications. A one to one transfer is, of course, not feasible. Benedictine practices certainly have to be modified before they can be put into practice advantageously in corporations. Accordingly we briefly illustrate some starting points as to how the governance in other organizational forms could be complemented in a monastic sense.

Hardly any organizations as monasteries internalize value systems in such a profound way. Many, and in particular big, organizations seem to have forgotten how to foster common values and identity through the channels of living and working together. In general they select their employees primarily according to “objective” per-

¹¹ In the case of the Benedictines the primary objectives are: ‘Searching for god’ or contemplation. Secondary objectives are e.g. survival, expansion, reinvestment of revenues or CSR-efficiency.

formance criteria. This development is encouraged if the selection process is delegated to third parties, e.g. to headhunters. It would appear to be of secondary importance whether a candidate fits within the value system of a company or a team. Furthermore, in many organizations the pressure to perform dominates. In this daily routine other aspects of living and working are neglected, e.g. discussing current political or social issues which may affect the company in the future or engaging in voluntary team tasks such as social activities. Most companies organize such activities today more efficiently. They hire personal trainers, psychologists and event managers for a 2 or 3 day workshop. Nonetheless sporadic ‘team building’ of this nature is not sufficient because it has nothing in common with a profound socialization and internalization of value systems.

The recruitment of top managers is a related topic. In these times of globalization many companies hire their leaders externally. The example of Engelberg shows that internal promotions have the benefit of comprehensive information about a candidate’s past behavior being taken into account (Rost et al. 2008). Somewhat more idealistic are schemes promoting democratic participation of the employees. Organizations could pre-select suitable CEO or advisory board candidates by relying on first-hand information. Before election, these candidates could – like politicians – present their strategic vision for the firm (for more detail cf. Benz/Frey 2007). Many organizational forms such as partnerships successfully use democratic elements.

These are only a few general, possibly obvious suggestions for a new realignment of governance practice. A more tangible realization and the crucial question of how new governance structures can be enforced will have to be reserved for future research taking into account the form, situation, or size of organization, etc.

Conclusion

The financial crisis is a crisis of governance as well. In search of answers and solutions many scholars and practitioners recommend improved output control, i.e. better external incentives or even stricter regulations. Monasteries suggest that alternatives may be more sustainable for enhancing governance quality and reducing agency problems. The Benedictine institutions offer three realignments of actual corporate governance practice.

First, for non-quantifiable, ambiguous outputs clan control, i.e. careful (ex ante) selection and socialization processes, presents a superior alternative to ex post evaluation and output control. Wrong incentives covering questionable performance criteria are a main reason for the governance failures of today, in particular in knowledge intensive work. The quality of knowledge intensive work, e.g. the work of CEOs, is *not* quantifiable. Second, co-determination and inside control not only actively pay attention to firm-specific knowledge but also promote the principle of checks and balances by reducing agency problems. The Benedictines are specialists in encouraging firm-specific investments by giving appropriate incentives to their employees. Monasteries demonstrate that democratic elections of executives, internal evaluation processes, and employee representation on an advisory board foster and protect firm-specific investments. Third, against the current trend the Benedictines do not rely on an increasing number of external incentives. Instead they offer a modified variety of external

control. The religious Order succeeds in applying supportive external control, which is not perceived as controlling.

Summing up, the success of the Benedictine governance seems well worth considering. The Benedictine approaches have not only been found useful in the economic literature but have also already consequently been tested and executed over centuries. The Benedictines show how current corporate governance can be encouraged to go beyond stricter regulations or improved external incentives. It is not our aim to turn the entire governance system inside out. However, to control for knowledge intensive work it might be useful for certain organizations to modify the monastic approach to their need and to put some of these aspects into practice.

References

- Aboody, D./Kaszniak, R. (2000): CEO stock option awards and the timing of corporate voluntary disclosures. In: *Journal of Accounting and Economics*, 29(1): 73-100.
- Akerlof, G. A. (1980): A Theory of Social Custom, of Which Unemployment May be One Consequence. In: *The Quarterly Journal of Economics*, 94(4): 749-775.
- Azzi, C./Ehrenberg, R. (1975): Household Allocation of Time and Church Attendance. In: *Journal of Political Economy*, 83: 27-56.
- Baker, W. E. (1990): The Social Structure of a National Securities Market. In: *American Journal of Sociology*, 89(4): 775-811.
- Bebchuk, L./Fried, J. M. (2004): Pay without Performance. The Unfulfilled Promise of Executive Compensation. London: Mass.
- Bebchuk, L. A./Fried, J. M. (2005): Pay Without Performance: Overview of the Issues. In: *Journal of Applied Corporate Finance*, 17(4).
- Benz, M./Frey, B. S. (2007): Corporate governance: What can we learn from public governance? In: *Academy of Management Review*, 32(1): 92-104.
- Blair, M. M./Stout, L. A. (1999): A team production theory of corporate law. In: *Virginia Law Review*, 85(2): 247-328.
- Blount, S. (1995): When Social Outcomes Aren't Fair: The Effect of Causal Attributions on Preferences. In: *Organizational Behavior and Human Decision Processes*, 63(2): 131-144.
- Boyd, B. K. (1994): Board Control and CEO Compensation. In: *Strategic Management Journal*, 15(5): 335-344.
- Bratton, W. (2002): Enron and the Dark Side of Shareholder Value. In: *Tulane Law Review*, 76: 1275-1362.
- Coleman, J. (1990): *The Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- Conger, J. A./Kanungo, R. N. (1987): Toward a Behavioral-Theory of Charismatic Leadership in Organizational Settings. In: *Academy of Management Review*, 12(4): 637-647.
- Consuetudines. (1991): *Consuetudines Abbey of Engelberg*. Engelberg.
- Conyon, M. J./Peck, S. I. (1998): Board Control, Remuneration Committees, and Top Management Compensation. In: *Academy of Management Journal*, 41(2): 146-157.
- Core, J. E./Holthausen, R. W./Larcker, D. F. (1999): Corporate governance, chief executive officer compensation, and firm performance. In: *Journal of Financial Economics*, 51(3): 371-406.
- Cox, J. C. (2004): How to identify trust and reciprocity. In: *Games and Economic Behavior*, 46(2): 260-281.
- David, P./Kochhar, R./Levitas, E. (1998): The effect of institutional investors on the level and mix of CEO compensation. In: *Academy of Management Journal*, 41(2): 200-208.
- Deci, E. L./Koestner, R./Ryan, R. M. (1999): A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. In: *Psychological Bulletin*, 125: 627-668.
- Dufvenberg, M./Kirchsteiger, G. (2004): A theory of sequential reciprocity. In: *Games and Economic Behavior*, 47(2): 268-298.

- Eckert, J. C. (2000): *Dienen statt Herrschen. Unternehmenskultur und Ordensspiritualität: Begegnungen – Herausforderungen – Anregungen*. Stuttgart: Schäffer-Poeschel.
- Efendi, J./Srivastava, A./Swanson, E. P. (2006): Why do Corporate Managers misstate Financial Statements? The Role of Option Compensation and other Factors. In: SSRN Electronic Paper Collection, <http://ssrn.com/abstract=547922>: 1-62.
- Einsiedeln, Monastery (2009): Website: www.kloster-einsiedeln.ch; 10.06.2009.
- Eisenhardt, K. M. (1985): Control: Organizational and Economic Approaches. In: *Management Science*, 31: 134-149.
- Ekelund, R. B./Hébert, R. F./Tollison, R. D. (2006): *The Marketplace of Christianity*. Cambridge: The MIT Press.
- Falk, A./Fehr, E./Fischbacher, U. (2003): On the nature of fair behavior. In: *Economic Inquiry*, 41(1): 20-26.
- Fama, E./Jensen, M. C. (1983): Agency Problems and Residual Claims. In: *Journal of Law and Economics*, 26: 327-349.
- Fehr, E./Falk, A. (2002): Psychological Foundations of Incentives. In: *European Economic Review*, 46: 687-724.
- Ferrero, M. (2008): The triumph of Christianity in the Roman empire: An economic interpretation. In: *European Journal of Political Economy*, 24: 73-87.
- Festinger, L. (1954): A Theory of Social Comparison Processes. In: *Human Relations*, 7: 117-140.
- Fong, E. A./Tosi, H. L. (2007): Effort, performance, and conscientiousness: An agency theory perspective. In: *Journal of Management*, 33(2): 161-179.
- Foss, K./Foss, N., J. (2000): The Knowledge-Based Approach and Organizational Economics: How much do they really differ? And how does it matter? In: N. Foss, J. /V. Mahnke (Eds.), *Competence, governance, and entrepreneurship: advances in economic strategy research*. Oxford: Oxford University Press: 55-79.
- Foss, K./Foss, N. J./Vasquez, H. (2006): Tying the Manager's Hands: Constraining Opportunistic Managerial Intervention. In: *Cambridge Journal of Economics*, 30(5): 797-818.
- Freeman, R. B./Lazear, E. P. (1996): An Economic Analysis of Works Councils. In: J. Rogers & W. Streek (Eds.), *Works Councils - Consultation, Representation, and Cooperation in Industrial Relations*: Chicago, London: 27-49.
- Frey, B. S. (1997): *Not Just for the Money: An Economic Theory of Personal Motivation*. Cheltenham, UK / Brookfield, USA: Edward Elgar.
- Frey, B. S. (1999): *Economics as a science of human behaviour: towards a new social science paradigm (Extended 2nd ed.)*. Boston; Dordrecht: Kluwer Academic Publishers.
- Frey, B. S./Jegen, R. (2001): Motivation crowding theory: A survey of empirical evidence. In: *Journal of Economic Surveys*, 15(5): 589-611.
- Frey, B. S./Osterloh, M. (2005): Yes, managers should be paid like bureaucrats. In: *Journal of Management Inquiry*, 14(1): 96-111.
- Frey, B. S./Osterloh, M. (2006): Evaluations: Hidden Costs, Questionable Benefits, and Superior Alternatives. In: *Working Paper Series ISSN 1424-0459*, 302.
- Gäbler, U. (2005): *Wiederkehr der Religion?* In: *Basler Universitätsreden*, 103.
- Germania Benedictina. (1970): *Die Benediktinerklöster in Bayern*. St. Ottilien: EOS-Verlag.
- Germania Benedictina. (1975): *Die Benediktinerklöster in Baden-Württemberg*. St. Ottilien: EOS-Verlag.
- Germania Benedictina. (1999): *Die Reformverbände und Kongregationen der Benediktiner im deutschen Sprachraum*. St. Ottilien: EOS-Verlag.
- Goffman, E. (1961): *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Garden City, N.Y.: First Anchor Books Edition.
- Grandori, A./Kogut, B. (2002): Dialogue on Organization and Knowledge. In: *Organization Science*, 13: 224-232.
- Granovetter, M. (1985): Economic-Action and Social-Structure - the Problem of Embeddedness. In: *American Journal of Sociology*, 91(3): 481-510.
- Grant, G. H. (2003): The evolution of corporate governance and its impact on modern corporate America. In: *Management Decision*, 41(3): 923-934.

- Grant, R. M. (1996): Prospering in Dynamically-Competitive Environments: Organizational Capability as Knowledge Integration. In: *Organization Science*, 7: 375-387.
- Groves, R. M./Cialdini, R. B./Couper, M. P. (1992): Understanding the Decision to Participate in a Survey. In: *Public Opinion Quarterly*, 56(4): 475-495.
- Heer, G. (1975): *Aus der Vergangenheit von Kloster und Tal Engelberg 1120-1970*. Engelberg: Kloster Engelberg.
- Held, M./Kubon-Gilke, G./Sturn, R. (Eds.) (2007): *Normative und institutionelle Grundfragen der Ökonomik. Jahrbuch 6: Ökonomie der Religion*. Marburg: Metropolis.
- Helvetia Sacra. (1986): *Die Orden mit Benediktinerregel. Frühe Klöster, die Benediktiner und Benediktinerinnen in der Schweiz*. Bern: Francke Verlag.
- Hirschman, A. O. (1970): *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA.
- Hoskisson, R. E./Castleton, M. W./Withers, M. C. (2009): Complementarity in Monitoring and Bonding: More Intense Monitoring Leads to Higher Executive Compensation. In: *Academy of Management Perspectives*, 23(2).
- House of Bavarian History (2007): Website: <http://www.hdbg.de/kloester/>; 15.09.2007.
- Iannaccone, L. R. (1998): Introduction to the Economics of Religion. In: *Journal of Economic Literature*, 36: 1465-1496.
- Inauen, E./Frey, B. S. (2008): Benediktinerabteien aus ökonomischer Sicht. Über die ausserordentliche Stabilität einer besonderen Institution. In: *Erbe und Auftrag. Monastische Welt*, forthcoming.
- Janis, I. L. (1972): *Victims of Groupthink. A Psychological Study of Foreign Policy Decisions and Fiascos*. Boston.
- Janis, I. L. (1982): *Groupthink*. Boston: Houghton Mifflin.
- Jaspert, B. (1989): Benedikts Botschaft am Ende des 20. Jahrhunderts, *Regulae Benedicti Studia. Annuarum Internationale*, 16: 205-232.
- Jensen, M. C. (2003): Paying people to lie: the truth about the budgeting process In: *European Financial Management*, 9(3): 379-406.
- Jensen, M. C./Meckling, W. H. (1976): Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. In: *Journal of Financial Economics*, 3: 305-360.
- Jensen, M. C./Murphy, K. J. (1990a): CEO Incentives: It's Not How Much You Pay, but How. In: *Harvard Business Review*, 68: 138-153.
- Jensen, M. C./Murphy, K. J. (1990b): Performance, Pay and Top-management Incentives. In: *Journal of Political Economy*, 98: 225-264.
- Jensen, M. C./Murphy, K. J./Wruck, E. G. 2004. Remuneration: Where We've Been, How We Got to Here, What are the Problems, and How to Fix Them. *Negotiation, Organizations and Markets Research Paper Series, Harvard Business School NOM Research Paper No. 04-28*.
- Johnson, S. A./Ryan, H. E./Tian, Y. S. (2006): Managerial Incentives and Corporate Fraud: The Sources of Incentives matter. In: *SSRN Electronic Paper Collection*, <http://ssrn.com/abstract=395960>: 1-36.
- Kerr, S. (1975): On the Folly of Rewarding A, while Hoping for B. In: *Academy of Management Journal*, 18: 769-783.
- Kieser, A. (1987): From Asceticism to Administration of Wealth. Medieval Monasteries and the Pitfalls of Rationalization. In: *Organization Studies*, 8(2): 103 - 123.
- Kieser, A./Walgenbach, P. (2007): *Organisation* (5. ed.). Stuttgart: Schäffer-Poeschel.
- Lambert, R. A./Larcker, D. F./Weigelt, K. (1993): The Structure of Organizational Incentives. In: *Administrative Science Quarterly*, 38(3): 438-461.
- Main, B. G. (1991): Top Executive Pay and Performance. In: *Managerial and Decision Economics*, 12(3): 219-229.
- McCleary, R. M./Barro, R. J. (2006): Religion and Economy. In: *Journal of Economic Perspectives*, 20(2): 49-72.
- McGrath, P. (2007): Knowledge Management in Monastic Communities of the Medieval Irish Celtic Church. In: *Journal of Management History* 13(2): 211-223.
- McGregor, D. (1960): *The Human Side of Enterprise*. New York: McGraw Hill.

- Miller, K. D. (2002): Competitive strategies of religious organizations. In: *Strategic Management Journal*, 23(5): 435-456.
- Moulin, L. (1965): Policy-making in the religious orders. In: *Government and Opposition*, 1(1): 25-54.
- Muller-Camen, M./Salzgeber, S. (2005): Changes in Academic Work and the Chair Regime: The Case of German Business Administration Academics. In: *Organization Studies*, 26(2): 271-290.
- Müller, I. (1971): *Geschichte der Abtei Disentis - Von den Anfängen bis zur Gegenwart*. Zürich / Köln.
- Osterloh, M. (2007): Psychologische Ökonomik: Integration statt Konfrontation. Die Bedeutung der Psychologischen Ökonomik für die BWL. In: *Zeitschrift für betriebswirtschaftliche Forschung*, 56: 61 - 81.
- Osterloh, M./Frey, B. S. (2000): Motivation, Knowledge Transfer, and Organizational Forms. In: *Organization Science*, 11(5): 538-550.
- Osterloh, M./Frey, B. S. (2004): Corporate governance for crooks. The case for corporate virtue. In: A. Grandori (Ed.), *Corporate Governance and Firm Organization*: Oxford: Oxford University Press: 191-211.
- Osterloh, M./Frey, B. S. (2006): Shareholders Should Welcome Knowledge Workers as Directors. In: *Journal of Management and Governance*, 10(3): 325 - 345.
- Ouchi, W. G. (1977): The Relationship Between Organizational Structure and Organizational Control. In: *Administrative Science Quarterly*, 22: 95-113.
- Ouchi, W. G. (1979): A Conceptual Framework for the Design of Organizational Control Mechanisms. In: *Management Science*, 25: 833-848.
- Penrose, E. T. (1959): *The Theory of the Growth of the Firm*. Oxford: Oxford University Press.
- Power, M. (1994): *The Audit Explosion*. London: Demos.
- Power, M. (1997): *The Audit Society. Ritual of Verification*. Oxford: Oxford University Press.
- Rabin, M. (1993): Incorporating Fairness into Game-Theory and Economics. In: *American Economic Review*, 83(5): 1281-1302.
- Regula Benedicti (2006): *Die Regel des heiligen Benedikt*. Beuron: Beuronener Kunstverlag.
- Reiber, K. E. (2003): *Organisation im Spiegel der Regula Benedicti – Eine hermeneutische Interpretation der benediktinischen Regel im Kontext der lernenden Organisation*. Universität Tübingen: Fakultät für Sozial- und Verhaltenswissenschaften, University of Tübingen.
- Romano, R. (2005): The Sarbanes-Oxley Act and the making of quack corporate governance. In: *Yale Law Journal*, 114(7): 1521-1612.
- Rost, K./Salomo, S./Osterloh, M. (2008): CEO Appointments and the Loss of Firm-specific Knowledge - Putting Integrity Back into Hiring Decisions. In: *Corporate Ownership and Control*, 5(3): 86-98.
- Rost, K./Inauen, E./Osterloh, M./Frey, B. S. (2009): The Corporate Governance of Benedictine Abbeys: What can Stock Corporations Learn from Monasteries? In: *Journal of Management History*, forthcoming.
- Rost, K./Osterloh, M. (2009): Opening the Black Box of Upper Echelons: Expertise and Gender as Drivers of Poor Information Processing During the Financial Crisis. Working Paper, University Zürich.
- Schweizer Benediktinerkongregation. (1986): *Satzungen und spirituelle Richtlinien der Schweizer Benediktinerkongregation*. Engelberg: Kloster Engelberg.
- Snider, L. (2009): Accommodating Power: the 'Common Sense' of Regulators. In: *Social & Legal Studies*, 18(2): 179-197.
- Sobel, J. (2005): Interdependent preferences and reciprocity. In: *Journal of Economic Literature*, 43(2): 392-436.
- Spender, J. C. (1996): Making Knowledge the Basis of a Dynamic Theory of the Firm. In: *Strategic Management Journal*, 17(Special Issue): 45-62.
- St.Ottilien Benediktinerkongregation (2004): *Eigenrecht der Benediktinerkongregation St.Ottilien*. St.Ottilien.
- Stark, R./Finke, R. (2000): *Acts of faith: Explaining the Human Side of Religion*. Berkeley, CA.: University of California Press.
- Stefani, U. (2008): Discussion of "Bonus and Malus in Principal Agent Relations with Fixed Pay and Real Effort". In: *Schmalenbach Business Review*, 60(3): 304-318.

- Tajfel, H. (1981): *Human groups and social categories: studies in social psychology*. Cambridge, NY: Cambridge University Press.
- Teece, D. J./Pisano, G./Shuen, A. (1997): Dynamic Capability and Strategic Management. In: *Strategic Management Journal*, 18(7): 509-533.
- Thompson, J. D. (1967): *Organizations in Action. Social Science Bases of Administrative Theory*. New York.
- Wenger, E. C./Snyder, W. M. (2000): Communities of practice: The organizational frontier. In: *Harvard Business Review*, 78(1): 139-145.
- Westphal, J. D./Zajac, E. J. (1994): Substance and Symbolism in Ceos Long-Term Incentive Plans. In: *Administrative Science Quarterly*, 39(3): 367-390.
- Yermack, D. (1997): Good timing: CEO stock option awards and company news announcements. In: *Journal of Finance*, 52(2): 449-476.
- Zamagni, S. (2008): *The Catholic Ethic and the Spirit of Capitalism*, International Society for New Institutional Economics (ISNIE). Toronto.
- Zingales, L. (1998): Corporate Governance. In P. Newman (Ed.), *The New Palgrave Dictionary of Economics and the Law*. London: Stockton Press. 1: 497-503.
- Zingales, L. (2009): The Future of Securities Regulation. In: *Journal of Accounting Research*, 47(2): 391-425.

Appendix

Table 3: Analysis of the abbots in the monastery of Engelberg

Abbot	Year of investiture	Year of resignation/ death	Tenure	1=Good abbot 2=Poor abbot (-)=missing
Adelhelm	1120	1126	6	1
(Luitfrid)	1126	1143	6	2
(Welfo)	1126	1143	6	2
(Hesso)	1126	1143	6	2
Frowin	1143	1178	35	1
Berchtold	1178	1197	19	1
Heinrich I.	1197	1223	26	1
Heinrich II.	1223	1241	18	1
Werner	1241	1250	9	1
Walter von Iberg	1250	1267	17	1
Walter von Cham	1267	1276	9	1
Arnold von Will	1276	1296	20	1
Ulrich von Stansstad	1296	1298	2	-
Rudolf Schertleib	1298	1317	19	1
Walter Amstutz	1317	1331	14	1
Wilhelm v. Wolfenschiessen	1331	1347	16	-
Heinrich von Sempach	1347	1359	12	1
Nikolaus von Wisserlen	1359	1360	1	-
Rudolf von Stühlingen	1360	1398	38	1
Walter Mirer	1398	1420	22	1
Johann Kupferschmied	1420	1421	1	-
Johann Kummer	1421	1435	12	2
Johann de Wida	1429	1431	2	-
Rudolf Kaufmann	1435	1442	7	2
Johann Strin	1442	1450	8	2
Johann Ambühl	1450	1458	8	2

Abbot	Year of investiture	Year of resignation/ death	Tenure	1=Good abbot 2=Poor abbot (-)=missing
Heinrich Porter	1458	1505	26	-
Ulrich Stalder	1478	1489	11	2
Nikolaus Gratis	1489	1490	1	-
Johann Elthon	1490	1499	9	2
Barnabas Bürki	1505	1546	41	1
Johann Spörlin	1547	1548	1	-
Bernhard Ernst	1548	1553	5	1
Jodoc Krämer	1553	1574	21	-
Rudolf Gwicht	1574	1576	2	1
Jakob Suter	1576	1583	7	1
Gabriel Blattmann	1584	1592	8	2
Andreas Herrsch	1592	1600	8	2
Melchior Rizzi	1600	1603	3	2
Jakob Benedikt Sigerist	1603	1619	16	1
Benedikt Keller	1619	1630	11	-
Plazidus Knüttel	1630	1658	28	1
Ignaz Betschart	1658	1681	23	1
Gregor Fleischlin	1681	1686	5	1
Ignaz Burnott	1686	1693	7	1
Plazidus Hess	1693	1694	1	-
Joachim Albini	1694	1724	30	1
Maurus Rinderli	1724	1730	6	2
Emanuel Crivelli	1730	1749	19	1
Maurus Zink	1749	1769	20	1
Leodegar Salzmann	1769	1798	29	1
Karl Stadler	1803	1822	19	1
Eugen von Büren	1822	1851	29	1
Plazidus Tanner	1851	1866	15	1
Anselm Villiger	1866	1901	35	1
Leodegar Scherer	1901	1914	13	1
Basil Fellmann	1914	1929	15	1
Bonaventura Egger	1929	1931	2	-
Leodegar Hunkeler	1931	1956	25	1
Leonhard Bösch	1956	1988	32	1
Berchtold Müller	1988	2009	21	1