

The corporate governance of Benedictine abbeys

- What can stock corporations learn from monasteries? -

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Abstract

Purpose – The governance structure of monasteries is analyzed to gain new insights and apply these to solve agency problems of modern corporations. During the long history of monasteries, some abbots and monks lined their own pockets and certain monasteries were undisciplined. However, monasteries developed special systems to check these excesses and therefore were able to survive for centuries.

Design/methodology/approach – We use 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. Then the governance mechanisms of these monasteries are analyzed in detail. Finally we draw 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 were examined show an average lifetime of almost 500 years and only quarter of them dissolved as a result of agency problems. We argue that this success is due to an appropriate governance structure that relies strongly on internal control mechanisms.

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 understanding the efficiency of internal behavioral incentives and their combination with external control mechanisms in corporate governance.

Keywords: Corporate Governance, Principal-Agency-Theory, Psychological Economics, Monasteries, Benedictine Order

Article Type: Research paper

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 CEOs and thus preventing such scandals (Fama and Jensen, 1983, Jensen and Meckling, 1976, Jensen and Murphy, 1990a, Jensen and Murphy, 1990b). 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.

In fact, for 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, 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, 1991b, 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). Recent literature suggests that external discipline should be complemented by internal behavioral incentives (Davis et al., 1997, Frey and Osterloh, 2002, Frey and Osterloh, 2006, Osterloh and Frey, 2006, Reberlioux, 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 behaviour. By neglecting these motives authors may fail to understand the levels and the changes in behaviour. 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 behaviour if they neglect internal behavioral incentives. In particular, psychological economics (for an overview see Frey and Benz, 2004), motivation psychology (for an overview see 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 approached their specific governance problems.

Studying the governance of monasteries offers the following advantages: Firstly, monasteries were, and still are, confronted with similar principal agency problems to 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. Secondly, 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. Thirdly, Benedictine monasteries, with over 1000 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 use a dataset of all Benedictine abbeys [1] in Bavaria, Baden-Württemberg and German-speaking Switzerland, and analyze their governance mechanisms in detail. The following questions are addressed: Are monasteries capable of solving agency problems? If so, how are they doing this, and what are the insights for other organizational forms? 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 altogether 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 (Helvetia 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 the 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 (cf. appendix 1). The empirical examination is limited to Benedictines and 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, Germania Benedictina, 1975, Germania Benedictina, 1999, Helvetia Sacra, 1986) and the Website of the house of Bavarian history (2007)

As of 2008, the 134 monasteries have an average lifetime of almost exactly 600 years (cf. appendix 1). We have modified this average lifetime in three ways. Firstly, the period before 1000AD is ignored because a specific Benedictine monasticism had not evolved until then (Helvetia Sacra, 1986). Secondly, temporary closures are excluded because a monastic community can survive for years without actually having a monastery building: the time during the Thirty Years' War or the Third Reich being prominent examples. Thirdly, 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 150 (cf. appendix 2). This is a first indication of efficient governance in Benedictine monasteries.

Table 1 analyzes the reasons for closures. The table lists 119 institutions after the year 1000AD, and disregards temporary closures, which implies 151 foundations. 17,2% of the monasteries were never closed down; these institutions still exist today. 4% of the monasteries were voluntarily closed. A large proportion of all monasteries, 52,3%, 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 16th century and Secularization in the 19th century. In the 20th century, the number of monasteries was slowly on the rise again.

Table 1. Survival and closure of monasteries

Reason for closures	Number of Benedictine Monasteries	in %	Average lifetime in years	Year of the last event
No closure	26	17,2%	277	-
Non agency problem related closures				
Voluntary closure	6	4%	540	1883
External institutional factors	79	52,3%	568	1862
	85	56,3%	-	-
Agency problem related closures				
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%	-	-

Focusing on agency problems, 13,2% 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. 6% disappeared due to

control failures, including hostile takeovers. The changes in governance structures are revealing: over 7% 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 further 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 10th century and the Reformation Period. As further shown in Table 1, monasteries unable to survive due to agency problems (40 monasteries or 26,5%) 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.

Take in Figure (No. 1)

The findings on the reasons for closures indicate that a maximum of one quarter (26,5%) 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; (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. And 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 [3].

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).

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 gives a graphical overview of the governance of a Benedictine monastery.

Take in Figure (No. 2)

Internal governance mechanisms

Internal control in the Benedictine monasteries can be divided into two main categories. Firstly, monasteries build on common value systems, careful selection and rigorous socialization processes. These arrangements can be explained by embeddedness theory and psychological economics. Secondly, 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) [4]

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 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: 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). The empirical literature supports these insights. For example, Falk, Fehr and Fischbacher (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 (for an overview see 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 a lot 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: Firstly, with respect to the Benedictine values, dialogue among the monks is fostered, and any disagreements are addressed and solved. Secondly, 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: Firstly, 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. Secondly, 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. Thirdly, 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. Fourthly, 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 only has the power to decide in rare, specific cases. 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). Only 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, 1991a, Westphal and Zajac, 1994). Some authors argue that, thanks 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 Malfèr 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.” [5]

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 United States, 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 (for an overview compare 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. This kind of governance disregards internal mechanisms, such as voice, and intrinsic motives, such as loyalty or trust. These internal arrangements help with avoiding problems and facilitate better control. The corporate governance of stock corporations can learn from monasteries, which emphasize these internal mechanisms and demonstrate their operability. Many of these governance mechanisms are in line with new proposals by psychological or political economics and embeddedness theory. In view of current corporate scandals, such as the bankruptcies of Enron, Qwest, Global Crossing and WorldCom, where CEOs collected an average salary of over \$100 million (Bratton, 2002), 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 using a probation period for candidates, rather than 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.

Firstly, 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, Janis, 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). Secondly, 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, Iannaccone, 1997, Iannaccone, 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] 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 Malfèr, who has been active for 8 years as the supreme 'visitor' 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.
- [4] Obviously, the rule of the Saint Benedict can't 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.
- [5] Interview with Archabbot Benno Malfer, 07.11.2007.

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

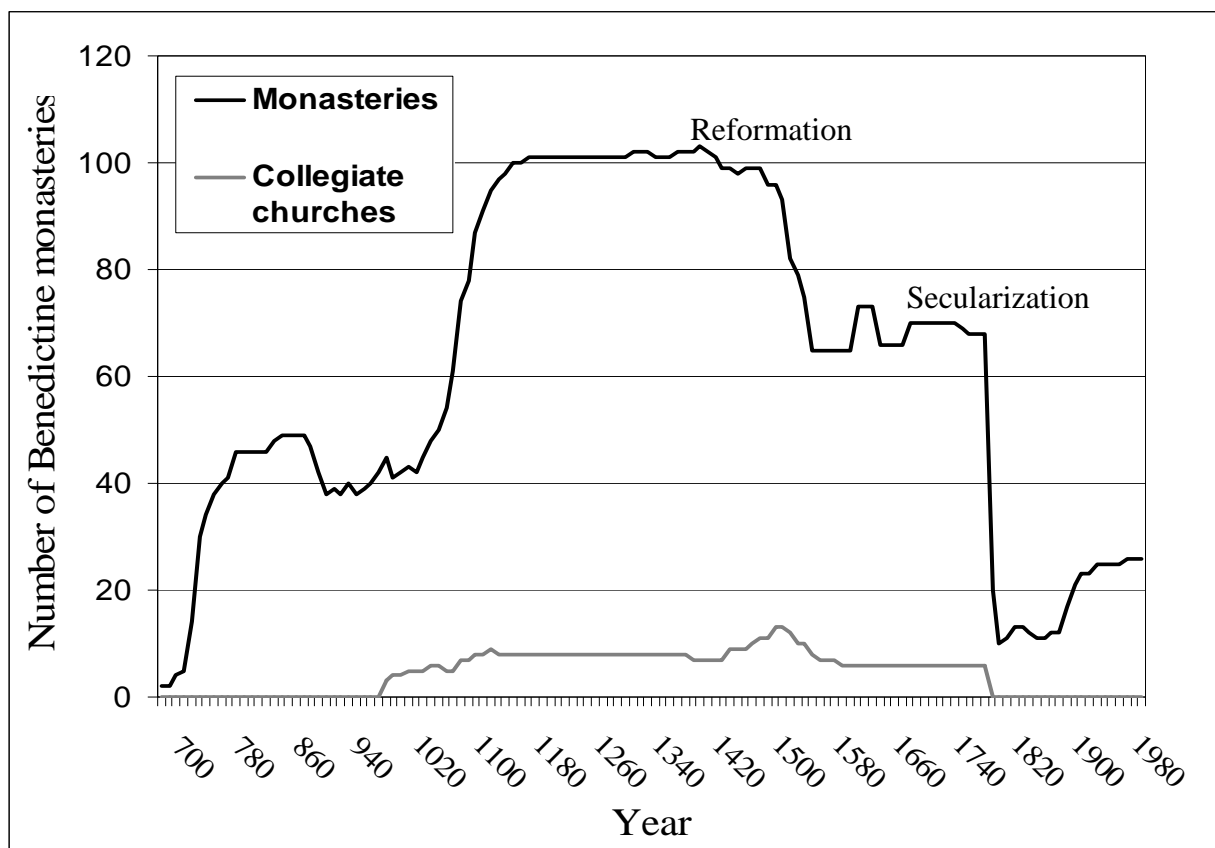
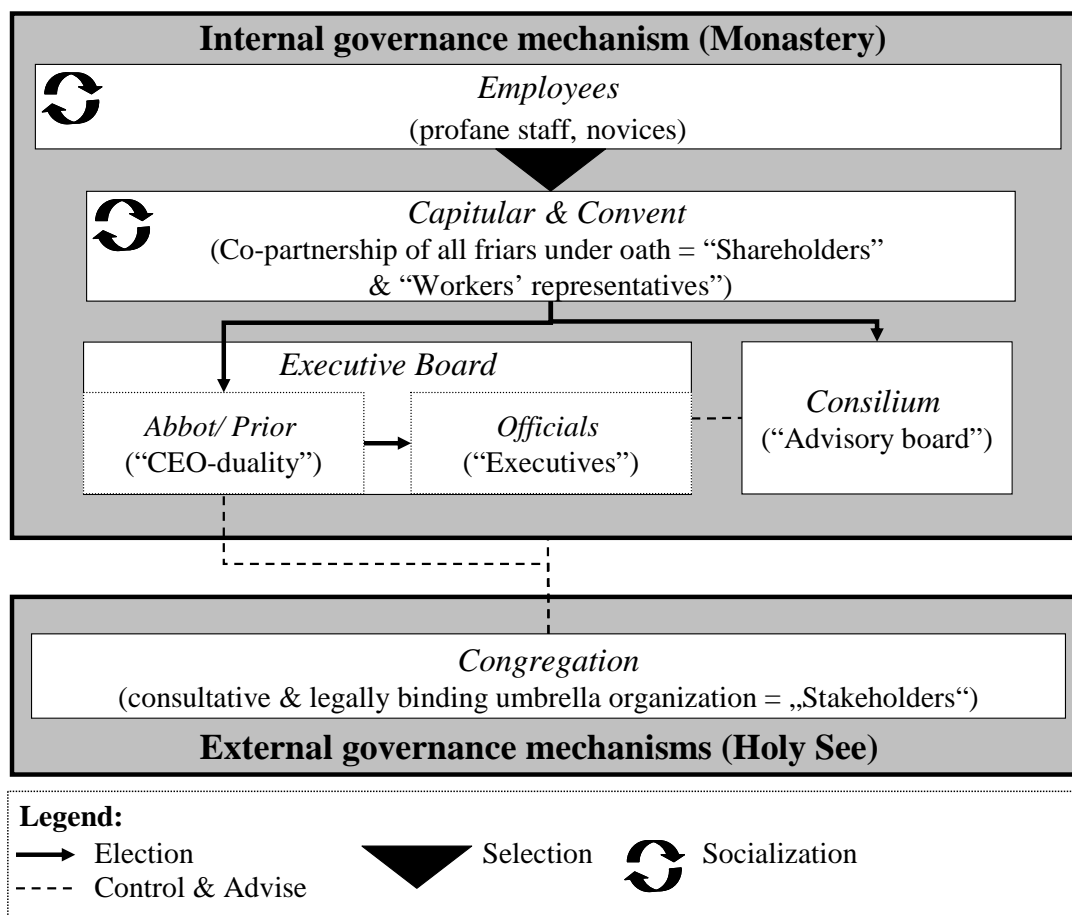


Figure 2. Governance mechanisms of the Benedictines



Appendix 1: All Benedictine abbeys ever existing in Baden-Württemberg, Bavaria and German speaking Switzerland, incl. reasons for closure

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Alpirsbach	1095	1535	Reformation 1: T. in Prot. school	1629	1648	Restitution edict
Amorbach	approx. 700	1803	Secularization			
Andechs	1455	approx. 1570	Reformation 2: Running short of novices Custom loses relevance (e.g. pilgrimage)	1588	1803	Secularization
Anhausen	1113	1558	Reformation 1: T. in Prot. chapter	1629	1648	Restitution edict
Ansbach	748	approx. 1000	T. in collegiate chapter (until 1563 ¹)			
Asbach	1139	1803	Secularization			
Attel	1145	1803	Secularization			
Augsburg St.Stephan	1834	--				
Augsburg St.Ulrich and Afra	1012	1537	Reformation 1	1548	1802	Secularization
Auhausen	approx. 1100	1534	Reformation 1			
Aura an der Saale	1113	1564	Mismanagement (plus warlike troubles)			
Bad Wimpfen	1947	--	(Refoundation of the Abbey of Grüssau, frightened away during second World War)			
Banz	approx. 1060	1568	Reformation 2, neglect	1574	1803	Secularization
Benediktbeuren	approx. 740	1803	Secularization			
Beinwil-Mariastein	approx. 1100	1554	Extinction of the Convent, because of destruction and peasant uprising	1633	--	many times in exile
Berg im Donaugau	769	approx. 900	Raids by the Hungarians			
Beuron	1868	--				
Biburg	1133	1554	Reformation 2, extinction of the Convent, disciplinary and economic problems			
Blaubeuren	1085	1562	Reformation 1: T. in Prot. school	1630	1648	Restitution edict
Chiemsee	approx. 750	891	Subordination			
Disentis	approx. 750	--	Oldest abbey in this examination, continuously occupied			
Donauwörth	1110	1803	Secularization			
Ebersberg	1013	1590	Mismanagement (Reformation brings few new entrants)			
Echenbrunn	1120	approx. 1445	Extinction of the Convent	approx. 1460	1557	Reformation 1: Destroying
Eichstätt	1166	approx. 1350	Too little income, shortage of novices (1422 pursued as collegiate church)			

¹ <http://www.ansbach.de/cda/showpage.php?SiteID=66&lang=de>, 23.08.2007.

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Einsiedeln	934	1798	Helvetik: short term closure of the abbey	1803	--	
Elchingen	approx. 1120	1802	Secularization			
Ellwangen	764	1460	Collegiate chapter (until 1802) ² , additionally caused through rising costs, plague and fires			
Engelberg	approx. 1100	--				
Ensdorf	1121	1525	Neglect	1695	1802	Secularization
Erlach	approx. 1100	1528	Reformation 1			
Ettal	1332	1803	Secularization	1907	--	
Ettenheimmünster	approx. 800	1803	Secularization			
Faurndau	approx. 800	approx. 1120	T. in collegiate chapter (until 1536 ³)			
Feuchtwangen	approx. 800	approx. 1004	Presumable t. in collegiate chapter			
Fischingen	approx. 1138	1531	Reformation 1	1540	1848	Political shut down (liberalism)
Frauenzell	1424	1522	Mismanagement, misconduct of the rule	1582	1803	Secularization
Fultenbach	approx. 739	1449	Decline leads to administration by the Augsburg Hochstift (influence of the diocese)	1471	1773	Overextension: forced administration by the abbeys of Neresheim / Ottobeuren ⁴
Füssen	approx. 750	1802	Secularization			
Gengenbach	approx. 740	1807	Secularization			
Gottesau	approx. 1080	1527	Assumed to be destroyed in peasant wars	1630	1648	Restitution edict
Heidenheim	752	1537	Reformation, rather 2 ⁵			
Herrieden	approx. 790	888	Bishop closes abbey (adoption of the manors)			
Hirsau	approx. 830	approx. 1000	T. in collegiate chapter, then closure	1065	1560	Reformation 1: T. in Prot. school
Honau (Schottenkloster)	approx. 730	approx. 1000	Restitution edict			
Ilmmünster	approx. 762	1060	Secularization, t. in collegiate chapter (at least until 1398)			
			T. in collegiate chapter until 1493 ⁶			

² http://de.wikipedia.org/wiki/F%C3%BCrstpropstei_Ellwangen, 23.08.2007.

³ <http://www.la-bw.de/kloester-bw/klostertexte.php?kreis=Lkr.%20Göppingen&bistum=&alle=1&ungeteilt=&art=&orden=&orte=&buchstabe=&nr=55&thema=Geschichte>, 23.08.2007.

⁴ http://de.wikipedia.org/wiki/Kloster_Fultenbach, 23.08.2007.

⁵ <http://www.hahnenkamm.de/heidenheim/kloster/>, 23.08.2007.

⁶ http://de.wikipedia.org/wiki/Kloster_Ilmm%C3%BCnster, 18.09.2007.

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Irsee	1186	1802	Secularization			
Isny	1096	1350	Plague	1362	1803	Secularization
Jonschwil	before 900	approx. 950	Supposedly extinction of the noble family			
Kastl	1102	1563	Reformation 2, voluntary hand over (preceding mismanagement)			
Kempten	752	1803	Secularization			
Komburg	1078	1488	T. in collegiate chapter (until 1802)			
Konstanz (Schottenkl.)	approx. 1100	1529	Neglect, abbey loses significance. Closed through the city of Konstanz (fostered through Reformation)			
Luzern	approx. 740	approx. 820	Crisis of the nobility	850	approx. 1000	Downgraded to a dependent house (Murbach), background unknown
Lorch	approx. 1100	1563	Reformation more likely 1	1630	1648	Restitution edict
Mallersdorf	1109	1803	Secularization (16th century: major troubles, partial dependence)			
Marienberg	approx. 1090	1808	Secularization	1816	--	
Memmingen	1167	1435	Extinction → Downgraded to dependent house	1483	1498	Voluntary takeover through Augustinians due to extinction
Metten	766	approx. 910	Raid by the Hungarians	1157 1840 1695	1803 -- 1803	Secularization
Michelfeld	1119	1556	Reformation 1	1695	1803	Secularization
Michelsberg	1015	1803	Secularization			
Mönchröden	approx. 1147	1525	Reformation 1 (preceding plundering by peasants)			
Mönchsdeggingen	approx. 950	1802	Secularization			
Moosburg	8 cent.	1027	T. in collegiate chapter (until 1598 ⁷)			
Mosbach	approx. 770	approx. 1010	T. in collegiate chapter (until 1556)			
Münchaurach	approx. 1126	1525	Destroyed in peasants' revolt			
München St. Bonifaz	1850	--				
Münchsmünster	approx. 750	approx. 910	Raids by the Hungarians	approx. 1130	1554	Extinction during Reformation (2)
Münchsteinach	1133	1529	Reformation 1			
Münsterschwarzach	815	1803	Secularization	1914 1945	1941 --	Shut down 3. Reich
Muri	1065	1841	Political closure (liberalism)	1846	--	Asylum and restart in Gries

⁷ http://de.wikipedia.org/wiki/Benutzer:Schnatz/Liste_der_Benediktinerkl%C3%B6ster, 23.08.2007.

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Murrhardt	approx. 800	1552	Reformation more likely 1 ⁸ , Prot. school	1634	1648	Restitution edict
Neresheim	1120	1802	Secularization	1920	--	
Neuburg	1928	--				
Neustadt am Main	768	1803	Secularization			
Niederaltaich	741	1803	Secularization	1930	--	
Nürnberg (Schottenkl.)	approx. 1140	1525	Reformation 2: Voluntary hand over			
Oberaltaich	approx. 1100	1803	Secularization			
Ochsenhausen	1392	1803	Secularization			
Odenheim	approx. 1110	1503	T. into chapter of knights (until 1803 ⁹)			
Ottobeuren	approx. 764	1802	Secularization partially avoided: Soon t. in a priory (dependent house)	1920	--	Monastery never completely deserted
Petershausen	993	1530	Reformation 1: Turnout and destruction	1556	1802	Secularization
Pfäfers (Pfaffenmünster)	approx. 750	1838	French Revolution leads to economic misery, additionally identity crises about direction and calling of the abbey (insufficient information)			
Plankstetten	1129	1806	Secularization	1917	--	
Prüfening	1109	1803	Secularization			
Prüll	approx. 997	1485	Encumbrance leads to takeover (Carthusians)			
Regensburg St.Emmeram	before 739	1812	Secularization			
Regensburg St. Jakob (Schottenkloster)	1089	1862	Reduction of members leads to t. in priory and finally to closure			
Reichenau	approx. 724	1540	Hostile incorporation in the diocese of Konstanz (bishop chapter) and Downgrading in priory (until 1799)			
Reichenbach	1118	1556	Reformation, more likely 2 (voluntary: abbot)	1695	1803	Secularization
Rheinau	approx. 780	1799	Helvetik: The French close the abbey after the battle of Zurich	1803	1862	Political closing (liberalism)
Rohr	1946	--				
Rott am Inn	approx. 1083	1803	Secularization			
Schaffhausen	approx. 1060	1524	Reformation 2, t. in collegiate chapter (until 1529)			
Schäftlarn	762	approx. 930	unknown	1910	--	
Scheyern ¹⁰	1095	1803	Secularization	1842	--	

⁸ http://www.murrhardt.de/index.php3?ber=m2&topic=geschichte_kloster2, 23.08.2007

⁹ <http://www.odna.de/frames/start-frame.htm>, 23.08.2007

¹⁰ In Bavaria King Ludwig 1 deserves extraordinary merits. After secularization, many abbeys could be 'resurrected' due to his support.

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Schienen	approx. 800	909	Incorporation in the abbey of Reichenau (1215-1757 Propstei), inexplicit if hostile.			
Schlehdorf	approx. 740	approx. 1100	Probably t. in collegiate chapter (from 1140 collegiate chapter of the Augustinians) ¹¹			
Schliersee	approx. 779	approx. 900	unclear, later collegiate chapter (1141 - 1803)			
Schuttern	approx. 750	1806	Secularization			
Schwarzach	pres. 749 1590	approx. 1000 1803	unclear Secularization	1124	1588	Encumbrance, internal discord, external pressure
Schweiklberg	1914	1941	Shut down 3. Reich	1945	--	
Seeon	994	1803	Secularization			
Sinsheim	approx. 1095	1496	T. in collegiate chapter (until 1565 (Reformation))			
Staffelsee	approx. 738	810	unclear			
St. Blasien	approx. 1000	1806	Secularization			
Stein am Rhein	approx. 970	1581	Voluntary incorporation in the abbey of Petershausen			
St. Gall	719	1805	Lack of adaptability, monastery insists on exceptional position under constitutional law - political closing			
St. Georgen	1083	1806	Secularization (Reformation: 1566 turnout and rebuilt in Villingen)			
St. Johann	approx. 1100	1555	Hostile takeover through the abbey of St. Gall. Downgrade into priory			
St. Ottilien	1893	1941	Shut down 3. Reich	1945	--	
St. Peter im Schwarzwald	1093	1806	Secularization			
St. Trudpert	pres. 9 cent.	1806	Secularization			
St. Veit bei Neumarkt	1121	1802	Secularization			
Tegernbach	approx. 750	approx. 900	unclear			
Tegernsee	approx. 750	1803	Secularization			
Theres	approx. 1045	1802	Secularization			
Thierhaupten	approx. 750 approx 1500	approx. 900 1803	Raids by the Hungarians. Secularization	1028	1452	Economical and moral impoverishment: Administrators bridge over
Trub	1139	1528	Reformation			
Uznach	1982	--				
Vornbach	1094	1803	Secularization			
Wagenhusen	1119	1417	Hostile incorporation in the abbey of Schaffhausen			

¹¹ http://de.wikipedia.org/wiki/Kloster_Schlehdorf, 23.08.2007.

Abbey	Year established	Closure	Reason	Year rebuilt	Closure	Reason
Weihenstephan	1021	1803	Secularization			
Weingarten	approx. 740 ¹² 6	1802 --	Secularization	1922	1940	Shut down 3. Reich
Weissenhohe	1053	1554	Reformation more likely 2 because of encumbrance, bad discipline and recruiting problems	1695	1803	Secularization
Weltenburg	7 cent. 1128	approx. 900 1803	Raids by the Hungarians Secularization, from 1842 priory	approx. 1000 1913	1123 --	Hostile takeover Augustinians
Wessobrunn	approx. 750	approx. 900	Raids by the Hungarians	1065	1323	Encumbrance, short term incorporation into the Cistercian Abbey of Stams
Wiblingen	after 1323 1093	1803 1806	Secularization Secularization			
Wiesensteig	861	approx. 1100	T. in collegiate chapter (until 1803)			
Wülzburg	approx. 1050	1523	T. in collegiate chapter (until 1537 Reformation)			
Würzburg St. Burkard	748	10 cent.	unclear	983	1464	T. in chapter of knights (until 1803) ¹³
Würzburg (Schottenkl.)	1134 1595	1497 1763	Running out of novices T. in priory	1504	1547	Running out a second time
Würzburg St. Stephan	approx. 1057	1803	Secularization			
Zwiefalten	1091	1802	Secularization			

Legend

Reformation 1: Forced closure

Reformation 2: Indirect closure (voluntary hand over due to changed mentality, declining convents, weakening of the community)

Prot.: Protestant

T.: Transformation

¹² Founded in Altomünster, transfer in 1056

¹³ <http://www.wuerzburg.de/tourismus/sehenswertes/31,1737.html>, 23.08.2007.

**Appendix I2: Average lifetime of the abbeys, ignoring the period until 1000 AD and momentary closures and Refoundations.
Re-installations after complete shut downs, counted as separate organizations. Systematization of the reasons for closure.**

Abbey	Year established	Closure or still in existence	Refoundation	Closure or still in existence	Refoundation	Closure or still in existence	Lifetime 1. Period	Lifetime 2. Period	Lifetime 3. Period	Reason for closure
Alpirsbach	1095	1535					440	0	0	1
Amorbach	1000	1803					803	0	0	1
Andechs	1455	1570	1588	1803			115	215	0	3 1
Anhausen	1113	1558					445	0	0	1
Asbach	1139	1803					664	0	0	1
Attel	1145	1803					658	0	0	1
Augsburg St.Stephan	1834	2008					174	0	0	2
Augsburg St.Ulrich and Afra	1012	1537	1548	1802			525	254	0	1 1
Auhausen	1100	1534					434	0	0	1
Aura an der Saale	1113	1564					451	0	0	3
Bad Wimpfen	1947	2008					61	0	0	2
Banz	1060	1568	1574	1803			508	229	0	3 1
Benediktbeuren	1000	1803					803	0	0	1
Beinwil-Mariastein	1100	1554	1633	2008			454	375	0	1 2
Beuron	1868	2008					140	0	0	2
Biburg	1133	1554					421	0	0	3
Blaubeuren	1085	1562					477	0	0	1
Disentis	1000	2008					1008	0	0	2
Donauwörth	1110	1803					693	0	0	1
Ebersberg	1013	1590					577	0	0	3
Echenbrunn	1120	1445	1460	1557			325	97	0	3 1
Eichstätt	1166	1350					184	0	0	3
Einsiedeln	1000	2008					1008	0	0	2
Elchingen	1120	1802					682	0	0	1
Ellwangen	1000	1460					460	0	0	4
Engelberg	1100	2008					908	0	0	2
Ensdorf	1121	1525	1695	1802			404	107	0	3 1
Erlach	1100	1528					428	0	0	1

Abbay	Year established	Closure or still in existence	Refoundation	Closure or still in existence	Refoundation	Closure or still in existence	Lifetime 1. Period	Lifetime 2. Period	Lifetime 3. Period	Reason of closing
Ettal	1332	1803	1907	2008			471	101	0	1 2
Ettenheimmünster	1000	1803					803	0	0	1
Faurndau	1000	1120					120	0	0	4
Fischingen	1138	1531	1540	1848			393	308	0	1 1
Frauenzell	1424	1522	1582	1803			98	221	0	3 1
Fultenbach	1000	1449	1471	1773			449	302	0	5 5
Füssen	1000	1802					802	0	0	1
Gengenbach	1000	1807					807	0	0	1
Gottesau	1080	1527					447	0	0	1
Heidenheim	1000	1537					537	0	0	6
Hirsau	1065	1560					495	0	0	1
Immünster	1000	1060					60	0	0	4
Irsee	1186	1802					616	0	0	1
Isny	1096	1350	1362	1803			254	441	0	1 1
Kastl	1102	1563					461	0	0	6
Kempten	1000	1803					803	0	0	1
Komburg	1078	1488					410	0	0	4
Konstanz (Schott.)	1100	1529					429	0	0	3
Lorch	1100	1563					463	0	0	1
Mallersdorf	1109	1803					694	0	0	1
Marienberg	1090	2008					918	0	0	2
Memmingen	1167	1435	1483	1498			268	15	0	3 5
Metten	1157	1803	1840	2008			646	168	0	1 2
Michelfeld	1119	1556	1695	1803			437	108	0	1 1
Michelsberg	1015	1803					788	0	0	1
Mönchröden	1147	1525					378	0	0	1
Mönchsdeggingen	1000	1802					802	0	0	1
Münchaurach	1126	1525					399	0	0	1
München St.Bonifaz	1850	2008					158	0	0	2
Münchsmünster	1130	1554					424	0	0	3
Münchsteinach	1133	1529					396	0	0	1
Münsterschwarzach	1000	1803	1914	2008			803	94	0	1 2

Abbay	Year established	Closure or still in existence	Refoundation	Closure or still in existence	Refoundation	Closure or still in existence	Lifetime 1. Period	Lifetime 2. Period	Lifetime 3. Period	Reason of closing
Muri	1065	2008					942	0	0	2
Murrhardt	1000	1552					552	0	0	1
Neresheim	1120	1802	1920	2008			682	88	0	1 2
Neuburg	1928	2008					80	0	0	2
Neustadt am Main	1000	1803					803	0	0	1
Niederaltaich	1000	1803	1930	2008			803	78	0	1 2
Nürnberg										
Schottenkloster	1140	1525					385	0	0	6
Oberaltaich	1100	1803					703	0	0	1
Ochsenhausen	1392	1803					411	0	0	1
Odenheim	1110	1503					393	0	0	4
Ottobeuren	1000	1802	1920	2008			802	88	0	1 2
Petershausen	993	1530	1556	1802			537	246	0	1 1
Pfäfers	1000	1838					838	0	0	6 (1)
Plankstetten	1129	1806	1917	2008			677	91	0	1 2
Prüfening	1109	1803					694	0	0	1
Prüll	1000	1485					485	0	0	5 (2)
Regensburg										
St.Emmeram	1000	1812					812	0	0	1
Regensburg St. Jakob	1089	1862					773	0	0	3
Reichenau	1000	1540					540	0	0	5
Reichenbach	1118	1556	1659	1803			438	144	0	6 1
Rheinau	1000	1862					862	0	0	1
Rohr	1946	2008					62	0	0	2
Rott am Inn	1083	1803					720	0	0	1
Schaffhausen	1060	1524					464	0	0	4
Schäftlarn	1910	2008					98	0	0	2
Scheyern	1095	1803	1842	2008			708	166	0	1 2
Schlehdorf	1000	1100					100	0	0	4
Schuttern	1000	1806					806	0	0	1
Schwarzach	1124	1588	1590	1803			464	213	0	3 1
Schweiklberg	1914	2008					94	0	0	2
Seeon	1000	1803					803	0	0	1

Abbay	Year established	Closure or still in existence	Refoundation	Closure or still in existence	Refoundation	Closure or still in existence	Lifetime 1. Period	Lifetime 2. Period	Lifetime 3. Period	Reason of closing	
Sinsheim	1095	1496					401	0	0	4	
St. Blasien	1000	1806					806	0	0	1	
Stein am Rhein	1000	1581					581	0	0	6 (3)	
St. Gall	1000	1805					805	0	0	3	
St. Georgen	1083	1806					723	0	0	1	
St. Johann	1100	1555					455	0	0	5	
St. Ottilien	1893	2008					115	0	0	2	
St. Peter im Schwarzwald	1093	1806					713	0	0	1	
St. Trudpert	1000	1806					806	0	0	1	
St. Veit bei Neumarkt	1121	1802					681	0	0	1	
Tegernsee	1000	1803					803	0	0	1	
Theres	1045	1802					757	0	0	1	
Thierhaupten	1028	1452	1500	1803			424	303	0	3	1
Trub	1139	1528					389	0	0	1	
Uznach	1982	--					26				
Vornbach	1094	1803					709	0	0	1	
Wagenhusen	1119	1417					298	0	0	5	
Weihenstephan	1021	1803					782	0	0	1	
Weingarten	1000	1802	1922	2008			802	86	0	1	2
Weissenhohe	1053	1554	1695	1803			501	108	0	3	1
Weltenburg	1000	1123	1128	1803	1913	2008	123	675	95	5	1 2
Wessobrunn	1065	1323	1340	1803			258	463	0	5	1
Wiblingen	1093	1806					713	0	0	1	
Wiesensteig	1000	1100					100	0	0	4	
Wülzburg	1050	1523					473	0	0	4	
Würzburg St. Burkard	1000	1464					464	0	0	4	
W. Schottenkloster	1134	1497	1504	1547	1595	1763	363	43	168	3	3 4
W. St. Stephan	1057	1803					746	0	0	1	
Zwiefalten	1091	1802					711	0	0	1	

Legend: 1 = External institutional factors, 2 = No closing, 3 = Mismanagement, 4 = Change into other organizational form, 5 = Control failure, 6 = Voluntary closing