CrossMark

How a multiple orientation of control reduces governance failures: a focus on monastic auditing

Emil Inauen · Margit Osterloh · Bruno S. Frey · Fabian Homberg

Abstract This paper considers multiple control systems at the organizational level and argues for a nuanced and multifaceted approach for internal governance. For this undertaking, we look at a little-examined control and auditing instrument, the formalized audit procedures of Roman Catholic orders. These so-called visitations are one important pillar in the monastic governance system to counter aberrations. Utilizing surveys and interviews, we examine 96 Roman Catholic religious communities in Austria, Germany and Switzerland, and connect these visitations procedures with rule violations and sexual abuse cases. We argue that communities unaffected by scandals and rule violations rely strongly on process and clan control to address inefficiency and misconduct; whereas, affected communities focus more on business issues. We caution against the trend of relying predominantly on output-based processes while suggesting a balance between different types of control systems. Furthermore, we enhance the current discourse by considering implementation procedures of control. The religious orders attach great importance to the way control measures are carried out. To steer the behavior of their members, many successful orders even complement controls with personal support and identity strengthening.

E. Inauen (✉) · M. Osterloh
Department of Business Administration, University of Zurich, Universitätsstr. 84, 8006 Zurich, Switzerland
e-mail: emilinauen@access.uzh.ch

B. S. Frey
Zeppelin University, Friedrichshafen, Germany

F. Homberg
Department of Human Resources and Organizational Behaviour, Bournemouth University Business School, Bournemouth, UK

🙋 Springer

1 Excesses and scandals in religious orders

Governance has become a permanent issue in public dialogue. Since the turn of the twenty-first century, scandals of excessive manager compensation and fraudulent bookkeeping, and, most notably, misconduct relating to the financial crisis, have damaged the reputation of firms and triggered questions about the functioning of markets (Di Pietra et al. 2010; Bachman et al. 2011). Some authors speak of a crisis of governance (Magnan and Markarian 2011; Sun et al. 2011). The search for *good governance* is of immediate concern in order to regain control and restore confidence in the economic system and its leaders (Pirson and Turnbull 2011).

However, it is not only the economic world that laments scandals and crises. The Roman Catholic Church and some of its religious orders have experienced turbulent times. The revelation of child maltreatment, sexual abuse and authoritarian education methods in many Catholic organizations shocked the German public in the spring of 2010. The scandal made headline news for weeks. The immense attention resulted in a meticulous review of suspect organizations (for an overview, see Spiegel Online 2011, Die Zeit online 2010). Religious orders depend on their moral integrity. Therefore, the principals—the leadership of the religious orders and the Vatican—have a genuine interest in preventing such incidents. As such, the search for good governance is a central concern in religious organizations.[1]

An inevitable task in dealing with fraud and misconduct in organizations is that of controlling and monitoring members. An efficient functioning of organizations is designed by means of an appropriate configuration of the control systems. Concepts regarding (multiple) orientations of control have been known in the literature for a long time, but have gained too little attention in practitioner, organization and accounting literature (Malmi and Brown 2008; Sitkin et al. 2010). In the last decade a growing number of scholars called for investigations into multiple control systems and their effects (Alvesson and Kärreman 2004; Caglio and Ditillo 2008; Ferreira and Otley 2009; Grandori and Soda 2006; Kennedy and Widener 2008; Malmi and Brown 2008; Sandelin 2008). However, such research is still in its infancy.

Thus, in this paper we contribute to the research of multiple control systems by choosing the classic framework of Management Control Theory to investigate specific monastic audit procedures. The four control archetypes: process, clan, input and output control of Managerial Control Theory (Eisenhardt 1985; Ouchi 1977, 1979; Thompson 1967; Turner and Makhija 2006) offer an appropriate theoretical underpinning for the analysis of monastic control systems that allows us to examine their effectiveness in relation to misconduct. Depending on the task environment

---

[1] We use a broad and classical definition of governance: it is understood as the set of processes, customs, policies, laws, and institutions affecting the way an organization is directed and controlled. The abuse cases represent a massive governance failure in the religious orders.

and the goods produced, different combinations of output, process, clan, or input control are suggested to discipline members and reduce their misbehavior.

We chose to examine religious orders as a specific organizational form in the non-profit sector for our investigation of multiple control orientations. There are several reasons for this choice. First, in their long history, monastic organizations followed their own paths to control their sisters, padres and brothers. Similarly to other organizations, religious orders had to struggle with wastes of assets, laziness, political intrigues or sexual misconduct (see Helvetia Sacra 1986, a historical chronicle). Innovative organizational structures, for instance the religious orders were pioneers in the division of labor and the work ethic, and they brought considerable fortunes to many communities as far back as the early Middle Ages (Kieser 1987). As a consequence, not only did the temptation toward misuse increase, but over the centuries an intriguing governance system emerged. Second, our focus is not on monastic governance systems as a whole (see Inauen et al. 2010a, b), but on one specific audit instrument—the monastic visitation. The latter is interesting because it combines different forms of control in one procedure. Additionally, visitations developed differently within the various religious communities. Whereas some religious orders follow the trends in focusing on output control measures in their visitation procedures (and therefore concentrate on the economic situation of their community), many rely on process control and, in particular, on clan control to audit the communal and spiritual life of their brothers and sisters. Because of this diverging development, studying the little-known visitations may lead to new insights in relation to multiple control systems. Finally, the misuse scandals make the case of Catholic orders an important societal research topic. It could be enlightening for other organizations to look at those failures from a management control perspective.

To gain a better understanding of the visitations, we drew on qualitative and quantitative data. First, we reviewed the literature on visitations, searched constitutions of religious communities and interviewed monastic leaders. Second, we empirically investigated the characteristics of visitations in various religious orders. The analysis is based on a unique dataset that we collected between November 2009 and April 2010. More than 100 representatives from 224 monastic communities completed our comprehensive survey on monastic governance just months before the scandals went public. This allowed us to analyze the relation between characteristics of the different visitation systems and the misconduct of the religious communities. For this purpose we combined the survey data with external information on the abuse cases. We used logistic regression analysis to determine what characteristics of the visitation systems are associated with higher probabilities of sexual abuse and internal misconduct.

The results are relevant in respect to multiple orientations of control and, in addition, throw a light on the scandals in the Catholic orders. One specific characteristic of monastic visitations is the distinct coexistence of different types of control in the monastic audits. Output measures are primarily applied to control economic activities; whereas, process and clan control are used to monitor spiritual and communal life. Interestingly and in line with the theory, the choice of emphasis depends on the practice of a community. For example, where contemplation

dominates monastic life, clan control is more likely to play a dominant role. Our analysis indicates that visitation procedures can be an effective tool in preventing misbehavior. The outcomes on child abuse and on rule violations suggest that a focus on process and clan control has an impact on supervising principles and spiritual life. In contrast, a one-sided orientation on output control increases the probability of failures. We cannot explain why child abuse emerged in the monastic communities or where the failures originated. It does seem that visitations can be part of the solution though. If seriously applied and targeted, a positive preventive effect may be expected. However, we conclude that it is not sufficient to rely solely on appropriate types of control. For a successful auditing the type of implementation is equally important. Three issues stand out and are supposed to ensure the participation of the padres and brothers, hence enabling controls: trust in the visitors, confidentiality and the meaningfulness of the procedures. Additionally, the success of control increases if the visitations go hand-in-hand with identity strengthening and personal support. In the best-case scenario, monastic audits effectively combine process, clan and output controls with careful implementation and elements of identity strengthening.

By investigating monastic audits, our analysis advances a multiple-orientations approach to management control (Caglio and Ditillo 2008; Ferreira and Otley 2009; Malmi and Brown 2008). Most of the contributions refer to simple archetypes of control, whereas complex control structures are not fully explained (Caglio and Ditillo 2008). Using religious orders, we illuminate a multilayered audit instrument in a non-profit-sector organization and, therefore, deliver a rare empirical example in the field of multiple control systems. Organizations, regardless of size, need various governance and control structures to properly deal with the manifold challenges and contingency situations. We introduce the Managerial Control Theory framework of Ouchi (1977, 1979) as a basis to analyze multifaceted control systems and to bridge the gap between the fields of management control and organization theory. In the particular case of monasteries, we contribute to the development of the multiple control literature with two further aspects. First, the specific orientation of visitations, namely the focus on spiritual and community life, is fascinating. "Soft" factors, such as values, spirituality or social interaction are not typically associated with auditing procedures. Internal audits still concentrate primarily on finance, compliance and, more rarely, performance issues (Merchant and Van der Stede 2012). However, in broadening traditional audit procedures, the monastic approach could be a step toward better governance. Second, we take a closer look at the accompanying factors of control. In practice and literature, little attention is paid to the successful implementation of control systems. A careful and comprehensible implementation of the procedures is necessary to promote a functioning control system and to avoid adverse effects (De Charms 1968; Deci and Ryan 1980; Frey 1992; Osterloh and Weibel 2008). In this respect, we look also at the connection between the visitation procedures and identity development, a rarely addressed issue in the discourse of control systems. On a more practical level, the paper offers a new perspective on the misuse scandals within the Catholic Church.

2 Theoretical foundation

The following subsections detail the theoretical basis of this study. First, we review the literature on control systems. Second, we present the characteristics of monastic visitations as an audit instrument in detail.

2.1 Multiple orientations of control versus the one-fits-all approach

Control systems are critical for the efficient functioning of an organization (Meyer and Gupta 1994; Meyer 2003). Numerous definitions of management control exist, and many attempts have been made to determine its modes and mechanisms (for reviews, see Caglio and Ditillo 2008; Chenhall 2003; Malmi and Brown 2008; Merchant and Otley 2007). Two nearly unrelated research streams deal with the contents of multiple orientations of control.

Whereas the field of management control is dominant in the audit and accounting literature (Anthony and Govindarajan 2008; Merchant and Van der Stede 2012; Simons 1990; 1995), organization theory is also concerned with the mechanisms of control (e.g., Cardinal et al. 2010; Eisenhardt 1985; Ouchi 1979, 1980). Both research paths build on similar theoretical underpinnings and also show several theoretical overlaps. Through the conscious use of control the responsible agents try to ensure that an organization's members display expected behaviors (Osterloh and Weibel 2006). The management control system is effective when it increases the probability that employees will behave in ways consistent with the organization's objectives (Frost et al. 2012).

Concepts regarding multiple orientations of control have long been found in the literature (e.g., Otley 1980), but hardly gained deserved attention (Sitkin et al. 2010). Most of the contributions refer to *simple* archetypes of control, "whereas, *more complex* and varied combinations of control traits empirically observed are not fully explained" (Caglio and Ditillo 2008: p. 866). However, empirical research provides vast evidence that management control systems are large and complex sets of elements that are loosely connected and interdependent (e.g., Ambos and Schlegelmilch 2007; Carlsson-Wall et al. 2011; Frost et al. 2012; Gerdin 2005; Martinez and Jarillo 1989; O'Donnell 2000; St. John and Harrison 1999). Management control systems can be seen as packages which have to be dismantled for a better understanding of their impact (Chenhall 2003; Dent 1990; Fisher 1998; Flamholtz et al. 1985; Malmi and Brown 2008; Otley 1980). For instance, the way control mechanisms relate to contingency variables depends on what other mechanisms are applied simultaneously (Chenhall 2003; Fisher 1998). Despite this realization, empirical and theoretical work on the topic is still rare (Abernethy and Chua 1996; Alvesson and Kärreman 2004; Grant 2003; Rost and Osterloh 2009).

The organization literature refers to additional dimensions that should also be taken into account. Not only do the control systems as such play a role, but also social capital (Kirsch et al. 2010) or trust (Fryxell et al. 2002) have been established as important antecedents for the effectiveness of control systems. Furthermore, to ensure an efficient audit, appropriate implementation of the control processes has to be considered. How controls are perceived is crucial. In this context, the literature

primarily refers to the motivation crowding effect. The latter suggests that external interventions and control may undermine intrinsic motivation. According to Motivation Crowding Theory (Deci et al. 1999; Frey and Jegen 2001), monitoring measures are most effective when they are not perceived as controlling. A vote of no confidence or a lack of appreciation can result in a crowding out of motivation, thus leading to reduced performance and more misbehavior. By contrast, if controls are seen as appropriate and useful, unintended effects are more likely to be absent and we can expect members to cooperate in the procedures—ensuring efficient control (Adler and Borys 1996). For example, procedural fairness and the consistency or impartiality of the controllers mitigate negative monitoring effects (Frey and Osterloh 2002; Tyler and Blader 2000).

Finally, an audit can include additional supportive tasks, such as developing identity. The literature has neglected this aspect so far. Individuals might be driven by strong identities, and their actions might be shaped by their commitment to this identity (Alvesson et al. 2008; George and Qian 2010, Weaver 2006). In other words, a positive influence on the behavior of the controlled persons is expected if the audits improve the perception of the living and working conditions of members. Accordingly, our focus on implementation and additional services complements the field of management control with other important aspects.

The multidimensionality of control systems stands in stark contrast to current developments in the governance discourse. Examining theory and practice leaves no doubt that one type of control currently dominates in controlling the behavior of managers and employees. Output control procedures constitute the foundation for performance assessments and incentive schemes, and have become increasingly popular during the last decades. There is even a proliferation beyond the corporate field extending to public administration (see the literature on "New Public Management") as well as to the nonprofit sector (Dart 2004; Perry et al. 2009; Frey et al. 2013). The dominant paradigm behind these developments is the *homo oeconomicus*, which assumes fully rational and self-interested actors. Thus, external incentives are the best way to direct the members of an organization efficiently (Jensen and Meckling 1976; Fama and Jensen 1983; Jensen and Murphy 1990). While stricter regulation and rigorous standards are discussed on a governmental level, (Brenner and Schwalbach 2009; Kirkpatrick 2009; Snider 2009), companies focus on improved output control, for instance, adjusting remuneration systems to focus on the long run (Feinberg 2011; Hausmann and Bechtold-Orth 2010). However, history shows that the exclusive use of output measures may be ineffective in successfully addressing governance problems (Grant 2003; Rost and Osterloh 2009) and is likely to yield unintended effects (Keevers et al. 2011).

2.2 Audits in the religious orders: visitations

Very few contributions deal with the intersection between governance, control mechanisms and religious orders. In a seminal paper, Kieser (1987: p. 103) analyzes religious orders as the "first deliberately designed organization in the Occident." They became wealthy through their rational organization of labor (e.g., the division of labor) and their work morale. This resulting wealth was an important reason why

orders developed sophisticated control systems. McGrath (2007) investigated knowledge management in monastic communities of the medieval Irish Celtic church, which depended strongly on governance structures. Further, Inauen et al. (2010a, b) and Rost et al. (2010) comprehensively studied the Benedictines' governance structures, which are considered an essential factor in the longevity of these organizations. The aforementioned authors depict mainly the modes of action of the internal control mechanisms such as careful selection and socialization of novices or participation rights of the members. However, internal control is not sufficient if the subsidiaries' members get together to circumvent regulations. Thus, the heads of religious orders and the church are interested in monitoring the local communities from the outside. One important pillar in the monastic governance system to counter such aberrations are the visitations (Müller 2003), which are carried out by the umbrella organizations of the religious orders. In examining the monastic visitation procedures, we place them in a context with multiple control systems and the recent child abuse scandals. In the following section the visitations are extensively described.

The term "visitation" harks back to the Latin word *visitatio*, which stands for an inspection or visit, but also can bear the meaning of affliction or punishment (Frieb 2006). The formalized visit in order to audit organizations is widely applied in Christian churches. We limit our analysis by concentrating on the visitations in religious orders of the Roman Catholic Church. The importance of the instrument is illustrated in Roman Catholic canon law, where visitations have become an institutionalized term and are described as an inherent requirement for all religious orders [*Codex Iuris Canonici* (CIC) 1983, par. 628]. The visitation's concrete implementation is regulated in detail in the internal law of the various religious orders and their communities. In the following, we introduce the purpose and procedures of this little-known concept.

A look into the literature and internal law, as well as interviews with monastic experts from different categories of orders,[2] provides a better understanding of the monastic visitations. One purpose of the visitation is the immediate on-site inspection of the religious life in order to reveal and correct shortcomings (Hirnsperger 2001; Müller 2003). On the one hand, the spiritual conditions and life of religious members are monitored; on the other hand, legal relationships, land tenure and the financial state—that is, the economic part of the religious organizations—are addressed. Betz et al. (2005) define the twofold orientation on spiritual and economic condition as being the core function of the visitation. However, as the constitutions disclose, the range of tasks is more comprehensive today. The constitutions of the Benedictine Congregation of Beuron (Beuroner Benediktinerkongregation 2003, par. 244) extensively describe the general targets a visitation usually has, not only in the Benedictine Order but in all religious orders we examined, as "The purpose of the monastic visitations is to make the delegate familiar with the situation in the particular monasteries, to strengthen abbot and convent in their enthusiasm for monastic life, to examine the adherence of general ecclesiastical regulations, rule of the order, law of the congregation [the umbrella

---

[2] See the Acknowledgements section for detailed information.

organization of the Benedictines] and traditions of the community, to intervene against observed misbehavior, to encourage the renewal of authorities deemed necessary and to monitor the economic situation of the monastery." Depending on the community and order, the goals are weighted differently.

The visitations are accomplished by the umbrella organizations of a religious order, usually by the leadership of a province. The visitors normally have broad authority and are committed through a personally addressed obligation from the order's leadership. Interview information and internal law reveal that the procedure of the visitations intended to achieve these objectives is more or less similar in every religious order. In some communities it is roughly outlined in the internal statutes (Franciscans 2007; Premonstratensians 1997). A monastic visitation is always announced, possibly with an antecedent questionnaire, which gives the members the opportunity to reflect and to prepare—and maybe to conceal. A church service opens the procedure, followed by extensive conversations between the visitors and the community's leader, and then with every single member. The next step is the economic assessment of the organization. Religious organizations increasingly draw on external expertise (auditing services), but this does not discharge the visitors from liability (Meier 2006). The audit experts gather all the information to prepare the visitation report. The results and recommendations are first discussed with the leader and then presented to, and negotiated in, the plenum where changes are initiated. The visitation ends with a common service. Interestingly, the monitoring of the realization of the measures often devolves to the community's number two, for instance, the prior. Some communities hold an assembly on the subjects of the visitation: A few months after the inspection, a delegation reviews the progress and implementation measures.

Despite the common fundamental structures of monastic auditing, visitations show varied characteristics that allow a comparison of the different visitation systems. Examples are the frequency of the inspection, the number of visiting persons, the visitor's opportunities to influence and the subject of control. In more federalist orders such as the Benedictines, Cistercians or Premonstratensians, visitations are less frequent—ranging from every year to every 6 years—but come with more personnel, normally two or three visitors. The visitation's duration depends on the community's size and is more or less similar in the various orders. In a medium-size community of about a dozen members, the procedure lasts about three to 7 days. However, enforcing the measures and subsequent improvement processes can take months or even years. The visitors have some discretion in the execution of the audits. More or less attention can be paid to the different items on the agenda. We find it striking that visitations in many religious orders are quite similar, but the elements, such as the objects of control, differ fundamentally. While we have communities where visitors are interested only in spiritual and community life (control the books may often be outsourced), others concentrate mainly on the business aspects or on problems such as recruiting and financing (often caused by the loss of members). In many communities, the visitors set thematic priorities. For instance, a rule from the constitutions or a Bible verse can be the leitmotif of the visit. Further, visitations are completed with additional tasks regarding specific traditions and the purposes of the particular orders. For example, for those members

who do not live in the same monastery for a lifetime—such as the Franciscans, who have to change their residence every 9 years at a minimum—the information gained from the inspections provides the foundation for any moves. The report discusses how members can be appointed to the most suitable tasks in the best possible place.

In Managerial Control Theory, an adequate theoretical basis is found to meet the specific requirements of monastic governance. In the following sections, we derive hypotheses covering the types of control applied in the visitations. Different characteristics of the religious orders should affect the control system used. Then, we investigate the effectiveness of the control system in cases of sexual abuse and internal rule violations.

3 Hypotheses development

In order to contribute to the discourse on multiple control systems, we investigate the monastic audit system. For the analysis, we rely on ideas originating in Managerial Control Theory. The theory highlights the link between control systems design and the organization's task environment (Ouchi 1977, 1979; Turner and Makhija 2006; Cardinal 2001; Kirsch 1996). Task environment is defined on two dimensions. One is "knowledge of measurability and attributability of outputs;" the other is "knowledge of cause-effect relations" (Thompson 1967), or worded differently, "knowledge of the transformation process" (Ouchi 1977).

Figure 1 illustrates the paper's theoretical foundation and the research questions. On the left-hand side, Ouchi's four types of control (1977, 1979) are the starting positions for our analysis. Four mechanisms are delineated that control and steer the behavior of the managers and employees: input, output, process and clan controls. We investigate which types of control are applied in the monastic visitations and analyze their impact on misconduct, with a particular focus on the effectiveness of process and clan controls. In incorporating the implementation of visitations and additional services, we develop Managerial Control Theory in an important direction. We expect an indirect impact on misconduct if the procedures are fair and meaningful and if they simultaneously strengthen the identity of the religious members.

3.1 Control forms

Output control is most appropriate when process or cause-effect relations are difficult to specify, but the outputs are easy to measure (Eisenhardt 1985). In contrast, the preconditions of process control include evaluators that have the appropriate knowledge of the process of transforming inputs into outputs. Neither output control nor process control work sufficiently well when measurability and accountability of outputs is not given and the external controllers' knowledge of the transformation process are limited. Clan or input control is proposed as a solution. Clan control can be described as an assessment of individuals or groups as to whether they follow internalized norms, procedures, professional standards and rituals (Grant 2011; Ouchi 1977). For instance, senior colleagues functioning as role
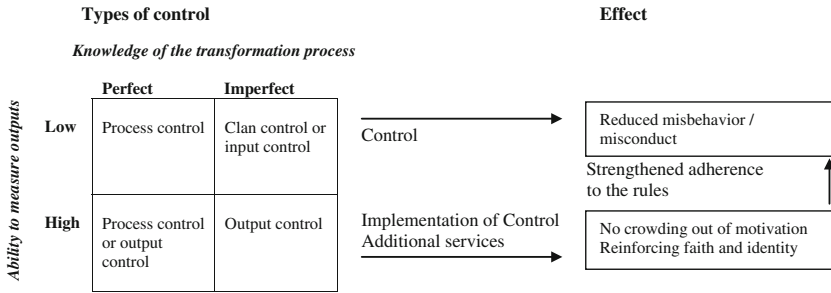
Types of control   **Effect**

Knowledge of the transformation process

Fig. 1 Visitations in religious orders: basic framework. *Source* Four field matrix adapted from Ouchi (1977, 1979)

models for younger coworkers and exhibiting the desired behavior induce the internalization of norms and values. A possible alternative to clan control in this quadrant (see Fig. 1) is input control, which works in a different way. With careful selection, trustworthy people are chosen; and with socialization processes, the desired behavior of these members is further emphasized. The concept was extended by Sitkin et al. (2010) and Cardinal et al. (2004) who highlight shifts in the use of different types of control in a longitudinal analysis. Similarly, in addition to organizational structure, Kirsch et al. (2010) emphasize the importance of social capital as a precondition for an efficient clan control. Clan control is most effective if project managers and team members trust and respect one other, apply shared mental models and exchange information frequently.[3]

The visitation is a very stable and highly esteemed auditing system developed in the religious orders. According to Managerial Control Theory, the type of control depends on the ability to measure outputs and the knowledge of the transformation process. Taking this into account, we expect specific characteristics of control to gain acceptance in these communities over the centuries. Religious orders represent a paradigm for an organization in which the performance of the individual members is hard to quantify and is not easily assignable (here we see some parallels, for instance, to the knowledge-intensive work of managers) (Frost et al. 2010). Often, there is a lack of precise and quantifiable outcomes (Ehrmann et al. 2013). It is impossible to evaluate the effects of sincere prayer or to answer the question of how many of the padres, sisters and brothers go to heaven. Even the effects of social tasks such as helping people in need, youth work or missionary work are very hard to capture. This situation implies that the achievement and control of objectives is only possible, to a limited extent, with output criteria. To enable an appraisal, for example, of *spiritual performance*, we expect religious orders to draw on alternative types of control. Managerial Control Theory offers input, process and clan controls as a solution. It is imaginable that all three types of control are part of the visitation

---

[3] Closely related to the framework of Ouchi (1979) is the levers of control model from Simons (1990, 1995, 2000). This equally comprehensive model shows many intersections and points of contact. For instance, diagnostic control shares many similarities with output control; whereas, belief systems build a bridge to clan control.

procedures. Are the right novices selected and are they carefully socialized into monastic life (input control)? Do the members adhere to traditions and rites; do prayers start punctually and in an attentive atmosphere (process control)? Does the community encourage the observance of rules and constitutions, and is misbehavior sanctioned by peers (clan control)?

In contrast, for the evaluation of the economic situation, a verification of output-performance is possible to some degree. As do other nonprofit organizations, religious orders have to be self-supporting. Earnings arise from work in the parishes, owner enterprises, lease of land, donations and many other undertakings. Here an output-performance comparison makes some sense, especially because the religious communities operate in manageable businesses, where this specific type of control is perfectly possible (Ouchi 1977, 1979). We expect output control where the management of the monastic properties is dominant, that is, where outcomes are easily measurable and assignable. Referring to Managerial Control Theory, we expect the religious communities to make use of the different kinds of control, that is, of multiple control systems.

However, we do not suggest that the religious communities weight the different types of control equally. The choice of control depends on the specific characteristics of the goods produced. Ehrmann et al. (2013: p. 31) define broadly two distinct sets of goods in religious orders: "search/experience goods, that is, goods whose features and characteristics are either easily evaluated before purchase or can be ascertained upon consumption, and credence goods, that is, goods whose utility impact is difficult or impossible to ascertain. The first set, for example, includes such products as beer, herbs, farming, mission, or solidarity with the poor. The quality of these products can be (more) easily evaluated and priced. The second set includes salvation goods like contemplation, or prayers." One could expect that communities with a strongly contemplative orientation in which prayer, meditation or spiritual exercises are more important (and cannot be assessed by means of outcomes) than are purposes in economy, social affairs, education or mission, show a greater emphasis on process and clan controls. We formulate the first hypothesis:

H1   Communities that primarily focus on prayer and contemplation attach greater weight to process- and clan control in the visitations than do communities that pursue targets in "the outside world."

Further, we suggest that specific traditions have an impact on the configuration of control procedures. With their specific history, spirituality or purpose, religious orders have different cultural practices and priorities.

3.2 Effectiveness

In addition to the arrangement of the control types, we examine whether and when visitations are effective. We examine their relation to sexual abuse cases and rule violations. According to the data available, an evaluation of monastic control systems' effectiveness proves difficult. Due to privacy protection, it is impossible to view visitation protocols and to assess behavioral change, even if members are long deceased. However, the variance in the current visitation systems of the religious

orders allows an evaluation of the different types of control. In particular, we are interested in the question of whether a focus on process and clan controls reveals a significant effect on the behavior of the padres and brothers, illustrating that a control of values and principles can be successful in audit procedures. Utilizing a quantitative, comparative approach between the communities, it is possible to investigate whether specific characteristics of the monastic audits are linked to the number of incidents. We investigate the impact of visitations on sexual abuse cases and rule violations.

H2a   Communities whose visitation procedures rely heavily on process- and clan control to examine the behavior of their members show a lower likelihood for sexual abuse cases.

H2b   Communities whose visitation procedures rely heavily on process- and clan control to examine the behavior of their members show a lower likelihood for violations of the basic rules than do communities whose visitation procedures rely heavily on output control.

Further, characteristics of visitations and religious orders suggest they have an impact on sexual misconduct and rule violation. On the visitations side, one would expect a correlation between the frequency of the audit procedures and misconduct in a religious community. Large differences exist. For instance, on average, Benedictines conduct visitations every 5.3 years, Franciscans 3.5 years, Capuchins 2.4 years, Dominicans 3.2 years, Jesuits 1.2 years and Divine Word Missionaries 3.6 years. We analyze the following set of hypotheses:

H3a   The higher the frequency of visitations, the less likely are sexual abuse cases.

H3b   The higher the frequency of visitations, the less likely are violations of the basic rules.

In the theoretical section of this paper we emphasize the importance of an appropriate implementation of the procedures in order to prevent a crowding out of motivation. The data record does not allow for a quantitative analysis of these issues. We therefore rely on interviews and constitutions to decide which aspects the religious leaders pay attention to when implementing their controls. Finally, an improvement of the controls is expected if they are combined with additional services that support identity and commitment to the organization. We investigate the impact of visitation procedures where identity development is fostered. From this we formulate the last set of hypotheses.

H4a   Communities whose visitation procedures attach importance to identity development show a lower probability for sexual abuse cases than do communities whose visitation procedures do not.

H4b   Communities whose visitation procedures attach importance to identity development show a lower probability for violations of the basic rules than do communities whose visitation procedures do not.

4 Methodology

4.1 Procedure and sample

The data for this analysis is based on a unique survey of Catholic religious orders in Austria, Germany and Switzerland that was carried out between November 2009 and April 2010. The survey was sent to 216 local communities; and 106 usable questionnaires were returned, of which 10 had to be excluded due to missing data on some of the variables. All major religious orders participated with a response rate of at least 40 %. Table 1 shows the breakdown of the orders in our sample.

It was not possible to include the total population of the communities in the German-speaking area. We therefore use two main criteria for choosing orders and local religious communities: the category and the size of an order. The category

Table 1 Sample of religious orders

Category	Name of the religious order	No. of surveys received
Monastic orders	Benedictines	10
	Cistercians	5
	Carthusians[c]	1
Canons regular	Augustinian Canons	7
	Premonstratensians	6
Mendicant orders	Dominicans	8
	Capuchins	11
	Franciscans	17
	Carmelites[c]	1
Clerks regular[a]	Jesuits/Society of Jesus	11
	Camillians	2
Congregations[b]	Redemptorists	5
	Divine Word Missionaries	8
	Missionary Oblates of Mary Immaculate	4
	White Fathers	4
	Salvatorians	4
	Single communities[c]	2
	Total	106

The scale of the religious orders in the German-speaking area was elicited via the websites of the communities (number of communities). Rate of Return: Benedictines 40 %, Cistercians 45 %, Augustinian Canons 45 %, Premonstratensians 75 %, Dominicans 62 %, Capuchins 65 %, Franciscans 68 %, Jesuits/Society of Jesus 69 %, Redemptorists 45 %, Divine Word Missionaries 62 %, Missionary Oblates of Mary Immaculate 67 %, White Fathers 57 %, Salvatorians 57 %. A nonresponse bias on the level of religious orders does not appear

[a] The Jesuits have, by far, the largest size and impact in this category. Besides the Society of Jesus, only a few very small communities exist in the German-speaking area. We have chosen the Camillians as a second organization

[b] In the category of Congregations, with several dozen religious orders, the proportions are not obvious

[c] Some single communities exemplary of a certain category of religious order are included as well

depends on the historical background of the orders and comprises monastic orders, canons regular, mendicant orders, clerks regular and congregations (Schwaiger and Heim 2008). Although we inquired into the concrete, contemporaneous practices of the communities, these archetypes were important in choosing a balanced selection of religious orders. Our second criterion is the size of orders in the German-speaking area. From every category, at least two of the largest orders—according to the number of houses of a religious order—are represented in the sample. Additionally, we targeted organizations in Germany (50 communities), Austria (29), and Switzerland (27), due to the particular histories of and conditions within these countries. Seventy-three percent of the surveys were filled out by leaders, and nineteen percent by officials from local communities (executives in finance or education). Ninety percent of the responders possess a high level of education. Accordingly, we can assume that the participants possess a requisite knowledge of good governance. All respondents to our survey were male.

4.2 Measures

The following sections outline the variables used for the subsequent quantitative analysis. Tables 2 and 3 summarize the variable coding and display means and the standard deviations of dependent and independent variables. Correlations are listed in "Appendix".

Before crafting the questionnaire we conducted expert interviews to better understand what measures should be included in the survey and to increase content validity of the survey items. In order to gain in-depth information on the visitations, we talked to seven monastic leaders (see "Acknowledgements" section for more information). These padres and brothers supervised the project and added to a correct understanding of the monastic structures and connections.

In addition to the subjective survey statements, objective sources are included in the regression analysis. Web and media research delivered current data on misconduct in the religious communities, as well as information concerning a religious community's involvement in child and youth work. In order to get a comprehensive picture, we scrutinized the literature on visitations and thoroughly reviewed the constitutions of the different religious orders.

4.2.1 Dependent variables

To analyze the effectiveness of process- and clan control we rely on two dependent variables: sexual abuse cases and internal rule violations. In the first set of analyses

Table 2 Variable definitions and descriptive statistics of dependent variables

Variable	Description	Mean	SD
Occurrence of sexual abuse case	Dummy variable equal to 1 if cases of sexual abuse were reported in reference to one of the orders in the sample	0.14	0.34
Occurrence of internal rule violation or abuse case	Dummy variable equal to 1 if rule violation or abuse case were reported on the survey	0.25	0.44
N		96	

Table 3 Variable definitions and descriptive statistics of explanatory variables

Variable	Description	Mean	SD
Focus on process and clan control	Dummy variable equal to 1 if focus is on process and clan control (1), or 0 if focus is on Output control	0.51	0.50
Frequency	Frequency of visitation as number of visitations per year	3.27	1.43
Supportive	Dummy variable equal to 1 if visitation is perceived as supporting, 0 otherwise	0.29	0.46
Canons regular	Dummy variable equal to 1 if order is "canons regular"	0.10	0.31
Monastic	Dummy variable equal to 1 if "monastic order"	0.13	0.33
Mendicant	Dummy variable equal to 1 if "mendicant order"	0.39	0.49
Congregation	Dummy variable equal to 1 if "congregation"	0.24	0.43
Youth	Dummy variable equal to 1 if members of the order are active in youth or child development, 0 otherwise	0.41	0.49
Germany	Dummy variable equal to 1 if order is located in Germany	0.48	0.50
Austria	Dummy variable equal to 1 if order is located in Austria	0.26	0.44
Size	Number of members	18.76	21.03
Age	Mean age of community members	60.27	9.09
N		96	

we investigate the number of sexual abuse cases associated with each order. The sexual abuse cases were made public in 2010 in the German-speaking area and resulted in a meticulous review of suspect organizations. The monastic institutions were under general suspicion and were regarded with great skepticism. It seems unlikely that the religious organizations are able to conceal serious cases anymore. We reviewed media reports about sexual abuse cases. The reported cases reveal substantial scope in the number of victims and perpetrators. It must be assumed that many community members knew about the problems, but suppressed or concealed the truth. Such behavior stands in stark contrast to the religious orders' constitutions and denotes a serious failure of a community. We excluded cases of isolated misconduct or crimes by a lone offender. Based on this information a binary dependent variable taking the value of 1 if an abuse case was reported and zero otherwise was created.

In the second set of analyses, we investigate internal rule violations of the orders. We asked the leaders of each order to tell us about acute problems in their communities (excluding financial and recruiting issues, which are common in many organizations) and to identify the most recent issue. Leaders reported about 20 cases that indicate a severe rule violation. Examples include the following: breaking vows, agitation, waste of assets and serious indiscretions. From this information we were able to create a variable that indicates internal rule violations. Considered jointly, the sexual abuse cases and the rule violations allow us to examine whether the characteristics of the visitations increase the probability for misconduct in the forms of sexual abuse and internal rule violations. Where the visitations focus on the control of principles and spiritual life, we expect fewer of these problems. Thus, we combined the information on abuse cases with the information on internal rule

violations and created a dependent variable that takes the value of 1 if a rule violation or abuse case was reported and zero otherwise.

4.2.2 Independent variables

The main independent variables are the type of control, frequency of visitations and supportive nature of visitations (that is, identity strengthening in the visitation procedures). These variables emerged as important based on the theoretical foundations presented in the literature review sections of this paper and as a result of the preliminary interviews with monastic experts. Therefore, we included those variables in the survey. Additionally, we controlled for the type of order, national origin of the order, whether the order's members are active in child and youth development, size of the order and age of the order's members. The variables are explained in further detail below.

4.2.2.1 Type of control   A set of survey items aimed at identifying the different types of controls that illustrate the focus of the communities. We asked the monastic leaders: "Which importance do you ascribe to the visitations regarding the control of finances and economic activity, the control of rules and spiritual life?" The items depict different types of control; whereas the control of finances points to the monitoring of books and key figures—that is, typical output-control procedures, control of rules and spiritual life happen predominantly through process or clan controls (output control is not possible here). All items used 5-point Likert scales. Ultimately, we split the sample into two groups and created a dummy variable for process and clan controls.

4.2.2.2 Frequency of visitations   The frequency of visitations was measured as the number of visitations per year. Broad variance exists between the different religious orders as related to the audit frequency. The survey item asked monastic leaders how often (in years) their communities are visited.

4.2.2.3 Supportive nature of visitation   One item asked the monastic leaders to describe additional tasks of the visitations. Based on this qualitative information, we created a dummy variable reflecting which communities attach great importance to "*identity strengthening*" through the visitation procedures (Table 7). The variable takes the value of 1 if the visitation was considered as supporting the identity development of the order and zero otherwise.

4.2.2.4 Type of order   We used dummy variables to control for the archetypes of orders represented in our sample (clerks regular, canons regular, monastic orders, mendicant orders and congregations). Clerks regular is the reference category.

4.2.2.5 Youth development   This variable is a dummy variable that captures whether members of the order are active in child or youth development (1 if active in youth development and zero otherwise). Regarding the investigation of sexual

abuse cases, an emphasis on youth development represents a crucial variable. The internet was helpful in searching for information about whether a community's priorities include child and youth work in schools, parishes and youth centers.

4.2.2.6 Origin We used a set of dummy variables to control for the national origin of the order represented in our sample. The sample comprises orders from Germany, Austria and Switzerland. Switzerland is the reference category. By controlling for countries, we account for differences in legislation and environments.

4.2.2.7 Size of order We controlled for the size of the order by asking the respondent for the number of members that the order currently has.

4.2.2.8 Age The age variable captures the average age in years of the respective community members.

Both size of the order and the age variable take the composition of the communities into account. For instance, we can assume that in smaller communities fewer and different problems occur, just as in the case of communities with a different age structure among members.

4.2.2.9 Economic and contemplative orientation of a religious community Economic orientation is illustrated with the items "Owner enterprises as the most important source of funding: Yes/No" and "The name of our community is a brand name as well." Contemplative orientation is illustrated with the items "How distinct is the contemplative orientation of your local community?" and "Work is a spiritual experience". The items are measured on 5-point Likert scales. This variable was used to assess hypothesis 1.

4.2.3 Analyses

We use a comparison of means to investigate hypothesis 1. For all remaining hypotheses (H2a–H4b) we use logistic regression analysis to investigate which variables are associated with an increased or decreased probability of abuse cases and rule violations. In both cases the dependent variable is binary (sexual abuse; abuse and internal rule violations) and consequently logistic regression is the appropriate choice. Alternatives are probit or tobit models. Probit models have advantages when modeling latent variables. However, in our case variables (abuse, rule violations) are observable. Tobit models are more appropriate for truncated variables, and therefore were not an option in our case. Considering these aspects jointly led us to believe that logit models are a good choice for our purposes. Nonetheless, we computed the Anderson–Darling normality test which rejects the normality assumption. This again ruled out the probit regression and gave us another good reason for using logistic regression which is not dependent on normal distributions. For ease of interpretation the regression output tables display odds ratios instead of logits.

5 Results

5.1 Types of control applied in the visitation procedures

The first part of the empirical results deals with the different types of control. Do the visitations encompass the different control forms specified in Managerial Control Theory (input, process-, output- and clan control)? (See Fig. 1).

According to the monastic leaders, output control and ex post evaluation hold a special position in most of the communities. Corresponding to the theory, they are applied mainly for the control of economic performance where comparing budget figures with actual figures is barely a problem. Fundamental purposes, such as to "search for God" (Benedictines) or to "live the gospel in compassion, penance and preaching" (Franciscans) (Engelbert 2009; Holtz 2001) are evaluated in another way. Here, input-, process- and clan control come into consideration. Selection and socialization (that is, input control) are central elements of monastic governance, but in the context of the visitation, they play a minor part. More relevant for the monastic audit are process and clan controls. During interviews with monastic leaders, it became apparent that process and clan controls in the visitations are closely related and a separation is not possible. The main purpose of the visitations is to get an idea of the moral and spiritual situation of a community. First, the auditors actively participate in the religious life of the community during the visits. Second, and even more important, extensive one-on-one conversations with the religious members take place. Typical questions that address the members' behavior refer to the problems and successes in monastic life and the relationships within the community. In the visitation statutes of the Franciscans Art. 26 (2007) it is written: "He [the visitor] should, in particular, assess how the Friars: (1) participate in fraternal life…; (2) cultivate the spirit of prayer and devotion; (3) behave as minors and as workers for justice and peace among themselves; (4) work faithfully and devotedly; (5) live a life of poverty; (6) promote the Franciscan charism." In the talks, visitors try to sense if the members are meeting values and principles and, where this is not the case, try to induce behavioral changes. Visitors, padres and brothers attempt to improve the situation with praise and criticism, with discussions in private and among the group, and with stricter measures where necessary. Whereas active participation and the questioning by the visitors refer mainly to processes, clan control takes place in the discussions and in implementing the decisions.

We investigate the orientation of a community in respect to the control system employed. First, linearity tests indicate that generally higher levels of process and clan controls are associated with higher levels of contemplation ($F = 6.26$; $p < 0.05$) and higher levels of experiencing work as a spiritual experience ($F = 4.17$; $p < 0.05$). Additionally, all deviations from linearity are not significant. In contrast, orders that run their own businesses rely more strongly on output control. Running a business serves as a proxy for economic orientation. The t test indicates that orders running a business attach a higher importance to output control ($|t| = 2.07$; $p < 0.05$) than do the remaining organizations. In addition, orders using their names as brands are associated with higher output control ($F = 2.82$; $p < 0.1$). Again all deviations from linearity are not significant.

Table 4 Types of control: comparison of means

Religious order	Process and clan control			Output control		
	N	|T|	Sig.	N	|T|	Sig.
Canons regular	10	0.298	0.766	10	0.234	0.815
Monastic Orders	12	0.921	0.359	12	2.739	0.007***
Mendicants	37	2.20	0.029*	37	1.179	0.241
Congregations	23	0.248	0.804	23	0.651	0.516
Clerks regular	13	1.941	0.054†	13	0.734	0.46
N total	95			95		

Factors that influence the visitations types of control: economic orientation, contemplative orientation

Comparison of means. Each order is tested against the remainder of the sample

To describe the different foci of the religious orders, we outline the deviation from the mean of all religious orders in the sample. Example: For the 12 monastic orders in the sample, output control is significantly more important ($t = 2.7$, $p < 0.01$) than for the average community

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.10$

In the second step, we break the analysis down to the different archetypes of religious orders. The results of the comparison of means are displayed in Table 4. The numbers illustrate that the visitation systems differ according to a community's affiliation. Monastic orders attach significantly more weight to the control of finance and economy than other communities do. This can be partly explained by the business activities of these orders. Many of them have associated enterprises (from breweries to publishers to commercial real estate) and, thus, financial monitoring is more imperative. Tendencies in the mendicant (Capuchin, Dominican, Franciscans) and clerks regular orders (Jesuits) are difficult to interpret. For example, we find that mendicants attach significantly less importance to process and clan controls compared to the rest of the sample. The opposite is the case for clerks regular. The latter give significantly more importance to process and clan controls. However, the differences in priorities are obvious. The case suggests that audit procedures depend on the customs and traditions of an organization. Visitations reflect the control culture: output-, process-, and clan control are weighted differently when auditing the various communities.

To summarize, visitations constitute a comprehensive control tool that considers measurability of outputs and knowledge of the transformation process. Overall, these results support hypothesis 1 and show that contemplative organizations, with their hardly measurable outputs, rely more on process and clan controls in the audit procedure; whereas, economically orientated orders rely on output control to a stronger extent. Further, monastic traditions and purposes influence the concrete configuration of the audits.

5.2 Effectiveness of the visitations

Fourteen communities that completed our survey a few months before the scandals went public in 2010 have been severely affected by those incidents. The results of

Table 5 Logistic regression on sexual abuse cases

Dependent variable Independent variables	(1) Abuse (odds ratio)	(2) Abuse (odds ratio)	(3) Abuse (odds ratio)	(4) Abuse (odds ratio)	(5) Abuse (odds ratio)
Focus on process and clan control	0.155**	0.0799**			0.0316*
	(0.126)	(0.101)			(0.0594)
Frequency	1.153		2.654*		3.443*
	(0.276)		(1.531)		(2.541)
Identity development	0.433			0.255	0.106*
	(0.359)			(0.302)	(0.142)
Canons regular		0.166	0.00975	0.78	0.000559*
		(0.299)	(0.0286)	(1.153)	(0.00226)
Monastic		1.406	0.398	10.42	0.00839
		(2.732)	(0.94)	(16.92)	(0.0311)
Mendicant		0.0387**	0.0130**	0.139*	0.00120**
		(0.0551)	(0.024)	(0.164)	(0.00362)
Congregations		0.0182**	0.0109**	0.0558**	0.00108**
		(0.0294)	(0.0194)	(0.0752)	(0.00289)
Youth		4.626*	8.837**	4.900*	7.638*
		(4.049)	(8.91)	(4.153)	(8.164)
Germany		40.84*	142.1**	104.7**	65.07*
		(83.96)	(320)	(216.1)	(156.1)
Austria		9.382	20.65	12.59	20.32
		(16.28)	(38.34)	(21.15)	(40.87)
Size		1.022	1.023	1.018	1.024
		(0.0266)	(0.0278)	(0.0247)	(0.0272)
Age		1.07	1.087	1.057	1.074
		(0.0599)	(0.0647)	(0.0587)	(0.0695)
Constant	0.217	0.000522	1.89e−06**	0.000106**	0.000115
	(0.208)	(0.0024)	(0.0000101)	(0.000482)	(0.000656)
N	96	96	96	96	96
McFadden R2	0.129	0.474	0.437	0.416	0.556

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

our logistic regression analyses are shown in Tables 5 and 6. Table 5 displays results for the analysis of sexual abuse cases; whereas, Table 6 presents the results for the analysis of abuse and internal rule violations. Both tables display odds ratios for ease of interpretation. An odds ratio larger than 1 indicates a higher probability of abuse and rule violations; whereas, an odds ratio below one indicates a lower probability of such events. We estimate five different models for each dependent variable.

Table 6 Logistic regression on internal rule violations

Dependent variable Independent variables	(6) Rule violation (odds ratio)	(7) Rule violation (odds ratio)	(8) Rule violation (odds ratio)	(9) Rule violation (odds ratio)	(10) Rule violation (odds ratio)
Focus on process and clan control	0.234***	0.167**			0.116***
	(0.13)	(0.118)			(0.0928)
Frequency	1.072		1.158		1.147
	(0.207)		(0.418)		(0.583)
Identity development	0.160**			0.0836**	0.0532**
	(0.128)			(0.0881)	(0.0609)
Canons regular		0.607	0.735	1.129	0.298
		(0.713)	(1.223)	(1.282)	(0.68)
Monastic		1.777	3.332	6.106	1.088
		(2.315)	(5.521)	(7.854)	(2.629)
Mendicant		0.161*	0.241	0.35	0.0999
		(0.152)	(0.252)	(0.326)	(0.149)
Congregations		0.273	0.411	0.417	0.149
		(0.266)	(0.408)	(0.395)	(0.198)
Youth		3.281*	3.377**	3.671**	4.174*
		(2.1)	(2.039)	(2.397)	(3.097)
Germany		11.04**	16.34**	23.74**	20.15**
		(13.43)	(18.89)	(30.26)	(28.77)
Austria		21.12**	21.54***	30.28***	37.41**
		(25.99)	(24.92)	(38.94)	(53.55)
Size		1.025	1.02	1.018	1.022
		(0.0166)	(0.0157)	(0.0147)	(0.0165)
Age		1.066	1.066	1.056	1.075
		(0.0457)	(0.0435)	(0.0452)	(0.0547)
Constant	0.695	0.00130**	0.000231***	0.000583**	0.000877*
	(0.536)	(0.00421)	(0.000734)	(0.00188)	(0.00339)
N	96	96	96	96	96
McFadden R2	0.152	0.347	0.279	0.357	0.445

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

5.2.1 Estimation strategy and Robustness

The first four models focus on the main variables of interest: type of control, frequency of visitations and supportive identity development. The final model (models 5 and 10) estimates the full set of variables. Presenting several models for each case serves as an additional robustness check. We further checked for multicollinearity by calculating variance inflation factors (VIF). For all models the VIF are within normal limits. The mean VIF for the full model is 2.07 and the

largest single VIF is 3.28. Hence, we have no reason to believe multicollinearity is a problem in our analyses. With the one exception of model 3, no major problem was noted according to the results of the Hosmer–Lemeshow test. Also, pseudo R-square values fall into acceptable ranges. Additionally, the linktest specification check did not yield worrying results. Thus, we conclude that, overall, all but one model have a good fit with the data.

5.2.2 Results for sexual abuse cases

We first consider the impact on sexual abuse cases. Hypothesis 2a stipulated that process and clan controls are associated with lower probabilities of sexual abuse occurring. All models display significant odds ratios lower than one indicating that these control forms are associated with a lower probability of sexual abuse cases occurring. Therefore, we accept hypothesis 2a.

Hypothesis 3a linked the likelihood of sexual abuse cases in church organizations to the frequency of visitations. Model 1 does not indicate any effect in this respect. However, once we start controlling for a variety of factors, results become stable and significant. Results indicate that higher values, that is, lower frequency of visitations, are associated with a higher probability of abuse cases. Therefore, we have to accept hypothesis 3a.

Hypothesis 4a established that communities whose visitation procedures are supportive and contribute to the order's identity development would have a lower probability of suffering from sexual abuse cases. The full model supports this hypothesis. The odds ratio is below 1 and significant, indicating that identity developing visitation procedures are associated with lower probabilities of sexual abuse cases in religious orders.

Because opportunity invites wrongdoing, it comes as no surprise that an engagement in child and youth work (item "youth") increases the risk of sexual misconduct. This variable is positively associated with the probability of sexual abuse occurring and significant in all models. Overall, we find limited but nonetheless existing evidence for our hypotheses. However, we have to acknowledge the low significance as all coefficients of the main variables sit on the 10 % level.

5.2.2.1 Results for abuse and rule violations

Now we consider results for the analysis of rule violations (models 6–10). The estimation strategy is the same as in the previous section. Diagnostic checks such as the Hosmer–Lemeshow Test did not raise any concerns and pseudo R-square values fall into acceptable ranges. Hypothesis 2b linked such misconduct to process and clan controls. Similarly to the results for abuse cases, we find the results are stable across all models, highly significant and in the expected direction, that is, process and clan controls are associated with lower probabilities of misconduct. Thus we accept hypothesis 2b.

Hypothesis 3b stipulated that the frequency of visitations is associated with lower probabilities of rule violations. We do not find a significant result at this time, and therefore have to reject hypothesis 3b. Ultimately, hypothesis 4b argued that

supportive, identity developing visitations are associated with a lower likelihood of misconduct and rule violations. In this case, the results are clear, significant and stable across models supporting hypothesis 4b. Again involvement in child and youth work was significantly associated with an increased probability of rule violations.

Considering the analysis for abuse cases and rule violations jointly, the most important result is the validation of hypotheses 2a and 2b highlighting the importance of control mechanisms other than output control. The focus of control is moderately significant (OR = 0.03; $p < 0.1$) for abuse cases and highly significant if we add cases of internal rule violation (OR = 0.11, $p < 0.01$). Religious communities that attach more relative weight to process and clan control (the control of basic principles and spiritual life) than to output control exhibit less misconduct. Additionally, visitations that support the order's identity development appear to be beneficial and help to discipline the order's members. Consequently, the emphasis on identity development indicates an alternative way to reduce wrongdoing.

It is possible to draw some cautious conclusions on the effectiveness of the visitations today and to clarify hypotheses 2 and 3.[4] The outcomes on child abuse and on rule violations suggest that process and clan controls make an impact on supervising principles and spiritual life. In the next subsection, we take a qualitative look at implementation and additional services.

5.3 The crucial role of implementation and identity development

To enable a functioning assessment, the control type is not the only relevant factor. How the control procedures are implemented and perceived is essential. Such questions are not considered marginal in the survey. We take a brief look at this important aspect—in the conversations with the monastic leaders and in reviewing monastic constitutions.

5.3.1 Trust, secrecy, embeddedness

In the conversations with the monastic leaders, we asked about special requirements this form of audit involves. In all religious orders, trustworthiness is named as an inevitable feature if the visitations are to have a full impact. Fundamental respect and mutual trust between visitor and community member are considered essential for fruitful cooperation. In many constitutions, we find an admonition to the visitors to criticize in a fraternal manner in wisdom and love (Beuroner

---

[4] A parallel historical study underscores the impressive significance of the little-known visitations in Christianity and supports the impression from the quantitative analysis. The existence over centuries—from late antiquity until today (Peters 2003), and in the religious orders for almost a millennium—of the visitations, plus their dissemination to all religious orders, dioceses and beyond the Catholic Church (Schwaiger 2003), point to an extraordinary, successful governance instrument. The history of their reception illustrates the flexibility and the broad applicability of this religious assessment tool, and reveals an instrument that heavily influenced the paths of the examined organizations. The focus on output-, process- and clan control to monitor economic health and spiritual life, a constituting element from the beginning, proved highly successful.

Benediktinerkongregation 2003). The controlled padres and brothers must not be humiliated or put under pressure. In return, the controlled members have a responsibility and are encouraged to cooperate truthfully with the visitors (CIC 1983: pp. 628). Reliability is further emphasized with the mandatory obligation of secrecy; a comprehensive privacy protection is guaranteed. The visitor "is forbidden to reveal *to anyone, in any way*, the names of the Friars about whom he has learned something harmful…" (Franciscans 2007 pp. 33). This represents a substantial difference from common evaluation practices, which, to the contrary, emphasize transparency. Finally, the procedure is embedded in the spiritual life and tradition of the community. Padres and brothers pray for successful procedures and agreement, with services marking the beginning and ending of the visits. Such connections with personal faith underline the seriousness of the assessment and give some sense to the monastic audit.

5.3.2 Service orientation

In addition to the implementation, visitations are seen as a service to the community (Peters 2003). As apparent already in the definitions of the visitation, the control aspect is but one among others. According to many padres and brothers interviewed, spiritual strengthening and encouragement of the members is of major importance. Where legal rules about visitations are available, this objective is also explicitly mentioned (Salesians 1984). The Premonstratensians' constitutions read: "…therefore it is the first task of the visitation to strengthen the dynamic spiritual life, to consolidate legitimate, local customs" (Premonstratensians 1997, pp. 227). Again, the results are confirmed in the survey. The monastic leaders were invited to name further objectives of the visitations that are carried out in their local communities. Different tasks are attributed to the monastic auditing beyond control functions. Table 7 lists these goals according to the number of times each goal is mentioned in the survey. The most frequently mentioned keywords are better communication, strengthening of community, and individual members, followed by conversation about personal mental state, discussion of future perspectives and renewal of the spiritual life. In their talks, visitors not only focus on monitoring and intervention, but try to encourage the members and offer assistance. It is striking that more than half the goals mentioned (printed in bold letters in Table 7) relate to strengthening and identity development. Visitations in the best-case scenario are a service to the community, which in turn fosters adequate behavior by deepening identity and faith. Therefore, spiritual discipline and the observance of canonical and monastic law should not be emphasized through control alone, but through an improvement of the living conditions of the religious members.

Monastic auditing indicates that many visitors attach great importance to correct implementation and complementary services. The elimination of misconduct by means of controls is not the only intention; the assessment is combined with different tasks like emphasizing communication or strengthening the communal life (Peters 2003; Hein 2005).

For a successful auditing, not only the types of control are essential, but also the kind of implementation has to be considered. Our analysis illustrates that control

Table 7 Tasks of the visitations

Which further tasks are accomplished with the visitations?	Number of mentions
Foster communication, encourage meetings	10
Strengthening the community	**6**
Individual encouragement/strengthening	**5**
Conversation about personal mental state	**5**
Future perspectives, goals	**5**
Renewal of mission/spiritual life	**4**
Preparatory talks about mutations	3
To open a debate	2
Single indications: preparation of gatherings, supervision in situations of change, exchange of experience between communities, shelter from work overload, etc.	1

Data in bold letters refer to identity development

works if the assessed members cooperate and accept the procedures. Additionally, for the interviewed monastic leaders, support in monastic life and identity strengthening, central targets of the visitations, have an effect on the (mis-)behavior of the members. The effect is also reflected in the empirical analysis (H4a and H4b).

6 Discussion and conclusion

The search for good governance is one of the major issues in this decade. How are managers and employees controlled to reduce misconduct and unethical behavior? In addition to stricter regulation, financial incentives based on output control are the favored instrument in steering working employee behavior. The success of output control procedures continues in the corporate sector (Hilb 2011) and encroaches into other fields such as public administration or education (Frey et al. 2013, Wragg et al. 2004). However, it is highly controversial as to whether this one-sided direction on tightened regulation and an enhancement of external controls alone lead to satisfactory outcomes. With their visitation systems, religious orders offer some alternative concepts worthy of consideration by other organizational forms. The analysis of multiple orientations of control (Sect. 5.1) and their effectiveness (Sect. 5.2) in religious orders leads us to the conclusions outlined below.

First, only a control system that is characterized by multiple orientations meets the requirements of *good governance*. The religious orders devote themselves to many different tasks, and the control systems need to take this into account. Spiritual services such as prayer and meditation are part of their mission. Similarly, social work, cultural tasks and the production of goods such as books or beer are interwoven with the mission of religious orders. As a consequence, none of the examined communities can be reduced to one, two or even three of these tasks. In such conditions, exclusively output-oriented control systems are not viable. Following Ouchi (1977, 1979) and his colleagues, the control must fit the task

environment of the goods and services. As they differ highly in nature, it is not sufficient to refer to one of the control archetypes (clan-, process- or output control). Instead, we need systems that offer a manifold orientation of control. This is confirmed in the analysis. Communities that neglected the control of spirituality and community life (that is, process and clan controls) in their visitation procedures and focused instead on the business routine of their organizations, show a higher probability of abuse cases and rule violations.

As with the religious communities, most other organizations, including small ones, provide a wide range of tasks and objectives. We expect similar control patterns. Across private firms, nonprofit organizations and public administration, output control has increasingly become the dominant control type. In governance systems where an exclusive use of output measures is common, the behavior of the employees is channeled toward fulfilling tasks relevant for their assessment and compensation (Chava and Purnanandam 2010; Johnson 2011). Individuals act strategically to reach their goals (Bebchuk and Fried 2005, Holmström and Milgrom 1991; Jensen 2003; Jensen et al. 2004; Rajan 2010). Behaviors that cannot be easily monitored, such as organizational citizenship behavior, tend to be ignored (Weibel 2007). A multiple-oriented control system, involving input-, process-, or clan control, mitigates the potentially negative effects of pure output control. Wrong incentives are reduced, and the challenges of difficult measurability and performance accountability are faced with a more comprehensive basis (Frost et al. 2010). Process- and clan control shift the focus away from employees who want immediate gratification and are tempted to violate standards (Johnson et al. 2009). Finally and probably most importantly, a well-balanced control system takes into account the firm's culture and values (Fortado 1994; Simons 1995; 2000) and is able to influence the behavior of management and employees. Behavior consistent with group expectations, norms and values will be rewarded; fraudulent behavior will be sanctioned (Fortado 1994; Osterloh and Frey 2006). It has been shown that belief and value systems can be powerful levers of control (Rodrigue et al. 2013; Simons 2000). Organizations, in particular nonprofit ones, may benefit from an increased use of such control systems.

Second, the specific characteristic of monastic visitations is the distinct coexistence of different types of control in the monastic audits. Performance is hard to measure in the religious institutions, so alternative types of control that do not rely on outputs have been developed. What is surprising here is that different types of control are applied simultaneously in the auditing process. This is commonly an area of governance normally focused strongly on processes, output control and ex post evaluations (Merchant and Van der Stede 2012). The visitations not only help to control the books and the economic situation, but if correctly applied, they also consider organization culture, that is, the spirit and the discipline of the monks, and the adherence to principles and traditions. Formal and informal control mechanisms are considered (Cardinal et al. 2010). Whereas output control plays a role in the monitoring of economic activities and the financial state of a community, the control of values and principles through process and clan controls is equally important. Our analysis substantiates the success of the twofold orientation of monastic audits, an emphasis differing considerably from auditing processes in

other organizations. This extension of auditing and monitoring procedures could be a promising way to achieve better governance in other control systems as well.

Third, the study demonstrates that not only are the different types of control important but identity development is crucial (Sect. 5.3). In the twentieth century, the focus in the religious orders' auditing tended to shift away from a one-sided orientation on control to favoring a system of support and mutual assistance. Individual support and identity development go hand in hand with visitation procedures. A strengthening of community and individual members is expected to foster a correct attitude and behavior in the padres, sisters and brothers, as in the case of controls. Additionally, with great care, the religious communities embed the visitation processes in their daily life and the value system of their organizations to provide sense and comprehension. Such an approach bringing together control *and* support may seem idealistic for some organizations; however, it could be worthwhile to configure controls in such a way as to prevent feelings of distrust or marginality. The findings in the religious orders illustrate that controls do not have to be perceived as being controlling to have effect. Intrinsic values, such as identification, trust, and integrity, promote a functioning control system (De Charms 1968; Deci and Ryan 1980; Frey 1997; Osterloh and Weibel 2008).

Fourth, we adopt a more general perspective that points beyond internal audit measures by examining the abuse scandals. The investigation shows that even organizations whose raison d'être is compassion are not immune to severe governance failures. It also appears that the instrument of the visitations was not sufficient to guarantee correct behavior. Knowing that the following considerations need some verification, the cases indicate that the coordination with other control mechanisms was not adequately developed. Instead of dealing with the scandals and accounting for the past behaviors, the sexual abuse cases were placed under a taboo. This behavior reveals one of the most severe dangers of internal governance, the emergence of groupthink (Janis 1972; Tajfel 1981). Monastic communities are life partnerships that depend on a distinct homogeneity among members (Schmelzer 1979). Strong group cohesion is fostered with internal control mechanisms—for instance, with a rigorous socialization of the novices—and the development of a strong corporate identity. Groupthink can be one consequence leading to the wrong kind of solidarity between members or into a culture of concealment. Additionally, because of a specific Catholic trait of keeping up the reputation of the "Holy Church" at all costs, high dignitaries ignored abuses and inadvertently sanctioned wrong behavior. Closely connected as well is the dichotomy of church law and state law—a further obstacle to transparency (Kaufmann 2010). The negative aspects of groupthink can be addressed by various measures. In addition to internal strategies, for instance, implementing a culture of critical examination, an outside perspective can improve matters (Janis 1972). The visitations could have been the element to bring in the urgently required diversity. If seriously applied and executed, a positive preventive effect may be expected. If visitors openly address such concerns, the repression of dealing with such taboos should be absent. However, as the analysis illustrates, the controls have not always been implemented consistently and, by focusing on financial issues, were no counterweight to the strong internal control mechanisms. The case illustrates the importance of taking a holistic view of control

systems. Internal audits are just one part in a comprehensive organizational governance system.

As a contribution to the literature on good governance and auditing, our paper focuses attention on a multiple orientation of control in the auditing procedures of religious orders. It becomes obvious that a "one-fits-all" approach is not enough to face the challenges. Internal audits limited to economic valuation and compliance with the law are incomplete and do not fulfill today's requirements anymore. Further, by including implementation practices and additional services such as identity development, we point to neglected aspects in the management control literature. With control instruments applied and practiced over centuries, religious orders offer some concepts and ideas worth considering toward better governance beyond the religious field.

7 Limitations and future research

This study has an explorative character; it is intended to stimulate further research that would be able to overcome the limitations of this study. First, this study is limited to the German-speaking area, as all orders who responded to our survey are located in Germany, Switzerland and Austria. However, since all orders worldwide rely on similar governance structures, our analysis offers a first glance into their advantages and problems. Second, the number of reported abuse cases is quite limited. Therefore, future research embracing larger samples of orders may be able to generate more detailed insights on the prevention of abuse cases. Related to the limited data available on abuse cases is another issue: Orders relying heavily on clan controls may experience less denunciation by abused individuals as those may still feel some obligation to the order. The latter may affect our dependent variable, however, is not measurable at all. The insights gained through interviews helped to mitigate this issue a little bit. Third, one needs to account for the particular characteristics of religious orders. Certainly we do not propagate a one-to-one transfer of monastic governance instruments (for a detailed discussion, see Inauen et al. 2010a). Circumstances vary too widely, and an implementation depends on, for instance, the form, purpose, size, situation or context of an organization (Alford and Hughes 2008). However, it might be rewarding to do research into business alternatives to approach some of the problems in governance today (Clarke 2011; Benz and Frey 2007).

Future research on multiple control systems should not only consider different types of control and explore their relations among each other more deeply, but should also take into account surrounding conditions as the impact of implementation practices. Different starting points are conceivable precisely because similar control instruments already exist. For instance, the internal audit in many organizations encompasses the efficiency of processes and compliance with law and regulations. Broadening the scope of internal audit procedures is likely to play an increasingly important role in the future.

Appendix

See Table 8.

Table 8 Correlations

		1	2	3	4	5	6	7
1	Control types							
2	Focus on process & clan control	−0.30*						
3	Sexual abuse	−0.01	−0.28*					
4	Abuse—rule violations	0.03	−0.30*	0.69*				
5	Frequency	−0.09	−0.22*	0.12	0.10			
6	Identity development	−0.01	0.08	−0.12	−0.26*	−0.03		
7	Canons regular	−0.03	−0.01	−0.04	0.04	0.49*	−0.07	
8	Monastic orders	−0.09	−0.20	0.31*	0.29*	0.37*	−0.03	−0.13
9	Mendicant orders	0.22*	−0.08	−0.19	−0.26*	−0.06	0.10	−0.27*
10	Congregations	0.03	0.06	−0.15	−0.04	−0.13	−0.09	−0.19
11	Child and youth work	0.00	−0.08	0.29*	0.26*	−0.03	0.03	0.00
12	Germany	0.09	−0.06	0.17	0.07	−0.12	0.07	−0.05
13	Austria	−0.03	0.01	−0.03	0.15	0.09	−0.07	0.19
14	Number of members	0.03	−0.11	0.28*	0.31*	0.27*	−0.07	0.11
15	Mean age	0.08	0.02	0.03	0.03	−0.21*	−0.07	−0.31*

		8	9	10	11	12	13	14
9	Mendicant orders	−0.30*						
10	Congregations	−0.21*	−0.44*					
11	Child and youth work	0.14	−0.13	−0.02				
12	Germany	−0.24*	0.05	0.15	0.14			
13	Austria	0.13	−0.08	−0.22*	−0.10	−0.57*		
14	Number of members	0.40*	−0.33*	0.08	0.13	0.05	0.01	
15	Mean age	−0.04	−0.02	0.28*	0.02	−0.02	−0.34	0.10*

Means and standard deviations are displayed in Tables 2 and 3

* $p < 0.05$; N = 96

References

Abernethy, M. A., & Chua, W. F. (1996). A field study of control system "redesign": The impact of institutional processes on strategic choice. *Contemporary Accounting Research, 13*(2), 569–606.

Adler, P. S., & Borys, B. (1996). Two types of bureaucracy: Enabling and coercive. *Administrative Science Quarterly, 41*, 61–89.

Alford, J., & Hughes, O. (2008). Public value pragmatism as the next phase of public management. *American Review of Public Administration, 38*(2), 130–148.

Alvesson, M., Ashcraft, K. L., & Thomas, R. (2008). Identity matters: Reflections on the construction of identity scholarship in organization studies. *Organization, 15*(1), 5–28.

Alvesson, M., & Kärreman, D. (2004). Interfaces of control. Technocratic and socio-ideological control in a global management consultancy firm. *Accounting, Organizations and Society, 29*(3/4), 423.

Ambos, B., & Schlegelmilch, B. B. (2007). Innovation and control in the multinational firm: A comparison of political and contingency approaches. *Strategic Management Journal, 28*(5), 473–486.

Anthony, R. N., & Govindarajan, V. (2008). *Management control systems* (12th ed.). Boston, MA: McGraw-Hill.

Bachman, R., Gillespie, N., & Kramer, R. (2011). Call for papers for a special issue on trust in crisis: Organizational and institutional trust, failures and repair. *Organization Studies, 32*(8), 1139–1141.

Bebchuk, L. A., & Fried, J. M. (2005). Pay without performance: Overview of the issues. *Journal of Applied Corporate Finance, 17*(4), 8–23.

Benz, M., & Frey, B. S. (2007). Corporate governance: What can we learn from public governance? *Academy of Management Review, 32*(1), 92–104.

Betz, H. D., Browning, D. S., Janowski, B., & Jüngel, E. (2005). *Religion in Geschichte und Gegenwart. Handwörterbuch für Theologie und Religionswissenschaft* (4th ed., Vol. 8). Tübingen: Mohr Siebeck Verlag.

Beuroner Benediktinerkongregation. (2003). *Die Visitation der Klöster.* Internal law' Directorium Spirituale, Chapter V. Maria Laach Abbey, Germany.

Brenner, S., & Schwalbach, J. (2009). Legal institutions, board diligence, and top executive pay. *Corporate Governance: An International Review, 17*(1), 1–12.

Caglio, A., & Ditillo, A. (2008). A review and discussion of management control in inter-firm relationships: Achievements and future directions. *Accounting, Organizations and Society, 33*(7–8), 865–898.

Cardinal, L. B. (2001). Technological innovation in the pharmaceutical industry: The use of organizational control in managing research and development. *Organization Science, 12*(1), 19–36.

Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2004). Balancing and rebalancing in the creation and evolution of organizational control. *Organization Science, 15*(4), 411–431.

Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2010). A configurational theory of control. In S. B. Sitkin, L. B. Cardinal, & K. M. Bijlsma-Frankema (Eds.), *Organizational control* (pp. 51–79). New York, NY: Cambridge University Press.

Carlsson-Wall, M., Kraus, K., & Lind, J. (2011). The interdependencies of intra- and interorganisational controls and work practices—the case of domestic care of the elderly. *Management Accounting Research, 22*(4), 313–329.

Chava, S., & Purnanandam, A. (2010). CEOs versus CFOs: Incentives and corporate policies. *Journal of Financial Economics, 97*(2), 263–278.

Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society, 28*(2/3), 127–168.

Clarke, D. C. (2011). "Nothing but wind"? The past and future of comparative corporate governance. *American Journal of Comparative Law, 59*(1), 75–110.

Codex Iuris Canonici. (1983). Canon law of the Catholic Church. 1 October 2011. http://www.intratext. com/IXT/ ENG0017/_INDEX.HTM.

Dart, R. (2004). Being "business-like" in a nonprofit organization: A grounded and inductive typology. *Nonprofit and Voluntary Sector Quarterly, 23*, 290–310.

De Charms, R. (1968). *Personal causation: The internal affective determinants of behavior.* New York, NY: Academic Press.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*, 627–668.

Deci, E. L., & Ryan, R. M. (1980). The empirical exploration of intrinsic motivational processes. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 39–80). New York, NY: Academic Press.

Dent, J. F. (1990). Strategy, organization and control: Some possibilities for accounting research. *Accounting, Organizations and Society, 15*(1/2), 3–25.

Die Zeit Online. (2010). *Chronologie der Übergriffe*. May 18, 2010 http://www.zeit.de/gesellschaft/zeitgeschehen/2010-04/sexueller-missbrauch-chronologie.

Di Pietra, R., McLeay, S., & Ronen, J. (2010). Special issue on governance and accounting regulation. *Journal of Management and Governance, 14*(4), 273–276.

Ehrmann, T., Rost, K., & Inauen, E. (2013). Location of decision rights in Catholic religious orders. *Managerial and Decision Economics, 34*(1), 29–39.

Eisenhardt, K. M. (1985). Control—organizational and economic approaches. *Management Science, 31*(2), 134–149.

Engelbert, P. (2009). Zwischen Regel und Reform: Zur Geschichte des Benediktinerordens. In C. Schütz & P. Rath (Eds.), *Der Benediktinerorden. Gott suchen in Gebet und Arbeit*. Ostfildern: Matthias Grünewald Verlag.

Fama, E., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics, 26*, 327–349.

Feinberg, K. (2011). Compensating company executives under the troubled asset relief program. *Corporate Governance: An International Review, 19*(5), 492–496.

Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research, 20*(4), 263–282.

Fisher, J. G. (1998). Contingency theory, management control systems and firm outcomes: Past results and future directions. *Behavioral Research in Accounting, 10*, 47–64.

Flamholtz, E. G., Das, T. K., & Tsui, A. S. (1985). Toward an integrative framework of organizational control. *Accounting, Organizations and Society, 10*(1), 35–50.

Fortado, B. (1994). Informal supervisory social-control strategies. *Journal of Management Studies, 31*(2), 251–274.

Franciscans. (2007). *The special statutes for the canonical visitation and presidency of the provincial chapter 2001*. Rome, Italy: Franciscan Order.

Frey, B. S. (1992). Tertium datur: Pricing, regulating and intrinsic motivation. *Kyklos, 45*, 161–184.

Frey, B. S. (1997). *Not just for the money: An economic theory of personal motivation*. Cheltenham, Brookfield: Edward Elgar.

Frey, B. S., Homberg, F., & Osterloh, M. (2013). Organizational Control Systems and pay for performance in the Public Service. *Organization Studies, 34*(7), 949–972.

Frey, B. S., & Jegen, R. (2001). Motivation crowding theory: A survey of empirical evidence. *Journal of Economic Surveys, 15*(5), 589–611.

Frey, B. S., & Osterloh, M. (Eds.). (2002). *Successful management by motivation: Balancing intrinsic and extrinsic incentives*. Berlin: Springer.

Frieb, K. (2006). *Kirchenvisitation und Kommunikation. Die Akten zu den Visitationen in der Kuroberpfalz unter Ludwig VI* (pp. 1576–1583). Munich: Beck.

Frost, J., Osterloh, M., & Weibel, A. (2010). Governing knowledge work: Transactional and transformational solutions. *Organizational Dynamics, 39*(2), 126–136.

Frost, J., Vogel, R., & Bagban, K. (2012). Towards a combinative approach to management control: How control mechanisms interact in a multi-business firm. Working paper presented at EGOS 2012 Helsinki.

Fryxell, G. E., Dooley, R. S., & Vryza, M. (2002). After the ink dries: The interaction of trust and control in US-based international joint ventures. *Journal of Management Studies, 39*(6), 865–886.

George, E., & Qian, C. (2010). Organizational identity and control: can the two go together? In S. B. Sitkin, L. B. Cardinal, & K. M. Bijlsma-Frankema (Eds.), *Organizational control* (pp. 167–190). New York, NY: Cambridge University Press.

Gerdin, J. (2005). Management accounting system design in manufacturing departments: An empirical investigation using a multiple contingencies approach. *Accounting, Organizations and Society, 30*(2), 99–126.

Grandori, A., & Soda, G. (2006). A relational approach to organization design. *Industry & Innovation, 13*(2), 151–172.

Grant, G. H. (2003). The evolution of corporate governance and its impact on modern corporate America. *Management Decision, 41*(3), 923–934.

Grant, R. M. (2011). Reflections on knowledge-based approaches to the organization of production. *Journal of Management & Governance*, online first 13 December 2011, pp. 1–18.

Hausmann, Y., & Bechtold-Orth, E. (2010). Changing remuneration systems in Europe and the United States—a legal analysis of recent developments in the wake of the financial crisis. *European Business Organization Law Review, 11*(2), 195–229.

Hein, M. (2005). Visitation. In D. Betz, D. S. Browning, B. Janowski, & E. Jüngel (Eds.), *Religion in Geschichte und Gegenwart. Handwörterbuch für Theologie und Religionswissenschaft*. Tübingen: Mohr Siebeck Verlag.

Helvetia Sacra. (1986). Die Orden mit Benediktinerregel. Frühe Klöster, die Benediktiner und Benediktinerinnen in der Schweiz, Vol. 3/1/1. Bern, Switzerland: Francke.

Hilb, M. (2011). Redesigning corporate governance: Lessons learnt from the global financial crisis. *Journal of Management and Governance, 15*(4), 533–538.

Hirnsperger, J. (2001). Visitation II. Kirchenrechtlich. In M. Buchberger, W. Kasper, K. Baumgartner (Eds.), *Lexikon für Theologie und Kirche*. Freiburg i. Br.: Herder Verlag.

Holmström, B., & Milgrom, P. (1991). Multitask principal-agent analyses: Incentive contracts, asset ownership, and job design. *Journal of Law Economics and Organization, 7*, 24–52.

Holtz, L. (2001). *Geschichte des christlichen Ordenslebens*. Düsseldorf: Patmos.

Inauen, E., Rost, K., Frey, B. S., Homberg, F., & Osterloh, M. (2010a). Monastic governance: Forgotten prospects for public institutions. *American Review of Public Administration, 40*(6), 631–653.

Inauen, E., Rost, K., Osterloh, M., & Frey, B. S. (2010b). Back to the future: A monastic perspective on corporate governance. *Management Revue, 21*(10), 38–59.

Janis, I. L. (1972). *Victims of groupthink. A psychological study of foreign policy decisions and fiascos*. Boston: Houghton Mifflin.

Jensen, M. C. (2003). Paying people to lie: The truth about the budgeting process. *European Financial Management, 9*(3), 379–406.

Jensen, M. C., & Meckling, H. W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360.

Jensen, M. C., & Murphy, K. J. (1990). Performance, pay and top-management incentives. *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. Harvard Business School NOM Research Paper No. 04-28, Harvard.

Johnson, S. (2011). The next financial crisis. *Corporate Governance: An International Review, 19*(5), 489–491.

Johnson, S. A., Ryan, H. E, Jr, & Tyan, I. S. (2009). Managerial incentives and corporate fraud: The sources of incentives matter. *Review of Finance, 13*(1), 115–145.

Kaufmann, F.-X. (2010). Moralische Lethargie in der Kirche. *Frankfurter Allgemeine Zeitung, 96*, 8.

Keevers, L., Treleaven, L., Sykes, C., & Darcy, M. (2011). Made to measure: Taming practices with results- based accountability. *Organization Studies, 33*(1), 97–120.

Kennedy, F. A., & Widener, S. K. (2008). A control framework: Insights from evidence on lean accounting. *Management Accounting Research, 19*(4), 301–323.

Kieser, A. (1987). From asceticism to administration of wealth. Medieval monasteries and the pitfalls of rationalization. *Organization Studies, 8*(2), 103–123.

Kirkpatrick, G. (Ed.) (2009). The corporate governance lessons from the financial crisis. Report by OECD steering group on corporate governance, pp. 1–30.

Kirsch, L. (1996). The management of complex tasks in organizations: Controlling the systems development process. *Organization Science, 7*(1), 1–21.

Kirsch, L. J., Ko, D. G., & Haney, M. H. (2010). Investigating the antecedents of team-based clan control: Adding social capital as a predictor. *Organization Science, 21*(2), 469–489. Lexisnexis University. Reed Elsevier Inc.

McGrath, P. (2007). Knowledge management in monastic communities of the Medieval Irish Celtic Church. *Journal of Management History, 13*(2), 211–223.

Magnan, M., & Markarian, G. (2011). Accounting, governance and the crisis: Is risk the missing link? *European Accounting Review, 20*(2), 215–231.

Malmi, T., & Brown, D. A. (2008). Management control systems as a package-opportunities, challenges and research directions. *Management Accounting Research, 19*(4), 287–300.

Martinez, J. I., & Jarillo, J. C. (1989). The evolution of research on coordination mechanisms in multinational corporations. *Journal of International Business Studies, 20*(3), 489–514.

Meier, D. M. (2006). Klösterliche Finanzvisitation. Anforderungen an ein internes Kontrollsystem. In K. Lüdicke, H. Paarhammer, & D. A. Binder (Eds.), *Kirche in einer säkularisierten Gesellschaft* (pp. 405–420). Innsbruck: Studienverlag.

Merchant, K. A., & Otley, D. T. (2007). A review of the literature on control and accountability. In C. S. Chapman, A. G. Hopwood, & M. D. Shields (Eds.), *Handbook of management accounting research* (Vol. 2, pp. 785–802). Amsterdam: Elsevier.

Merchant, K. A., & Van der Stede, W. A. (2012). *Management control systems: Performance measurement, evaluation and incentives* (3rd ed.). New Jersey: Prentice Hall.

Meyer, M. W. (2003). *Rethinking performance measurement. Beyond the balanced scorecard.* New York, NY: Cambridge University Press.

Meyer, M. W., & Gupta, W. (1994). The performance paradox. *Research in Organizational Behavior, 16*, 309–369.

Müller, G. (2003). *Theologische Realenzyklopädie.*, 35 Berlin & New York, NY: De Gruyter.

O'Donnell, S. W. (2000). Managing foreign subsidiaries: Agents of headquarters, or an interdependent network? *Strategic Management Journal, 21*(5), 525–548.

Osterloh, M., & Frey, B. S. (2006). Shareholders should welcome knowledge workers as directors. *Journal of Management and Governance, 10*(3), 325–345.

Osterloh, M., & Weibel, A. (2006). *Investition Vertrauen. Prozesse der Vertrauensentwicklung in Organisationen.* Wiesbaden: Gabler.

Osterloh, M., & Weibel, A. (2008). Managing motivation—Verdrängung und Verstärkung der intrinsischen Motivation aus Sicht der psychologischen Ökonomik. *Wirtschaftswissenschaftliches Studium (WiSt), 8*, 406–411.

Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society, 5*(4), 413–428.

Ouchi, W. G. (1977). The relationship between organizational structure and organizational control. *Administrative Science Quarterly, 22*, 95–113.

Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science, 25*, 833–848.

Ouchi, W. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly, 25*, 129–141.

Perry, J. L., Engbers, T. A., & Jun, S. J. (2009). Back to the future? Performance-related pay, empirical research, and the perils of persistence. *Public Administration Review, 69*(1), 39–51.

Peters, C. (2003). Visitation I. In *Theologische Realenzyklopädie*. Berlin, New York: De Gruyter.

Pirson, M., & Turnbull, S. (2011). Toward a more humanistic governance model: Network governance structures. *Journal of Business Ethics, 99*(1), 101–114.

Premonstratensians. (1997). Konstitutionen des regulierten Chorherrenordens der Prämonstratenser: Visitationsordnung. Premonstratensian Order. Rome.

Rajan, R. (2010). *Fault lines: How hidden fractures still threaten the world economy*. Princeton: Princeton University Press.

Rodrigue, M., Magnan, B. & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. *Management Accounting Research*, *24*(4), 301–306.

Rost, K., Inauen, E., Osterloh, M., & Frey, B. S. (2010). Corporate Governance: What can stock corporations learn from monasteries? *Journal of Management History, 16*(1), 90–115.

Rost, K., & Osterloh, M. (2009). Management fashion pay-for-performance. *Schmalenbachs Business Review, 61*(2), 119–149.

Salesians (1984). *Allgemeine Satzungen der Salesianer Don Boscos*. Salesian Order. Rome.

Sandelin, M. (2008). Operation of management control practices as a package. A case study on control system variety in a growth firm context. *Management Accounting Research, 19*(4), 324–343.

Schmelzer, G. (1979). *Religiöse Gruppen und sozialwissenschaftliche Typologie. Möglichkeiten der soziologischen Analyse religiöser Orden*. Sozialwissenschaftliche Abhandlungen der Görres-Gesellschaft. Berlin: Duncker & Humblot.

Schwaiger, G. (2003). *Mönchtum, Orden, Klöster. Von den Anfängen bis zur Gegenwart*. Munich: Beck.

Schwaiger, G., & Heim, M. (2008). *Orden und Klöster: das christliche Mönchtum in der Geschichte* (3rd ed.). Munich: Beck.

Simons, R. (1990). The role of management control systems in creating competitive advantage: New perspectives. *Accounting, Organizations and Society, 15*(1–2), 127–143.

Simons, R. (1995). Control in an age of empowerment. *Harvard Business Review, 73*(2), 80–88.

Simons, R. (2000). *Performance Measurement & Control Systems for implementing Strategy*. Upper Saddle River, NJ: Prentice Hall.

Sitkin, S. B., Cardinal, L. B., & Bijlsma-Frankema, K. M. (Eds.). (2010). *Organizational control*. New York, NY: Cambridge University Press.

Snider, L. (2009). Accommodating power: the "common sense" of regulators. *Social & Legal Studies, 18*(2), 179–197.

Spiegel Online. (2011). Sexueller Missbrauch in der katholischen Kirche. Jan. 8, 2011. http://www. spiegel.de/thema/sexueller_missbrauch_in_der_katholischen_kirche.

St. John, C. H., & Harrison, J. S. (1999). Manufacturing-based relatedness, synergy, and coordination. *Strategic Management Journal, 20*(2), 129–145.

Sun, W., Stewart, J., & Pollard, D. (2011). *Corporate governance and the global financial crisis: International perspectives*. Cambridge: Cambridge University Press.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. CUP Archive.

Thompson, J. D. (1967). *Organizations in action*. New York, NY: McGraw-Hill.

Turner, K. L., & Makhija, M. V. (2006). The role of organizational controls in managing knowledge. *Academy of Management Review, 31*(1), 197–217.

Tyler, T. R., & Blader, S. L. (2000). *Cooperation in groups: procedural justice, social identity, and behavioral engagement*. Philadelphia, US: Psychology Press.

Weaver, G. R. (2006). Virtue in organizations: Moral identity as a foundation for moral agency. *Organization Studies, 27*(3), 341–368.

Weibel, A. (2007). *Voluntary work behaviors, habilitation manuscript*. Zurich: University of Zurich.

Wragg, E.C., Haynes, G. S., Wragg, C. M., & Chamberlin, R. P. (2004). Performance pay for teachers: The experiences of heads and teachers. London, UK & New York, NY: Routledge Falmer.

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

Margit Osterloh is Professor (em.) for Business Administration and Management of Technology and Innovation at the University of Zürich, Switzerland. She is Research Director of CREMA (Center for Research in Economics, Management, and the Arts). Margit Osterloh holds a honorary doctorate from Leuphana University Lüneburg. She was a member of Deutscher Wissenschaftsrat (German Council for Science and Humanities) until 2011 and a board member of three companies in Switzerland and Germany. Her main research areas are organization design, corporate governance, research governance, knowledge management, and gender issues.

Bruno S. Frey was Professor of Economics at the University of Constance from 1970 to 1977, and at the University of Zurich from 1977 to 2012. He has been Distinguished Professor of Behavioural Science at the Warwick Business School at the University of Warwick, UK, and is Professor at Zeppelin University Friedrichshafen, Germany. He is Research Director of CREMA (Center for Research in Economics, Management, and the Arts). He received honorary doctorates in economics from the Universities of St. Gallen (Switzerland 1998), Goeteborg (Sweden 1998), the Free University of Brussels (Belgium 2009), the University of Aix-en-Provence/Marseille (France 2010), and the University of Innsbruck (Austria 2011).

Fabian Homberg is Senior Lecturer at Bournemouth University. He holds a doctorate from the University of Zurich. His current research interests are motivation and incentives in private and public sector organizations, top management team diversity, and decision making biases.