Contributions to Management Science

Internal Control

A Study of Concept and Themes

Bearbeitet von
Olof Arwinge

1. Auflage 2012. Buch. XIX, 173 S. Hardcover
ISBN 978 3 7908 2881 8
Format (B x L): 15,5 x 23,5 cm
Gewicht: 461 g

Wirtschaft > Unternehmensfinanzen > Controlling, Wirtschaftsprüfung, Revision

Zu Inhaltsverzeichnis

Chapter 2
The Control System of the Firm

Abstract

Purpose: The aim of this chapter is to review the arguments for internal control systems. This will be done by providing an account of theories that explain the existence and necessity of internal control. We will also describe two contrasting theoretical perspectives that help explain the design and adoption of internal controls.

Synopsis: Why do control processes exist in organizations? The modern theory of the firm focuses on the need for cooperation to achieve common goals. In this case the organization consists of a group of consciously coordinated activities for the accomplishment of common objectives. One prerequisite however, is that the group's effort to achieve this end should be performed at the right time and in the right way, and with the right proportions. Thus people's understanding of common goals becomes a fundamental variable. Man is considered rational only to a limited extent, due to, for example cognitive limitations. Because differences among personal goals may exist, it is possible that an employee will substitute the goals of the firm with his/her own goals. Accordingly, a control system that provides incentives to reconcile differences so that efforts are coordinated toward the established objectives of the organization is needed. Agency theory provides a primarily economic explanation for the form of control systems. This theory has been controversial but has nonetheless been applied in a wide variety of fields such as finance, marketing, organization behaviour and accounting. At the heart of agency theory lies the separation between ownership and control. One person (the principal) engages another person (the agent) to perform some service. An agency problem arises if the cooperative behaviour, which would maximize the group's welfare, is not consistent with each individual's self-interest. Because owners of resources will have less information than those who manage the resources, these agents may take advantage of the situation for their own benefit. As a result, different contracting arrangements and controls need to be designed in order to mitigate agency-related problems. Institutional theory provides a contrasting explanation for adoption and form of controls. This theory suggests that controls are adopted in order to gain legitimacy, as symbolic displays and imitation of

O. Arwinge, *Internal Control*, Contributions to Management Science,
DOI 10.1007/978-3-7908-2882-5_2,

practices from the outside environment. Management looks to management fads, industry norms and firm traditions when adopting and implementing new control processes.

2.1 Introduction

The existence of, and the need for, control systems in organizations has been a rather controversial topic. Zannetos (1964, p. 862) has commented that human relations researchers have contested the necessity for control systems, especially with regards to their potential impact on human wellbeing and behaviour.

Because this thesis will deal with the internal control and changes in internal control, it is appropriate to first discuss the theory behind the existence of internal control systems and also why controls may be adopted and changed. Therefore we will start off by introducing and briefly discussing the modern theory of the firm, which puts forward a number of arguments that explain the existence and necessity for internal control systems. We will thereafter continue by describing two different and contrasting theories that help explain how control systems in organizations are formed an developed. These theoretical perspectives will be used throughout this thesis in connection with the treatment and analysis of specific issues and developments.

2.2 The Need for Control Systems

Why do control systems exist in organizations? What necessitates internal controls? In this section, we will outline the modern theory of the firm which has been used to explain the existence of control systems within firms (Zannetos, 1964). The modern theory of the firm focuses on conscious and purposeful cooperative behaviour. This is quite different from the classical microeconomic theory of the firm, or the so-called scientific view of the firm proposed by Taylor (1911). With regards to the microeconomic theory of the firm, as argued by Zannetos (1964), "the factors of production are in the end result considered as lacking will, issues of control and organizational nature do not arise" (p. 860). In the case of Taylor (1911) and his scientific view of the firm, purposeful behaviour is also absent because it has been replaced by programmed tasks, converting man into special purpose machines. Work is performed in the most efficient way and so the individual cannot effectively exercise his/hers will. Accordingly the need for internal control does not exist.

The modern theory of the firm is rather different and descends from work done by for example Barnard (1938), Simon (1948) and March and Simon (1958). These classical works focus on the need for cooperation to achieve common goals, and in these works man is often viewed as being only partly rational. The point of departure is that an organization is a group of consciously coordinated activities for the accomplishment of common objectives. From this definition, several implications arise. One stems from the fact that organizational effort comprises of more than one man. These participants can achieve more than any individual would alone, provided that their effort is timed so that efforts are performed at the right time and in the right way, and with the right proportions. And so the understanding of common goals becomes vitally important.

The view taken by the modern theory of the firm is that individuals are wilful and purposeful participants in organizations. This implies two things: first, man is only rational to a limited extent due to cognitive limitations for example (Simon, 1948; also see Zannetos, 1964, p. 864). Second, differences among personal goals may exist which is why it is possible that an employee will substitute company objectives with his/her own goals. This assumption of *bounded rationality* has been carried forward into areas such as transactional economics (Williamson, 1985) which view human nature as self-interest seeking and where problems of opportunistic behaviour may occur.

And so, due to their cognitive limitations, people make their own mental models about organizational goals and how to best achieve them. De Haas and Algera (2002) argue that chances are negligible that a group of people would construct and maintain the same mental models of the perceived reality. Thus individual visions about organizational goals within any group may very well diverge. The managerial challenge is therefore to make them converge. De Haas and Algera have proposed the concept of goal coherence as "the degree of consensus on constituency goal priorities" (p. 45).

As a result of these bounded rationalities and goal-replacement, incompatibilities may thus arise in any group action and in any organizational effort which aims to achieve common objectives. This can become manifested in disagreement or open conflict between participants, making the economic system less efficient and effective. De Haas and Algera (2002, p. 43) argue that:

> All else being equal, the larger the discrepancies between managers' and/or employees' mental models, the greater the lack of shared vision, the more the divergence in behavior and the higher the dispersion of organizational energy.

So if visions about what to achieve are shared (i.e. visions are converging) the challenge is to "produce goal congruent behaviors amongst the group members through the coordinated allocation of human resources" (p. 41). Because people are wilful and are able to make value judgements, and because they are only partially rational, a system that will manage possibly diverging interests is needed. A system which imposes limitations on the freedom of organizational members, and provides them with incentives to reconcile differences so that efforts are coordinated towards established objectives of the group is required (Zannetos, 1964,p. 863).

Thus, in any organizational activity, there must exist some form of control system that manages these issues as they occur, and makes sure that individual behaviours are consistent with the established group intent, i.e. that behaviours that are goal-congruent. A management control system that will be used to maintain or alter organizational activities based on information received (Simons, 1991, p. 49). Tannenbaum (1968, p. 3), an influential writer within the area of organizational control, argued that:

> Organization implies control. A social organization is an ordered arrangement of individual human interactions. Control processes help circumscribe idiosyncratic behaviours and keep them conformant to the rational plan of the organization. Organizations require a certain amount of conformity as well as the integration of diverse activities. It is the function of control to bring about conformance to organizational requirements and achievement of the ultimate purposes of the organizations. The coordination and order created out of the diverse interests and potentially diffuse behaviours of members are largely a function of control.

The necessity of control systems and internal controls may thus be explained by the *need for convergence, congruence and conformity* based on certain assumptions about human nature.

2.3 Adoption and Design of Controls

Having discussed the modern theory of the firm, a theory which provided a theoretical explanation of why control systems in firms exist, in the sections below we will introduce theories that help explain the shape and form of various internal control systems of organizations, including how they evolve and develop.

We will therefore introduce two contrasting, and perhaps supplementary, theoretical perspectives that may be used in order to explain certain organizational processes and control arrangements. The first theoretical orientation that we will discuss is agency theory (Jensen & Meckling, 1976; Fama & Jensen, 1983), considered by many to be a mainstream view of control. The agency theory provides a primarily economic explanation for the design and form of control systems. The second theoretical orientation that will be described, institutional theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983), offers a contrasting explanation for the development and form of control systems and uses a perhaps more sociological approach (see Eisenhardt, 1988, pp. 488–489).

2.3.1 The Need to Align Principals and Agents

Agency theory has been controversial, partly due to some of its assumptions about people (Eisenhardt, 1989a). Nonetheless, the theory has been applied in a wide variety of academic fields such as finance, marketing, political science, organizational behaviour and accounting (p. 57).

Agency theory, now consists of several different branches (Baiman, 1990), and was originally developed by Jensen and Meckling (1976) and later Fama and Jensen (1983). At the heart of the agency theory lies the separation of ownership and control.

Jensen and Meckling define an agency relationship as "a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent" (p. 308). In an agreed-upon contract between the parties, all rights and responsibilities such as compensation arrangements, information systems, allocation of duties and ownership rights are specified (Baiman, 1990, p. 342).

If both parties are so called utility maximizers there is "good reason to believe that the agent will not always act in the best interests of the principal" (Jensen & Meckling, 1976, p. 308). This underlying assumption, that all individuals are considered to be motivated solely by self-interest, is common to all agency models (Baiman, 1990). So the action taken by the agent may diverge from the cooperative action. And instead of taking the action that will maximize the group's welfare, another path is chosen by the agent whereby so-called *agency problems* arise. It is important to recognize however, that even if an agent tries his/her best to follow the principal's interests, his/her actions will always be coloured by his/hers interpretations of these. The agent's interpretation of the situation may still, unintentionally, lead to a diverging action thereby resulting in agency problems.

These agency problems must be addressed through contracting arrangements and other control mechanisms. Different agency models focus on, and propose, different solutions for these problems. What is common to all solutions however, is that they will try to limit the agent's divergences from the principal's interest, they will try to produce goal-congruent behaviors based on set (but perhaps not completely shared) goals.

These solutions will however not come at zero cost but different solutions are related to specific costs which will be allocated between the principal and the agent. These costs are known as agency costs and Jensen and Meckling (1976, p. 308) define these costs as the sum of:

- The monitoring expenditure by the principal, and
- The bonding expenditure by the agent, and
- The residual loss.

2.3.1.1 Control of Agency Problems

Agency costs necessarily are incurred because agency contracts are neither written nor enforced costlessly. They result from structuring, monitoring and bonding contracts, between principals and agents with conflicting interests, including the output loss from agency problems (Fama & Jensen, 1983, p. 304). The principal must therefore implement controls that will efficiently and effectively address these agency issues. It may however be both difficult and expensive for the principal to verify the agent's action.

As mentioned earlier, there are a variety of agency branches and these tend to focus on different areas (Eisenhardt, 1989; Baiman, 1990). The positivist agency theory focuses on contracting alternatives, often between the owners and managers of large-scale companies. A key question is often if contracts should be based on an agent's behaviour or the output produced by the agent. This branch is heavily influenced by the work by Jensen and Meckling (1976) and includes the positive theory of accounting (Watts & Zimmerman, 1983). Other, more general principal-agent researchers, have favoured a general theory that may be applied to any relationship, such as the manager and the employee or the buyer and the supplier. Different control solutions are generated as a result of the different characteristics of the principal-agent situation.

One problematic situation occurs when information asymmetries exist between principal and agent, as a result of which the principal is unable to observe agent performance. This situation is related to two specific issues, often referred to in the formal agency literature as *moral hazard* and *adverse selection*. Moral hazard refers to a lack of effort by the agent, i.e. the agent is shirking his/her duty and does not make the effort that was agreed upon. Adverse selection refers to misrepresentation by the agent, where he/she claims to posses certain skills or abilities (Eisenhardt, 1989, p. 61). In the case of unobservable behaviour, the principal may choose to invest in controls such as:

- Budget systems.
- Reporting and disclosure procedures.
- Board of directors and audit committees.
- Management layers.
- Internal and external audit activity.

Investments are therefore made in controls so that the information-gap between the principals and the agents may be reduced, or possibly even closed. To completely close the information-gap would in most cases however lead to unreasonable costs of control (see also Sect. 5.3.7). In which case, the principals *procure information* about the actual behaviour of the agents.

Another option for the principal is to contract the agent based on output. A known problem with this solution is of course that the output produced by the agent is only partly a result of the agent's efforts, which should then be reflected in the contract. In the end, these solutions are about balancing the costs from measuring and monitoring agent behaviour against the costs of measuring output and transferring risks to the agents (Eisenhardt, 1989, p. 61).

Agency theory has been used to explain demands for monitoring controls such as the financial statement audit, external directors on boards and committees (Watts & Zimmerman, 1983), audit committees (Fogarty & Kalbers, 1998), internal audit (Carcello, Hermanson, & Raghunandan, 2005) and compensation schemes (Eisenhardt, 1988). Agency theories have been used extensively in explaining earnings management and financial accounting policy choices, for transfer pricing and cost allocation and executive compensation (see Baiman, 1990). A major contribution of the principal-agent model is that is provides a coherent and useful framework for understanding managerial accounting procedures (p. 344).

Many of the entity-level and monitoring controls such as those mentioned above may be regarded as vehicles for reducing the information-gap between owners, through their representatives, and managers. As mentioned earlier however, agency problems may occur throughout the organization so different types of detailed internal controls may also be regarded as tools used to reduce agency costs associated with information asymmetries between managers and employees. Compensation schemes, performance reviews, policies and compliance checks are only a few examples of controls applied to reduce inherent uncertainties in relationships.

2.3.2 Need for Legitimacy

Another theoretical orientation, institutional theory, offers a contrasting explanation that may be used to understand the adoption and design of control practices within organizations. This theory, more sociological in character, originates from work done by Meyer and Rowan (1977) for example and DiMaggio and Powell (1983).

During recent years institutional theory has grown in popularity and offers a contrasting and different explanation to why new control structures and practices emerge in organizations. It has been said that institutional theory is becoming an important theoretical perspective in accounting and organization theory research (Dillard, Rigsby, & Goodman, 2004, p. 507).

Institutional theories question the technical and economic rationality for understanding corporate governance, and the structures that are invested in and developed within organizations. Instead, they offer a contrasting explanation which proposes that organizations develop and design structures, processes and systems not primarily based on rational economic cost-benefit analysis, but because they are more or less required to incorporate new practices and procedures. According to Meyer and Rowan (1977, p. 340) this means that:

> Organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures.

Organizational structures, including the various internal control functions, roles, processes and systems, become symbolic displays of conformity and social accountability. Organizations with the appropriate structures in place avoid in-depth investigations of their business operations. Meyer and Rowan, building on the work by Berger and Luckmann (1966), point to the importance of institutionalized rules. These are classifications built into society and may be taken for granted or supported by public opinion or even the force of law. These rules involve normative obligations which may be viewed as facts of (organizational) life which must be taken into account and considered by actors in the business community – whether they are risk management officers, compliance officers, managers, auditors, directors or other types of professionals within and outside of firms. The process of *institutionalization* is then *how social processes of different kinds come to take on a rule-like* status in everyday society (p. 341).

In this way repeated patterns of actions become institutions, or institutionalized rules, and thus institutional theory explains organizational phenomena by pointing to the environment and the formal and informal rules that are imposed on organizational activities. It seems reasonable to assume that not an insignificant part of organizational activity may be a result of such an aspiration of legitimacy. This would also include how internal control structures are designed and adopted. Hutter and Power (eds., 2005, pp. 137, 140), when discussing risk management practices and the rise of the chief risk officer, claim that:

> These positions are internal representations of externally encountered norms and rules… (…)…It signals organizational seriousness about matters and issues that need to be addressed in the current business climate, and have become a part of being legitimate organizations, together with audit committees and internal auditors.

This could be interpreted as that the environment imposes demands on the organization and expects certain organizational behaviors. This is how new roles and processes are implemented in the organization – roles and processes which may not immediately have a direct connection to the core operations of the organization but are instead rather loosely coupled (Meyer & Rowan, 1977). Using similar institutional arguments Power (2005, p. 3) claims, that "organizational responses to risk are shaped by their institutional environments". Calling new processes or institutions loosely coupled, also implies that they may have parallel or similar functions to existing controls (for instance), without there being a complete and explicit rational logic for how they relate.

2.3.2.1 Adoption of New Organizational Practices

According to the work done by Meyer and Rowan (1977), institutionalized rules have enormous impact on organizational activity. The rules, or the facts that must be taken for granted, define new organizing situations, redefine the old ones and prescribe how new organizational activities should or must be performed. New organizational practices spread rapidly in this way in modern society (p. 344).

In trying to explain why there is a startling homogeneity of organizational forms and practices, DiMaggio and Powell (1983, p. 149) explored the process of homogenization where they used the concept of isomorphism. Isomorphism refers to the adoption of an institutional practice by an organization. The authors refer to the process of isomorphism as "a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions" (p. 149).

Building on earlier research, the authors go on to suggest that there exist two types of such a process, namely competitive and institutional. The first one relates to market competition and the process of companies adopting similar types of structures and systems based on efficiency reasons. The institutional form of isomorphism suggests that firms not only compete for clients and resources but also institutional legitimacy and social fitness (DiMaggio & Powell, 1983, p. 50).

DiMaggio and Powell hereby suggested three classifications that relate to the motivations to adopt these new institutional practices: coercive, mimetic and normative. Below we will discuss these classifications.

2.3.2.2 Coercive Isomorphic Change

This change stems from political influence and the problem of legitimacy. According to the authors, coercive change is based on pressures from other organizations and by cultural expectations in the society within which the firm operates. These pressures could be both formal and informal and include standards and regulations issued by government and authorities in various areas, forcing organizations to adopt and implement certain practices. It could also include subsidiaries in a group having to adopt specific organizational practices such as financial accounting choices, performance evaluations, human resources processes and budget reporting schemes. To conclude, this type of organizational change, resulting in harmonized organizational activities within the populations of firms, is derived from coercive authority.

2.3.2.3 Mimetic Isomorphic Change

Not all institutional change is derived from coercive authority. Uncertainty according to DiMaggio and Powell is an important driver for change and imitation between firms. In situations where technology is poorly understood, or when goals seem to be unclear or ambiguous, firms may resolve the situation by looking at peer firms and imitate their formal practices (1983, p. 151). Managers actively look at the competition, not only within their own field, in order to find easy and cheap solutions to solve organizational problems and create legitimate practices. New organizational practices are thus molded based on old ones.

2.3.2.4 Normative Isomorphic Change

This type of institutional change is related to the different professions within society and across firms. Different job roles such as accountants, auditors, physicians, teachers and lawyers strive for freedom to set their own standards for work performance. DiMaggio and Powell claim that important drivers for this institutional change process are the following: standardized formal education and the professional bodies and networks that work across organizations. These drivers speed up the effect of harmonizing work procedures in various organizational fields across organizations. Put differently, accounting, compliance, risk management, management and human resource specialists all work similarly, due to their formal education and memberships in professional bodies and networks.

Hence, it is possible to conclude that especially for a sub-population of firms, such as for example the firms within the banking industry, different activities within the organization may be performed in a rather similar manner. These activities could potentially include risk management, compliance, sales, human resources and corporate governance-related arrangements which include the duties of internal auditors and the audit committees. It follows that the *specific controls surrounding these practices, such as the controls over risk management processes or human resource practices also may be performed in a similar manner.*

2.4 Control from Different Theoretical Perspectives

As we have described in Sects. 2.2 and 2.3, both agency and institutional theory provide explanations for how controls are adopted by firms. They do it however in different ways. Agency theory explains the application of controls as being primarily based on economic cost-benefit analysis, where controls are installed in order to reduce information asymmetries between principals and owners. Institutional theory however, provides a different explanation. Here, controls are adopted and designed in order to gain legitimacy, as symbolic displays and imitation or as practices from the outside environment.

According to institutional theory, management is not only concerned with cost-benefit concerns and risk-reward trade-offs but looks to management fads, industry norms and firm traditions when adopting and designing new (control) practices (Eisenhardt, 1988, p. 489). Both perspectives appear to be valid. In a study to explain the use of compensation policies for sales staff, Eisenhardt (1988) applied both theoretical perspectives and found that “both perspectives are necessary for a good description of compensation policies” (p. 488).

In Table 2.1 below, we provide a summarizing description of how controls could be viewed according to the two perspectives which is based on a comparison made by Eisenhardt (1988, p. 491) between the two theoretical perspectives. Throughout the thesis we will refer to this table in connection to our discussion and treatment of specific issues. This table is a simplification however, and furthermore, a reflection of our understanding of how controls could potentially be viewed from the different perspectives.

To briefly conclude, based on Table 2.1, from an agency perspective controls are installed in order to reduce risk and the uncertainty arising from information asymmetries between principals (for example owners or managers) and agents (for example managers or employees). Controls exist solely because of their technical functionality and are installed as a result of rational cost-benefit analysis.

From institutional perspectives controls are installed in order to gain legitimacy and other less rational factors. The installation of certain governance arrangements and controls such as risk assessments, compensation committees, policies, self-assessments may thus be made partly in order to gain legitimacy. These controls *display seriousness about certain matters* and are adopted largely due to industry

Table 2.1 Different theoretical perspectives on controls

Internal control from an agency-perspective	Internal control from an institutional perspective
Controls installed in order to reduce risk and information-asymmetries	Controls installed in order to gain legitimacy
Controls installed based on rational economic cost-benefit analysis	Controls installed based on rules of thumb analysis, firm tradition, management fads, external norms and rules
Controls exist primarily for their technical functionality	Controls exist primarily as symbolic displays
Controls changes and develops based on changes in risk exposures and information-asymmetries between different principal-agent relationships	Controls changes and develop based on political influence, imitation of other firms and practices, professional standards and networking between professional bodies and networks
Controls are installed in order to fit the environment	The environment consist of a source of (internal control) practices to which the firm conforms
People are self-interested, rational and risk-averse	People are satisfiers and want to conform to external norms

standards, imitation of other firms, firm tradition and management fads. Even though this is not done based on economic cost-benefit analysis it may still be beneficial to the company. In these cases however, companies may run the risk of the controls not being effectively embedded into core operations, but instead rather loosely coupled. They are visible, but may not provide any “real” assurance since the operational performance of these processes is low.

Policy-makers and control professionals can be expected to find agency theory more helpful in diagnosing situations and designing controls. Observers of the revival of interest in internal control in recent years may find institutional perspectives suggestive of possible mechanisms and explanations of this development. Thus, we find both types of theories potentially useful for our continued work. Both theoretical perspectives have also been applied in the work we have surveyed.

2.5 Summary and Concluding Remarks

This chapter has described two significant, and potentially supplementary, theories that can help explain the adoption of internal control practises and developments in them. Based on the findings in this chapter we conclude by emphasizing the following observations:

- Agency theory takes its point of departure in the separation of ownership and control, through which one party (the principal) has delegated responsibility to a second party (the agent). If both parties are utility-maximizers, there are good reasons to believe that the agent will not always act in the best interest of the principal. Because it is difficult or expensive for the principal to verify the actual actions of the agent, (cost-effective) controls must be established through various contracting and monitoring arrangements.

- Different branches of agency research propose different solutions. General principal-agency researchers point to solutions whereby agents may be effectively controlled by rewarding either agent behaviour or output. Agents may also be controlled through different monitoring arrangements where independent information is procured so that information asymmetries between principles and agents may be reduced.
- Institutional theories provide different explanations for why organizational control practices are adopted and evolve. Different pressures exist on different levels in society, and these produce harmonized practices across firms.
- Firms adopt practices in order to gain legitimacy in the public eye and controls are adopted based on pressures from governments, standard setters and professions, resulting in firms adopting generally acceptable practices in various areas. The end-product is a never-ending cycle where firms imitate one another through the adoption of similar practices.
- Like all popular theories, both agency and institutional theory have been criticized. Agency theory has been criticized for being too general, trivial, dehumanization and even dangerous. Institutional accounting research on the other hand, has been criticized for over-emphasizing the homogeneity of institutional fields and downplaying the importance of practice variations embedded in competing institutional logics. It has also been suggested that it ignores the deeply embedded nature of rationality and resistance to institutional pressures.
- In connection with our treatment of specific issues we will refer to the sections in this chapter and Table 2.1 which outlines how controls may be viewed from the different theoretical perspectives.