

## **ОБЩЕСТВЕНИ КОМУНИКАЦИИ И ИНФОРМАЦИОННИ НАУКИ** **PUBLIC COMMUNICATIONS AND INFORMATION SCIENCES**

### **INTERNAL CONTROLS: ADDED VALUES, LIMITATIONS, COSTS AND BENEFITS**

**Philipp Hoffmeister**

*University of Library Studies and Information Technologies*

**Abstract:** *Companies operate in a dynamic and constantly changing environment with increasing risks and growing complexity. Effective internal controls and internal control systems can help to reduce these risks and make them more manageable. The purpose of this article is to illustrate and discuss the added values, limitations, costs and benefits of internal control based on scientific publications. Studies indicate, for example, that internal control provides significant added values and benefits for companies in various forms, such as a positive effect on the market value, on internal business processes and on investors' financing decisions. Nevertheless, it is often viewed as merely fulfilling regulatory requirements. But it is important to note that internal control weaknesses have led to the collapse of well-known large companies in the past. Therefore, effective internal controls and internal control systems are integral elements of an adequate and proper management system. Internal control systems and their effectiveness should be analysed in future research work, considering the changes brought about by increasing digitalisation (such as artificial intelligence), agile working methods and the challenges of New Work.*

**Keywords:** *Internal controls, internal control system, risk management, adds values, limits, costs, benefits*

### **INTRODUCTION**

The global economy is becoming increasingly dynamic, which means that companies are operating in a highly complex environment. As a result, the competitive pressure on companies is increasing and the associated risks, such as the increasing market risk due to this highly competitive situation, are growing (cf. Liu and Wang 2019, 1; Siepermann 2008, 81). Companies should therefore reduce their (individual) risk factors so that they can build up a certain level of resilience, keep up with the competition and generate profits at the same time. One solution is to design and implement customised internal controls that are effectively managed and operated. Focussing internal controls solely on the company's market situation is not expedient. Internal controls or rather an internal control system should align with the overarching corporate strategy, internal control processes and control objectives (cf. Lämsiluoto et al. 2016, 6, 24ff). Many companies, especially small and medium-sized enterprises, associate the establishment and operation of internal controls or rather an internal control system with the fulfilment of legal requirements (cf. Ruud et al. 2018, 18). In addition, several financial scandals in the international financial and business world attracted attention in the early 2000s. These were caused by errors in the internal control systems of companies (cf. Kratz 2008, 5). The US energy company *Enron* collapsed in 2001 due to accounting fraud and artificially inflated profits (cf. Kratz 2008, 5). *WorldCom*, the third largest telecommunications company in the world at the time (cf. Fox 2008, 409), also suffered from accounting fraud in 2002. *WorldCom* engaged in fraudulent activities such as backdating contracts, understating costs and concealing debts through accounting tricks. These are just three examples of the many (fraudulent) irregularities that occurred at *WorldCom* (cf. Gamage et al. 2014, 26). In addition to other US companies, such as *Bernie Madoff* (former financial and stockbroker) and the *American International Group* (AIG), companies worldwide were involved in accounting scandals (cf. Umar and Umar Dikko 2018, 13; Gamage et al. 2014, 26): The South Korean conglomerate *Daewoo Group*, the Indian software and consulting company *Satyam Computer Services*, the British investment company

*Barlow Clowes* and the German conglomerates *Daimler* and *Siemens* as well as others (cf. Ewelt-Knauer et al. 2015, 1012; Gamage et al. 2014, 26). The German financial services provider *wirecard* is a more recent example of balance sheet fraud (cf. Bender et al. 2022, no page). This article will explore the added values and benefits that internal controls and an internal control system can provide to a company beyond regulatory compliance. It will also examine the limitations and attempt to evaluate their costs and benefits. The conclusion will summarise the key findings and provide suggestions for future research.

## RESEARCH METHODOLOGY

This article is primarily based on a literature analysis. The aim is to present the current state of research on the added values and limitations of internal controls or rather internal control systems and to demonstrate a theoretical construct for the costs and benefits. Relevant published research results on the three subject areas are intended to give readers a deeper understanding and provide managers in companies with a compact overview and impulses on the topics.

## RESULTS

The added values of internal controls or rather internal control systems can be categorised into two perspectives: an overarching perspective focussing on the company as a whole and an internal perspective focussing on internal processes and structures.

In performance research on internal control, there is evidence that effective internal control systems promote the profitability, growth and continued existence of the company and safeguard its assets (cf. Arad and Jamshedy-Navid 2010, 1). Gal and Akisik (2020, 1228) concluded that effective internal controls regarding financial reporting not only have a significant positive impact on the company's market value, but also increase it. Ibrahim et al. (2017, 693) suggest that companies can achieve better financial results by implementing an effective internal control system, conducting internal risk assessments, actively monitoring and having an appropriate IT infrastructure. Furthermore, companies that invest in an effective internal control system have a higher financial performance than those with weak internal control systems (cf. Origa 2015, 31). In addition, external stakeholders, such as lenders, consider the published information on a company's internal control system to be important for their investment and financing decisions (cf. Deumes and Knechel 2008, 56f, 59ff). The design and effectiveness of the internal control system in particular are the main focus of external lenders, as both factors impact the valuation and lending decisions of investors (cf. Schneider and Church 2008, 1, 11f). If the company has a formalised, documented and effective internal control system, it generally has a positive influence on the investors' risk classification. This, in turn, makes it easier to raise capital (cf. Bungartz 2020, 45f). Weaknesses in the internal control system could therefore reduce the financing volume (cf. Schneider and Church 2008, 1, 11f).

Regarding the internal perspective, the company's business processes are the main focus. The internal control system can identify operational weaknesses in the business processes, allowing for process optimizations to be initiated. Additionally, the introduction of an internal control system can lead to greater stability in business processes by documenting key processes. Process documentation can also have a positive effect, particularly when training new employees or dealing with staff turnover. Familiarisation period can be shortened. Process documentation provides external stakeholders with insight into key business processes, which in turn corresponds to the advantages of the overarching perspective described above. As the company deals with risks and internal controls in detail, this subsequently strengthens the employees' risk awareness, which can have a positive effect on the detection and avoidance of errors (cf. Bungartz 2020, 45). Internal management reports on the internal control system provide management with additional information – for example, to make decisions on the extent to which the internal control system can be optimised and the reports contain indicators for the future existence of the company (cf. Hermanson 2000, 340). Furthermore, internal controls assist management in efficiently allocating resources to achieve corporate goals (cf. Arad and Jamshedy-Navid 2010, 1). The literature and practice extensively discuss whether internal control generates shareholder value (cf. Ross et al. 2021, no page; Qi et al. 2017, 1101f; Pfister 2009, 28). Internal control already has an inherent

indirect link to the company's performance, as it is a component of the company's internal business processes and therefore part of the corporate organism. Assuming that top management focusses strongly on the design and performance of internal controls, the effectiveness and efficiency of business processes will generally increase. As a result, costs are reduced and the company's results are positively influenced. An adequate internal control system increases the reliability of financial results and ensures compliance with internal and legal regulations. Therefore, the possibility of the company being accused in cost-intensive legal proceedings decreases, which particularly impacts its reputation and can ultimately result in reduced earnings. However, if effective internal control is seen as internal control with a high degree of formalisation, a possible positive effect on the company's performance becomes questionable. This may even lead to increased costs. This example illustrates that the relationship between internal control and company performance is not always clear (cf. Pfister 2009, 28). Lastly, it is important to note that top management's focus on internal control alone may positively influence the objectives of an internal control system: Effectiveness and efficiency of operational business processes, reliability of reporting and compliance with laws, regulations and internal policies (cf. Pfister 2009, 28; Rittenberg and Miller 2005, 14, 22). To summarise, the aforementioned focus of management on greater effectiveness means that there is a high probability that internal control will contribute to improving results – but it is not a driver of performance itself (cf. Pfister 2009, 28, cf. also Simons 2005).

However, even well-designed internal control systems that have been in place for years have inherent limitations that can compromise their effectiveness and functionality and ultimately hinder the achievement of corporate objectives. The limitations of internal control are twofold: the “human factor” in the form of errors, omissions, fraudulent actions and the trade-off between cost and benefit aspects (cf. Pfister 2009, 30). These two inherent limitations of internal control make it clear that, despite well-designed internal controls, there is always a residual risk of the unexpected due to the behaviour of employees and the resulting consequences, which cannot be foreseen (cf. Pfaff and Ruud 2007, 23). Bungartz notes that human errors can result from negligence, distractions, errors of judgement and misinterpretation of work instructions. Omissions occur when employees responsible for certain controls misuse or neglect their responsibilities (cf. Bungartz 2020, 45). Additionally, employees are often required to make decisions under time pressure with incomplete information. It is possible that these decisions were made incorrectly and may need to be changed or corrected later (cf. COSO 1992, 76). For instance, if the assessment of risks is made incorrectly and inaccurately, risks that have a negative impact on the achievement of corporate goals can be misjudged or, in the worst case, ignored (cf. Pfister 2009, 30). Subsequently, fraud is defined as the circumvention or deliberate overriding of the internal control system by company management or employees. This can occur between employees within the company or through fraudulent collaboration between internal employees and external parties, such as customers or suppliers (cf. Bungartz 2020, 45). In summary, it can be stated that the integrity of management and the individual attitude and behaviour of each employee are particularly important factors for the effectiveness of the internal control system (cf. Pfister 2009, 31).

In many cases, regulations require the establishment and operation of internal controls or rather an internal control system. However, companies may require varying financial and time resources depending on their financial situation (cf. Krishnan 2005, 655). Companies in a weak financial position may focus on cost-saving to avoid insolvency and invest fewer resources in an effective internal control system (cf. Pfister 2009, 31). On the other hand, it is not guaranteed that high investments and strong internal control structures will result in high-quality internal controls (cf. Pfister 2009, 32). As a result, company management may choose not to implement certain internal control measures if they assume that the costs outweigh the benefits (cf. Bungartz 2020, 45). In most cases, internal controls or rather internal control systems are required by regulation. Their benefits and added values may not always be immediately apparent due to the inherent complexity of an internal control system (cf. Kinney 2000a, 88). Non-routine business processes, for example, are difficult or even impossible to capture by an internal control system, as they only run very irregularly. Additionally, internal or external factors may temporarily override the internal control system's functionality for a short period of time (cf. Bungartz 2020, 45). Nevertheless, it is important for a company's top management to evaluate the cost-benefit potential when implementing

and operating an internal control system (cf. COSO 1992, 75f, 77f, cf. also 4, 11, 116).

The issue of top management can be discussed using the model-theoretical approach presented in the following figure (figure adapted from Pfister 2009, 32 and Kinney 2000b, 91):

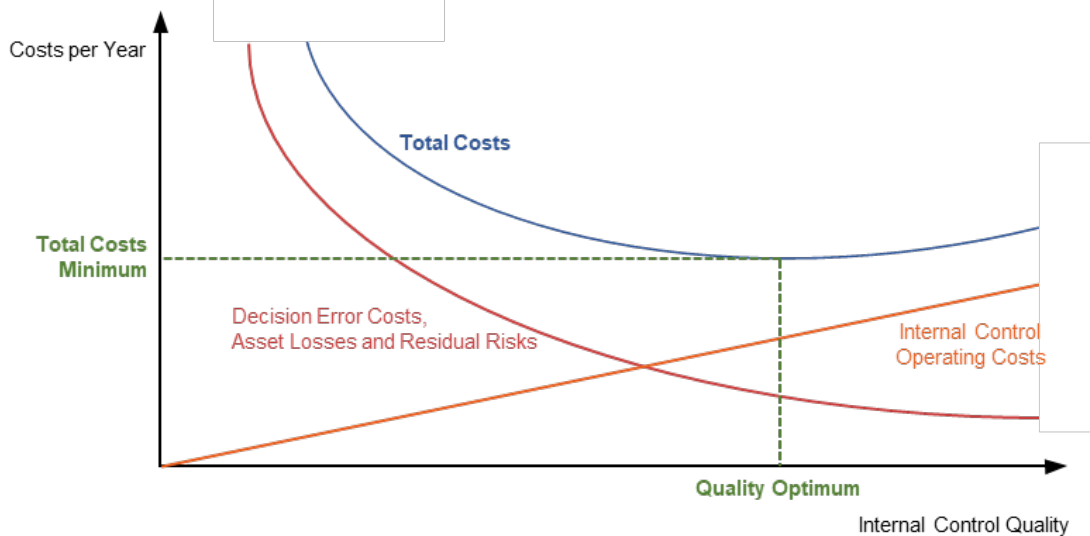


Fig. 1. Costs and benefits of internal control from a model-theoretical perspective

The figure illustrates the correlation between the total costs (blue line) and the internal control quality. The total costs are made up of the decision error costs, the asset losses, the residual risks (red line) and the internal control operating costs (orange line). According to the model theory, the ‘optimum’ of the total costs is attained when the sum of the decision error costs, the asset loss and the residual risks are balanced with the internal control operating costs. When designing and implementing the company-specific internal control system, top management should aim for this ‘quality optimum’ in terms of model theory. This is marked in the figure by the highlighted intersection of the graphs (cf. Pfister 2009, 31; CICA 1995, 3). The figure also shows that despite high investments in internal controls and the associated high degree of formalisation of internal control, certain residual risks remain. Even if the internal control system is comprehensively designed with sufficient functionality, not all influences and factors that affect the internal control system can be predicted and taken into account (cf. Pfister 2009, 31f). Furthermore, many decisions on the cost-benefit balance cannot be made entirely independently by the company. In many cases, there are regulatory requirements and minimum standards. For instance, the Sarbanes-Oxley Act in the USA establishes minimum standards for the level of formalisation of internal control that companies must comply with. These minimum standards subsequently affect the balance between the costs and benefits of internal control (cf. Pfister 2009, 32).

## CONCLUSION

An effective and well-designed internal control system provides a company with protection against errors, omissions, failures and fraudulent behaviour. It is important to note that this protection is not absolute. The examples cited, from *Enron* and *WorldCom* to *Siemens* and *wirecard*, demonstrate the importance of an internal control system, as well as its vulnerability to deliberate or unconscious offences. Furthermore, when designing and operating an internal control system, top management must consider regulatory requirements, costs and benefits. Nevertheless, the aforementioned research results of the literature analysis suggest that an internal control system is an integral element of management systems (cf. Suárez 2017, 10). The primary purpose of internal control is to safeguard and enhance the efficiency and effectiveness of business operations, as well as both internal and external financial and non-financial reporting, while also ensuring compliance with relevant laws and regulations (cf. COSO 2013, 3). Therefore, it should always be more than compliance with and fulfilment of regulatory requirements and thus also be understood and lived by the company’s management and employees. Future research should look more closely at the model-theoretical question of the ‘optimal’ balance between the cost and benefit



aspects of internal control with a focus on quantification. In addition, it is important to analyse current influencing factors, such as agile working methods, artificial intelligence in the course of the increased digitalisation of companies and the challenges of New Work, which affect the overall construct of an internal control system and its effectiveness.

## REFERENCES

- Arad, H., B. Jamshedy-Navid** (2010). A Clear Look at Internal Control: Theory and Concepts. *Social Science Research Network*, 1–27 [viewed 12 January 2024]. Available from: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1342048](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1342048).
- Bender, R., S. Iwersen, L.-M. Nagel, M. Verfürden, V. Votsmeier** (2022). Anklageschrift hat 474 Seiten – Was die Staatsanwaltschaft Ex-Wirecard-Chef Markus Braun vorwirft. *Handelsblatt* [viewed 17 February 2024]. Available from: <https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/wirecard-skandal-anklageschrift-hat-474-seiten-was-die-staatsanwaltschaft-ex-wirecard-chef-markus-braun-vorwirft/28695446.html>.
- Bungartz, O.** (2020). *Handbuch Interne Kontrollsysteme (IKS) – Steuerung und Überwachung von Unternehmen, 6<sup>th</sup> Edition*. Berlin (Germany): Erich Schmidt Verlag.
- CICA – Canadian Institute of Chartered Accountants** (1995). *Guidance on Control*.
- COSO – Committee of Sponsoring Organizations of the Treadway Commission** (1992). *Internal Control – Integrated Framework: Framework including Executive Summary*.
- COSO – Committee of Sponsoring Organizations of the Treadway Commission** (2013). *Internal Control – Integrated Framework: Executive Summary*.
- Deumes, R., W. R. Knechel** (2008). Economic Incentives for Voluntary Reporting on Internal Risk Management and Control Systems. *Auditing: A Journal of Practice & Theory*, 27, 1, pp. 35–66.
- Ewelt-Knauer, C., T. Knauer, M. Lachmann** (2015). Fraud Characteristics and Their Effects on Shareholder Wealth. *Journal of Business Economics*, 85, 9, pp. 1011–1047.
- Fox, D.** (2008). Compliance und Datenschutz. *DuD – Datenschutz und Datensicherheit*, 32, 6, pp. 409–411.
- Gal, G., O. Akisik** (2020). The Impact of Internal Control, External Assurance, and Integrated Reports on Market Value. *Corporate Social Responsibility and Environmental Management*, 27, 3, pp. 1227–1240.
- Gamege, C. T., K. Low Lock, A. A. J. Fernando** (2014). A Proposed Research Framework: Effectiveness of Internal Control System in State Commercial Banks in Sri Lanka. *International Journal of Scientific Research and Innovative Technology*, 1, 5, pp. 25–44.
- Hermanson, H. M.** (2000). An Analysis of the Demand for Reporting on Internal Control. *Accounting Horizons*, 14, 3, pp. 325–341.
- Ibrahim, S., G. Diibuzie, M. Abubakari** (2017). The Impact of Internal Control Systems on Financial Performance: The Case of Health Institutions in Upper West Region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7, 4, pp. 684–696.
- Kinney, W. R.** (2000a). Research Opportunities in Internal Control Quality and Quality Assurance. *Auditing: A Journal of Practice & Theory*, 19, s-1, pp. 83–90.
- Kinney, W. R.** (2000b). *Information Quality Assurance and Internal Control for Management Decision Making*. Boston (Massachusetts, USA): Irwin McGraw-Hill.
- Kratz, M.** (2008). Causes and Effects of Internal Control Outcomes. *University of Maastricht, Faculty of Economics and Business Administration*, pp. 1–56 [viewed 16 January 2024]. Available from: <https://www.studymode.com/essays/Causes-And-Effects-Of-Internal-Control-62892790.html>.
- Krishnan, J.** (2005). Audit Committee Quality and Internal Control: An Empirical Analysis. *The Accounting Review*, 80, 2, 649–675.
- Lämsiluoto, A., A. Jokipii, T. Eklund** (2016). Internal Control Effectiveness – a Clustering Approach. *Managerial Auditing Journal*, 31, 1, pp. 5–34.
- Liu, B., P. Wang** (2019). Investigation and Analysis of the Effectiveness and Influencing Factors of Internal Control in Chinese Enterprise Based on Wireless Network. *EURASIP Journal on Wireless Communications and Networking*, 35, pp. 1–7 [viewed 16 January 2024]. Available from: <https://jwcn-urasipjournals.springeropen.com/articles/10.1186/s13638-019-1357-9>.
- Origa, P. O.** (2015). Effect of Internal Control on the Financial Performance of Manufacturing Firms in Kenya. *University of Nairobi*, 1–42 [viewed 24 January 2024]. Available from: <http://erepository.uonbi.ac.ke/handle/11295/94578>.
- Pfaff, D., T. F. Ruud** (2007). *Schweizer Leitfaden zum Internen Kontrollsystem (IKS)*. Zürich (Switzerland): Orell Füssli Verlag.
- Pfister, J. A.** (2009). *Managing Organizational Culture for Effective Internal Control – From Practice to Theory*. Berlin, Heidelberg (Germany): Physica Verlag.
- Qi, B., L. Li, Q. Zhou, J. Sun** (2017). Does Internal Control over Financial Reporting Really Alleviate Agency Conflicts? *Accounting & Finance*, 57, 4, pp. 1101–1125.
- Rittenberg, L. E., P. K. Miller** (2005). Sarbanes-Oxley Section 404 Work – Looking at the Benefits. *The Institute of Internal Auditors Research Foundation*, 1–29 [viewed 24 January 2024]. Available from: [https://audioresinternos.es/wp-content/uploads/2022/07/43\\_Sarbanes-Oxley-Section-404-Work-Looking-at-the-Benefits.pdf](https://audioresinternos.es/wp-content/uploads/2022/07/43_Sarbanes-Oxley-Section-404-Work-Looking-at-the-Benefits.pdf).
- Ross, A., D. M. Bell, J. Wright, C. Adams** (2021). How Internal Controls Can Add Business Value. *Grant Thornton* [viewed

17 February 2024]. Available from: <https://www.grantthornton.com/insights/articles/advisory/2021/how-internal-controls-can-add-business-value>.

**Ruud, T. F., A. Kyburz, K. Schramm** (2018). Das Interne Kontrollsystem (IKS) in Schweizer Unternehmen ausserhalb des Finanzsektors – Einblicke in die aktuelle Praxis. *Universität St. Gallen, Institut für Accounting, Controlling und Auditing*, 1–40 [viewed 12 January 2024]. Available from: <https://www.alexandria.unisg.ch/entities/publication/fc0b8d91-2015-4f67-af1f-8b905517928b/details>.

**Schneider, A., B. K. Church** (2008). The Effect of Auditors' Internal Control Opinions on Loan Decisions. *Journal of Accounting and Public Policy*, 27, 1, pp. 1–18.

**Siepermann, M.** (2008). *Risikokostenrechnung: Erfolgreiche Informationsversorgung und Risikoprävention*. Berlin (Germany): Erich Schmidt Verlag.

**Simons, R.** (2005). *Levers of Organization Design – How Managers Use Accountability Systems for Greater Performance and Commitment*. Boston (Massachusetts, USA): Harvard Business School Press.

**Suárez, C. A.** (2017). Internal Control Systems Leading to Family Business Performance in Mexico: A Framework Analysis. *Journal of International Business Research*, 16, 1, pp. 1–16.

**Umar, H., M. Umar Dikko** (2018). The Effect of Internal Control on Performance of Commercial Banks in Nigeria. *International Journal of Management Research & Review*, 8, 6, pp. 13–32.

## ВЪТРЕШЕН КОНТРОЛ: ДОБАВЕНА СТОЙНОСТ, ОГРАНИЧЕНИЯ, РАЗХОДИ И ПОЛЗИ

**Резюме:** *Компаниите работят в динамична и постоянно променяща се среда с нарастващи рискове и сложност. Ефективният вътрешен контрол и системите за вътрешен контрол могат да помогнат за намаляване на тези рискове и да ги направят по-управляеми. Целта на тази статия е да илюстрира и обсъди добавената стойност, ограниченията, разходите и ползите от вътрешния контрол въз основа на научни публикации. Проучванията показват например, че вътрешният контрол осигурява значителни добавени стойности и ползи за дружествата под различни форми, като например положителен ефект върху пазарната стойност, върху вътрешните бизнес процеси и върху решенията на инвеститорите за финансиране. Въпреки това той често се разглежда като просто изпълнение на регулаторните изисквания. Важно е обаче да се отбележи, че слабостите на вътрешния контрол са довели до фалита на известни големи компании в миналото. Ето защо ефективният вътрешен контрол и системите за вътрешен контрол са неразделни елементи на една адекватна и правилна система за управление. Системите за вътрешен контрол и тяхната ефективност следва да бъдат анализирани в бъдеща изследователска работа, като се вземат предвид промените, предизвикани от нарастващата цифровизация (като изкуствения интелект), гъвкавите методи на работа и предизвикателствата на новата работа.*

**Ключови думи:** *вътрешен контрол, система за вътрешен контрол, управление на риска, добавени стойности, ограничения, ползи, разходи*

**Филип Хофмайстер, докторант**

Университет по библиотекознание и информационни технологии

E-mail: [p.hoffmeister@t-online.de](mailto:p.hoffmeister@t-online.de)