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IMPACT FACTORS ON THE DEVELOPMENT OF INTERNAL AUDITING IN THE 21ST CENTURY

Elisabeth Grabmann[1], Daniel Hofer[1]
[1] University of Applied Sciences Upper Austria, Wehrgrabengasse 1-3, 4400 Steyr, Austria

Abstract*: In recent years, there has been an increasing interest in internal auditing. The internal audit function (IAF) evolved as reaction to various impact factors that are poorly analysed, however. The purpose of this paper is therefore (1) to investigate internal auditing and its function at the end of the 20th century; (2) to examine the internal and external developments that affect IAF; and (3) to describe the new understanding of internal auditing. Based on the definition for internal auditing of the Institute of Internal Auditors (IIA) from 1999, the authors analysed the effects of six streams with impact on the IAF which were identified in literature. These are corporate governance, organisation and management as internal factors, and information technology, regulations and external auditors as external factors. As a result, a new understanding for internal auditing was developed. The key finding is that the diversity of the changes heightened the requirements for and enlarged the role of internal auditors.*

Keywords: *internal auditing, internal audit function, audit development, impact factors, corporate governance, Institute of Internal Auditors*

Introduction

In the past 15 years, several triggering events like the financial crisis, corporate scandals such as Enron or WorldCom, and the implementation of regulations (SOX etc.) brought internal auditing back on the agenda of leading executives. (Strouhal *et al.*, 2012) However, due to the complexity of the business environment it can be assumed that there are still more factors affecting the internal audit function (IAF) that should be taken into account in business practice. Therefore, it is now of particular importance to address this issue in academic research.

However, in comparison to the field of external auditing, rather little literature can be found on the function of internal auditing. (Peters *et al.*, 2012) For this reason, the purpose of this paper is to contribute in filling the revealed research gap. First of all, this paper describes the previous understanding of the tasks and the role of internal auditors. As a second step, the recent literature on the IAF is reviewed in order to find relevant impact factors and analyse their development. To conclude the outcome of the progress, the authors define the new understanding of IAF.

Framework for Review

The authors conducted a review of the development of internal auditing in international auditing standards, academic literature and selected practitioner research. Especially the last source supports practical insight of how IAF is carried out in the 21st century. This paper is subject to the limitation that only articles were used that could be generated with full-access by the following databases: EBSCO, Emerald and Sage.

Findings of the review reveal several impact factors that have led to changes in the IAF since the beginning of the current century. Based on this observation the authors propose a framework that captures these factors (see Figure 1) and serves as a structure for this paper.

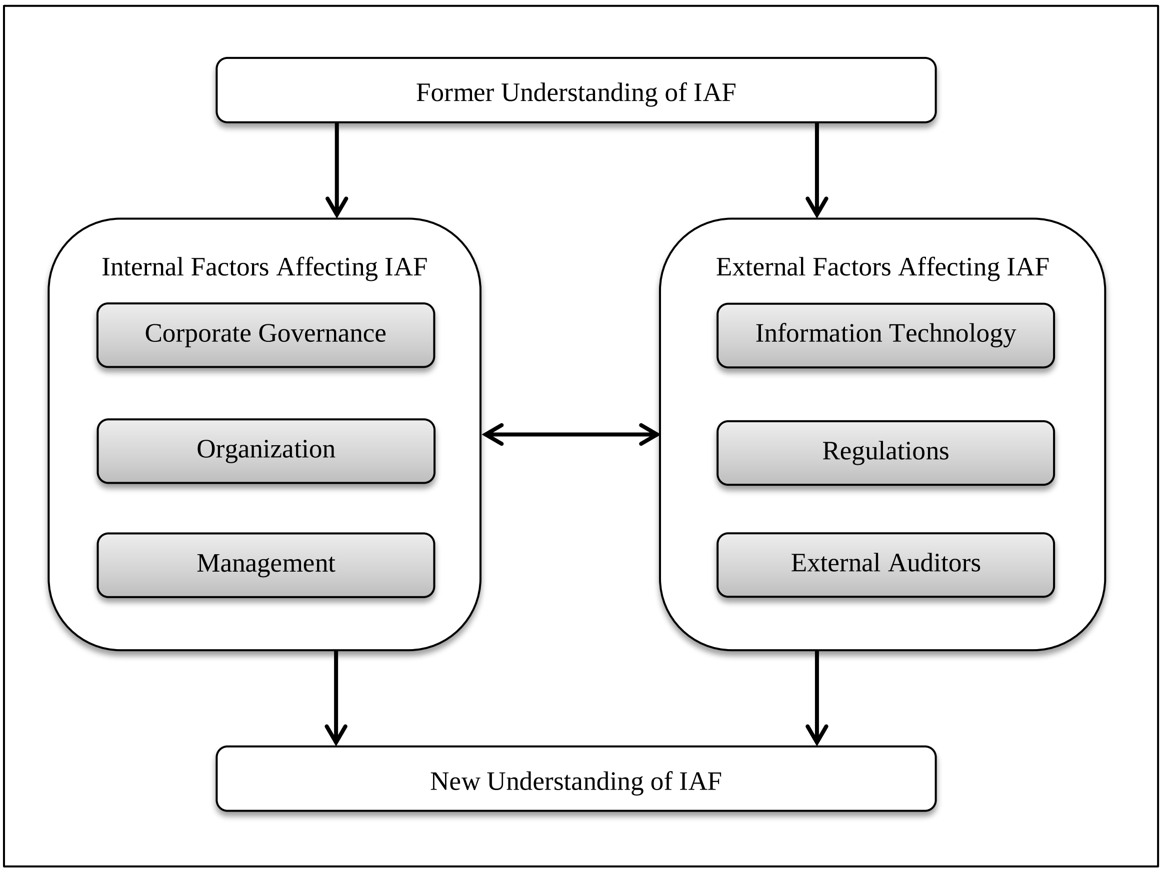

Figure 1: Framework of Impact Factors on the Development of IAF

First it is shown how the status quo of the IAF was at the end of the 20th century. Accordingly, this paper begins with background information on the definition and the role of internal auditing. The main part of the model investigates how various factors influence the IAF, separated into internal (changes within the company) and external (changes in the environment) factors. Internal factors affecting IAF deal with issues such as corporate governance, organizational structure and the company's management. External factors affecting IAF comprise advances in information technology, regulations emerged from the financial crisis and major corporate scandals, as well as the relationship between internal and external auditors. These factors may not only have a direct effect on the function of internal auditing, but also may interact between each other. Identified relationships are directly depicted in the related chapters. Finally, the concept concludes by demonstrating how the understanding of IAF has developed as reaction to these impacts.

Former Understanding of IAF

There is a consensus among scientists that internal auditing has as external auditing its roots in ancient times when market economy and enterprise systems evolved. (Chun, 1997) As the board of public traded companies obtained the power to take essential decisions, there was a demand for internal control in order to protect shareholders from fraudulent behaviour and neglecting compliance within the company. In the 1940s, internal auditing gained increased attention and, thus, the development and shaping of the IAF began both theoretically and practically. Hereby, internal auditors' tasks shifted from reviewing mistakes and preventing fraud to analysing corporate activities in operations and management. This resulted in a higher level of financial effectiveness and, therefore, the reputation of internal auditing enhanced in the view of executives. (Guoming, 1997)

Starting with the 1980s, internal audit departments have expanded considerably to cope with the increasing volatility caused by the globalisation, technological developments, cases of fraud, increased competition and complexity of business. (Rezaee, 1996) At the end of the 20th century, the understanding of IAF has significantly changed again as internal auditing was expected to take a more proactive role. (Meegan and Simpson, 1997) Due to the ever-changing business environment the IAF and its proposed definitions are frequently discussed with controversial viewpoints in theory and practice around the world. (Chun, 1997)

The global representatives of internal auditors, called the Institute of Internal Auditors (IIA), regularly publish standards for their profession and, thus, shape the function of internal auditors. Additionally, the IIA tries to capture different developments affecting the IAF in a generally accepted definition. The last adoption of this definition was settled in June 1999 and states the following (Nagy and Cenker, 2002):

> *"Internal auditing is an independent, objective assurance on consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance"*

According to this definition the IAF focuses more on value-added activities and a standard-driven approach. Nagy and Cenker (2002) were able to show in their survey that the defined function corresponds with the profession in practice at the beginning of the 21st century.

As many severe developments could be observed in the field of internal auditing before the 21st century, it can be expected that IAF will probably change again from that point of time until now. The following section deals, therefore, with internal and external impact factors that may have an influence on IAF from the year 2000 to date.

Internal Factors Affecting IAF

Corporate Governance

The Organisation for Economic Co-operation and Development (OECD) defines corporate governance as follows: (OECD / OCDE, 2004)

> *"Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined."*

In the past ten years theories as well as practical observations have witnessed a dynamic increase in legislation and academic fields relating to corporate governance. (Filatotchev and Wright, 2011) This is due to a growing concern in respect to corporate accountability, especially in developed countries, and can also be seen by an increasing number of voluntary corporate governance guidelines. (Sarens and Christopher, 2010) One of the main issues corporations face is the incorporation of ethical business values. To be successful in implementing these values it requires management to be indisputably integer in creating a corporate culture of ethical principles. (Salman and Siddiqui, 2013) Ethical risk governance can be seen as the foundation of Enterprise Risk Management (ERM). As it evolved to a system of protection for shareholder's value and at the same time raising the bottom line profitability, ERM is also an essential element of applied ethics. (Demidenko and McNutt, 2010) Changes in legal regulations as well as corporate governance guidelines have increased the shareholder's sway over boards of directors and executives. This development is driven by a series of tumults and scandals throughout the world at the beginning of 2000s resulting in questioning the efficiency of governance by shareholders. Consequently, the field of corporate governance is critical for both the economy and society. (Ryan *et al.*, 2010; Mishra and Bhattacharya, 2011)

Thus, ethical integrity is one of many abilities internal auditors need to have as they inherit a position of trust and objectivity in their actions. Internal auditors and chief audit executives (CAEs) have to be sensitive to recognize ethical matters, analysing all relevant facts relating to these issues within ethical codes and standards, and alert senior managers and the board as risks arise (e.g. in context of operational risks, legal risks and fraud risks within the company or its reputation). Keeping organization's activities within its lines set by the code of conduct is therefore the internal auditor's task. (Leung *et al.*, 2011)

Organization

Enterprise Risk Management (ERM) is defined as a flexible and integral risk management process for the entire company in order to reduce its overall risk level to a minimum and evolved within the last couple of years. (Castanheira *et al.*, 2010) ERM aims at (1) developing measurable strategic goals, (2) identifying risks that would endanger archiving these goals, and (3) implementing control systems for the mitigation of those risks. (Burnaby and Hass, 2009) In practice, the importance of a strong ERM process is already understood, and literature suggests internal auditing to take a proactive role in establishing ERM and in this context assisting management in its responsibility to build a strong risk management. This is particularly the case in smaller entities as these do not have that many resources available for encouraging ERM as larger corporations do. Thus, internal auditor's role has developed and being extended in this context. Yet, there seems to be a lack of expertise within IAF to meet the requirements of a successful implementation of ERM. (Castanheira *et al.*, 2010)

ERM represents the fundament for a continuous risk and control assurance (CRCA) program as ERM identifies and evaluates the organization's strategic risks which should be involved in the CRCA. Applying CRCA increases the efficiency and effectiveness of auditing and monitoring compared to the conventional assurance program, thus adding value to the IAF. (Marks, 2009) Supported by CRCA, the positive outcome of ERM, improved controlling of risks for achieving the company's objectives, clearly exceeds the costs of operating the ERM system. Literature recommends a high-level risk officer who is supported by C-level executives and occupies a separate function in order to observe the development of the ERM process. (Burnaby and Hass, 2009)

In recent years a significant number of corporations outsourced their internal audit department to public accounting firms, representing a continuous trend. (Brandon, 2010) This trend is more strongly pronounced in medium and large companies with audit committee participation in contrast to local organizations without audit committee participation. Results also show that there is a positive correlation between outsourcing and an IAF that is perceived as resource-intensive and non-value adding. Furthermore, the larger the lack of skill sets in the internal audit department is, the more likely it is considered to be outsourced. (Abdolmohammadi, 2013) Opponents of outsourcing claim that service providers that are instructed with the internal auditing activities are not equipped with enough business understanding and commitment to the instructor, and thus the outsourced function may not be fulfilled in accordance with the client's requirements. However, outsourcing internal auditing is associated with higher objectivity assessed by external auditors and higher expertise observed by financial directors. (Prawitt *et al.*, 2012)

Management

Internal auditors are now more often positioned as a strategic advisor to the board and as a sparring partner to the management. This position represents a challenge due to probable tensions between these two customers, stemming from different viewpoints, different motivations and different risk appetites: the board puts it's emphasize on risk reduction and mitigation, whereas the management's priority lies in growth and performance, thus active risk taking. As a result, board and management have diverging expectations in IAF, possibly leading to the fact that no party is fully satisfied, affecting the credibility of IAF and questioning its relevance. As a consequence, the perception of the board and the management on IAF leads to a weak utilisation or, in the worst case, ignorance of the services and recommendations provided by internal auditors. Evidence was found that internal auditors prioritise one customer group, whereas this choice lies within the responsibility of the CAE. This approach, alternative to target multiple customers, has the advantage that the key customer may be fully satisfied, instead of satisfying no one. (Lenz and Sarens, 2012)

There is the risk that only information filtered by management reaches the board. Thus, literature recommends a dual reporting system to board and management, but research also shows that in practice various and inconsistent reporting lines can be found. It is essential to establish a confidential and reliable reporting, where CAEs can communicate issues of concern without fearing a job loss, which may be especially the case when fraudulent activities are discovered. (Lenz and Sarens, 2012; Leung *et al.*, 2011)

For internal auditors it is essential to answer to this challenging position between the board and management by defining a clear offer by which they can add value to the corporation and in this way increase credibility and relevance of their profession within and outside of organizations. (Lenz and Sarens, 2012)

External Factors Affecting IAF

Information Technology

Information technology (IT) can be seen as major driver of transforming our economy in a vast extent. Due to this change, completely new risks emerged in business. As IT-related risks can endanger the surviving of companies, it is the auditor's task to improve his IT skills in order to keep pace with this ever-changing trend. (Jackson, 2012b) How strongly involved IT is in IAF depends on the company's resources as well as the auditor's IT know-how. Research also shows that there is a positive correlation between the degree to which audit committees review the performance of IAF and the depth to which IAF evaluates the IT processes. Furthermore, it can be deduced from this study that besides developing IT governance structures, processes and capabilities, the importance of IT auditors have increased and financial auditors need to improve their skills in order to execute audits effectively. There is a close collaboration between IT auditors and financial auditors. Evaluating the enterprise system environment by the IT auditor builds the basis for enabling the financial auditor to depend on IT outcomes used for further audit operations. (Héroux and Fortin, 2013, Kanellou and Spathis, 2011)

There could be seen significant influence of regulations on information technology, such as the U.S. Sarbanes-Oxley (SOX) Act in 2002. As the SOX Act passed legislation, companies embraced the opportunities of enterprise systems to cope with the complexity of this law. (Kanellou and Spathis, 2011)

Due to advances in information technology, internal auditing has been integrated in Enterprise Resource Planning (ERP) systems, which represent integrated control systems for internal auditors, ensuring effectiveness of operational controls and reliability for information transactions. However, not only advantages are linked to this integration and automation, there are also threats such as attempts of accessing and changing sensitive data or fraudulent program modifications as well as transactions within the system. (Madani, 2009) These threats can be categorized into two types: (1) risks of IT infrastructure and (2) the failure to recognize technological advances. Cloud computing can endanger companies in both ways, as information is outsourced into other organizations, for which internal control has to take responsibility. (Jackson, 2012b; Rashty, 2011) Potential fraud activities also lie in inefficient segregation of duties within the ERP system and an unsatisfying performance of periodic auditing. To overcome the insufficiency of the latter one, a continuous risk and control assurance (CRCA) is recommended in literature. (Kanellou and Spathis, 2011; Shin *et al.*, 2013)

As a result, using an ERP system normally leads to more internal audit procedures than before its implementation in order to ensure data security, resulting in more complexity within IAF. When such a system is implemented, the experience in auditing enterprise systems becomes more critical than general auditing knowledge. Thus, literature suggests employing an auditor with ERP know-how rather than a more experienced senior without ERP systems background. Furthermore, as stated in the "Theory of Planned Behavior" the perceived expertise in ERP systems is a relevant component of audit quality. (Kanellou and Spathis, 2011)

The function of auditing has, therefore, changed in response to the development of information technology concerning the application of more modern, computer-assisted auditing tools and techniques (CAATTs), which on the one hand supports, and on the other hand enriches the profession of auditing. Applying these tools and techniques requires continuous training. (Shin *et al.*, 2013; Madani, 2009; Kanellou and Spathis, 2011)

Regulations

In the early 2000s, corporate scandals, which could be witnessed in the cases of Enron, WorldCom and Parmalat as well as in the case of Lehman Brothers, the most prominent and far-reaching bankruptcy in the context of the financial crisis, had rooted in a lack of effective risk management and corporate governance. (Lenz and Sarens, 2012) These failures revealed the importance of the profession of internal auditing. Triggers of those were neither caused by industry-related factors nor did individual corporate actions solely lead to this high number of fraudulent cases during the relatively short time period. However, one major cause was found in the systemic violation of basic principles of risk management. (Kirkpatrick, 2009) This could be explained in two ways. As one explanation, literature states that large corporations, which were associated as too-big-to-fail, did not assess tail risks appropriately, but especially these low-probability events occurred disproportionately often during the financial crisis. Another explanation seems to be related to conflicts in corporate governance and principal-agent issues as obstacle to internal control and risk management systems of a company. This was caused by management systems that incited the increase of profitability of single departments instead of ensuring the enterprise risk in the sense of ERM. (Lang and Jagtiani, 2010; Strouhal *et al.*, 2012)

At the same time, this reason can be seen as causal factor for the financial crisis, when excessive risk taking was supported by overconfidence in established but untested statistical risk models which could be observed in a strong concentration in securities of the mortgage market. Inevitably, the exaggerated extent of these actions led to a bubble that unpredictably burst. Starting in 2007, the financial crisis turned into a worldwide economic recession, with severe impacts that can be felt to date. Thus, corporate governance failed to prevent the company from taking risks that are beyond its risk appetite. (Lang and Jagtiani, 2010; Kirkpatrick, 2009; lsaksson and Kirkpatrick, 2009) Crises like the recent one are expected to happen more frequently due to globalisation and growing interdependences between financial markets, economies, technology, society, and environment. (Alpaslan *et al.*, 2009)

To counteract this trend governments take legal and political preventive actions by setting corporate governance regulations aiming to shift from stakeholder protection to a concept that focuses on the efficiency of capital markets. These regulations no longer stem from companies but are set up within European regulatory initiatives as well as in capital and financial market laws of single member states of the EU, (Horn, 2012) resulting in a regulatory burden for organizations. As a consequence of globalisation, there are not only country specific laws but multinationals have also to face legal challenges in multiple countries at the same time. (Jackson, 2012a) Many of these regulations have an impact on the profession of internal auditing. The developments of the past decade have shown that regulators define the tasks of internal auditors more precisely, whereby there is not the attempt to standardize the setting of internal auditing as it is done in financial reporting and external auditing. (Chambers, 2014)

Corporate scandals and accounting fraud cases have led to the implementation of the U.S. Sarbanes-Oxley Act in 2002, with the aim to improve the confidence in the financial statements of listed companies. The two primer sections addressing IAF are stated in section 302 and 404. The first one demands disclosing a list with all substantial deficiencies in internal controls and informing on any fraudulent activities by employees who occupy IAF. (Keane *et al.*, 2012) Section 404 requires publishing information on the scope, adequacy and effectiveness of the internal control structure and processes in the context of financial reporting. (Johnstone *et al.*, 2011; Calderon *et al.*, 2012) Findings suggest a significantly increasing corporate governance environment as well as a strong, positive shift in the credibility and reliance on internal auditors in the post-SOX era, which was especially emphasized by obeying section 404. (Cohen *et al.*, 2010) In spite of the intention to prevent fraudulent cases such as Enron and WorldCom, SOX has to take the criticism that it would not have avoided these frauds. Furthermore, complying with this regulation means high costs for public companies, with an estimated raise of cost by 233 percent. (Chan *et al.*, 2009) However, as a result of strengthening companies' internal controls, a significant decline in reported material weaknesses could be observed between 2004 and 2010. (Calderon *et al.*, 2012)

As a consequence to the above described developments, internal auditors need to be constantly up-to-date with changes in regulations, as they are responsible for assuring that the company complies with any laws necessary. (Jackson, 2012a)

External Auditors

Recent regulations, e.g. Auditing Standard No. 5, instruct external auditors to rely on the function of internal auditing in order to reduce repetitive work and redundant results in assessing management statements about internal controls and financial statement disclosures. That increased the demand on internal auditors to ensure the efficiency and effectiveness of IAF so external auditors can rely on it. (Davidson *et al.*, 2013) Extensive research has been done investigating the reliance of external auditors on IAF. Most literature on it addresses three quality factors listed in SAS No. 65 describing what should be considered by external auditors when working together with internal auditors. These features are competence, objectivity, and the work performance of the IAF. (Bame-Aldred *et al.*, 2013)

Some prior research indicates that external auditors consider competence and objectivity as the two main criteria among these quality factors. (Brandon, 2010; Holt *et al.*, 2012) This viewpoint is supported by Suwaidan and Qasim (2010) who found that the objectivity of internal auditors contributes most to the reliance, followed by internal auditors' competence and their work performance. The degree of objectivity is often assessed as a result of the design and structure of the IAF, as it shows how independent internal auditors and CAEs are from unjustified interference of the management. Functional as well as administrative reporting relationships give indications of the objectivity. Competence may be highlighted by earning educational degrees, especially in accounting-related fields, and by presenting an extensive work experience in congeneric professions like auditing or accounting. Furthermore, it is recommended to participate and positively complete continuing professional courses in order to demonstrate up-to-date knowledge. (Holt *et al.*, 2012)

Findings in several papers indicate that external auditors rely more on the work of internal auditing when its function has been outsourced as opposed to an in-house function of internal auditing. However, external auditors do not see any difference between the reliance on an outsourced or in-house function when the IAF follows the principles of continuous auditing. While prior results suggest outsourcing the internal audit department in order to increase external auditor reliance and lower external audit costs, newer findings recommend maintaining the IAF in-house while using CRCA programs. (Davidson *et al.*, 2013)

The higher presence of standards, which allows external auditors to rely on the IAF, will elevate the importance to meet the criteria required for efficient and effective IAF. Impacts could be seen either in increased outsourcing activity or improvements in the in-house function. Latter could lead to an increased demand for professional certifications, such as the Certified Internal Auditor and Certified Public Accountant. (Holt *et al.*, 2012) Informal interactions between external and internal auditors in addition to formal regular meetings can provide further opportunities for external auditors to monitor and assess the IAF. (Zaman and Sarens, 2013)

New Understanding of IAF

The past few years can be seen as a dynamic period for internal auditing. The emphasis of the IAF evolved from being control-driven to a business risk approach. (Castanheira *et al.*, 2010; Whalen and Holt, 2013) Macroeconomic trends, for instance the globalisation and the rapid pace of change, which can be observed in modern business environment, have led to a more challenging world demanding a new skill set for internal auditors. Continuous learning, judgement, diversity management as well as the ability to adapt are only a few examples of critical skills. (Anderson, 2009) Research indicates a substantial extension and a refocus of the role to a new higher-profile that is potentially more valuable and in this way internal auditors are perceived as key players in the corporation. (Soh and Martinov-Bennie, 2011; Baker and Writer, 2013)

In the context of corporate governance, new fields like environmental and reputational risk management are enlarging the IAF making it to a central corporate governance mechanism. (Munro and Stewart, 2011; Baker, 2010) Ethical integrity is one of the many abilities internal auditors need to have as they inherit a position of trust, integrity and independence in their actions. Keeping organization's activities within the lines which are set by the code of conduct is the internal auditor's task. (Leung *et al.*, 2011)

As the stream about organization has shown, the approach in analysing and managing risks has changed compared to the former understanding of internal auditing. (Steffee, 2009) Literature states that it is the internal auditor's responsibility to cope with the growing trend of implementing an ERM in order to protect companies against the broad variety of risks. (Castanheira *et al.*, 2010; Burnaby and Hass, 2009) The efficiency and effectiveness of ERM can be increased by applying CRCA, thus adding value to the IAF. (Marks, 2009) Furthermore, there are controversial viewpoints concerning the tendency of outsourcing the internal audit department.

For the interaction with the management, internal auditors serve more often as a strategic partner, with the challenging position between the board of directors and executives as their viewpoints are often divergent. (Lenz and Sarens, 2012) Thereby it is important that internal auditors learn to communicate effectively any uncovered and assessed risks to the management. (Jackson, 2012a)

Advances in information technology has led to a close collaboration between IT auditors and financial auditors resulting in a higher demand for internal auditors with ERP know-how. (Héroux and Fortin, 2013, Kanellou and Spathis, 2011, 2011, 2011) New IT systems enabled internal auditing to provide management with more relevant information at lower cost and without delay by automated processes, real time facilities and integrated internal auditing. (Shin *et al.*, 2013; Sobel and Kapoor, 2012)

Several regulatory changes can be seen as response to corporate scandals and the global financial crisis, bringing the profession of the internal auditor to the frontline of the change agenda. (Leung *et al.*, 2011) Regulations forced corporations, and especially their internal auditors, to take a much broader spectrum of risks and controls into account that is no longer limited to financial controls. (Baker and Writer, 2013) Internal auditors need to face the challenge of complex and frequent changes in regulations, as they have to assure the compliance of the company with those laws. (Jackson, 2012a) As a consequence, many of them have an impact on the profession of internal auditing and define the tasks of internal auditors more precisely. (Chambers, 2014) For instance, as a consequence of the SOX act, a significant raise in the workload and responsibilities, and thus in the resources of the internal audit department could be observed. (Munro and Stewart, 2011) Furthermore, corporate scandals and the global financial crisis increased the demand for internal auditors to prove the efficiency and importance of their work. (Baker, 2010)

The reliance of external auditors on the internal audit function was fostered by recent regulations and standards with the aim of reducing repetitive work. Thus, the efficiency and effectiveness of IAF are prerequisite so that external auditors can rely on it. (Davidson *et al.*, 2013) Two different strategies could be observed as response to this demand: either an increase in outsourcing activities or an improvement in the in-house function. In this way, the importance of internal auditing reached a higher level, where professional certifications gained more attention. (Holt *et al.*, 2012)

The listed internal and external factors show that internal auditing behaves in a changing landscape. However, these developments are not the same in every country or industry.

A lot of literature can be found about country and region specific stages of development of internal auditing, presenting internal audit practices for instance in the United States, Latin America, Australia, India, Estonia, Sweden, and China, just to name a few. (Burnaby and Hass, 2011; Bollaert and Dilé, 2009; Christopher *et al.*, 2009; Cingula *et al.*, 2012; Yan-Leung Cheung *et al.*, 2010; Hawkesworth *et al.*, 2009; Franck and Sundgren, 2012) Research on the country specific approach on internal auditing is also done by drawing comparisons between countries. The analysis indicates great variations in the maturity of internal audit practices worldwide, which can be seen as the result of cultural differences, the economic development state of the country, and different regulations in corporate governance. (Sarens *et al.*, 2011) One paper states, for example, that Australian corporations appear to have a higher maturity level regarding governance systems live cycle than Russian companies. However, there are still lots of international challenges, like a linkage between risk framework, enterprise value model, and strategic planning as well as the implementation of proper risk management within a defined risk appetite in an organization’s culture. (Demidenko and McNutt, 2010) Furthermore, Burnaby et al. (2009) investigated differences between the United States and selected European countries with the result of substantial levels of variation in responses by country, especially with a high degree of non-compliance with the Standards by IIA for Quality Assurance and Improvement Program and Resolution of Management’s Acceptance of Risks. In another paper, Burnaby and Hass (2011) also drew comparison between the United States, Canada and many Latin American countries, finding notable consistency in implementation and compliance with the IIA’s International Standards for the Professional Practice of Internal Auditing and the required skills and competencies, which is suggested by the observed increase in globalisation.

Apart from country specific approaches it is also important to have a look at the industry a corporation is doing business in. Internal auditing has to cope with the increasing diversity and complexity of industries and, thus, the required skill set for internal auditors differs in dependence of the sector as internal auditors need to have professional knowledge of the business. (Shih *et al.*, 2009) In the case of public sector corporations, for instance, internal auditing must deal with risks that have an impact on the outcome to the public at large, meaning that the focus lies more on the social interest than on profit maximisation. (Vijayakumar, A. N. and Nagaraja, 2012) As another example internal auditing in the banking system faces an environment that is characterised by strict banking regulations. (Wai-Chung Lo and Ng, Michael C. M., 2009)

In comparison to the former understanding of internal auditing, which was described at the beginning of this paper, the new understanding reveals substantial developments that root in both internal and external factors that were analysed in this paper. As the IIA has not done any further adjustments to the official definition of the IAF since 1999, the IIA ought to consider redefining its published statement about internal auditing.

Conclusion

The objectives of this paper were:

- to investigate internal auditing and its function at the end of the 20th century
- to examine the relationship between internal auditing and impact factors, that arose from company specific (internal) and market-related (external) developments
- to describe today’s view on internal auditing resulting from the above-mentioned impact factors

To accomplish these objectives the authors conducted a literature review, which findings were clustered into six streams, divided into internal (corporate governance, organization and management) and external (information technology, regulations and external auditors) impact factors. The following table gives an overview of how these factors developed (column 2) and in what way the IAF is affected (column 3).

Table 1: Impact Factors and their Effects on IAF

Internal Factors Affecting IAF		
Corporate Governance	Increase in legislation and academic fields Growing concern about corporate accountability Increasing number of voluntary guidelines	Corporate culture of ethical principles Increased shareholder power Ethical integrity Managing legal and fraud risks Environmental and reputational risk management
Organization	Trend to enterprise risk management (ERM) and continuous risk and control assurance (CRCA) Outsourcing companies do internal audit activities	Key role in establishing risk management Applying CRCA Increased efficiency and effectiveness Either improving or outsourcing internal audit department
Management	High expectations by the board and management More fraudulent activities	Strategic advisor to the board and sparring partner to the management Dual reporting system Effective Communication
External Factors Affecting IAF		
Information Technology	Modern, computer-assisted auditing tools and techniques New IT-related risks Integration in enterprise resource planning (ERP) systems Cloud computing Potential fraud activities	Importance of IT skills and continuous training Integrated control systems Ensuring data security Experience in auditing ERP systems Collaboration between IT auditors and financial auditors
Regulations	Corporate scandals and accounting fraud cases Financial crises Globalisation and growing interdependences Many audit-related laws (e. g. SOX) Adapted corporate governance regulations	Disclosure of deficiencies in internal controls and internal control structure and processes Positive shift in credibility and reliance Decline in reported material weaknesses Increase in workload and responsibilities Higher costs Increase in the demand for internal auditors
External Auditors	Regulations about reliance on internal auditors Avoidance of repetitive work and redundant results	Ensuring competence, objectivity, and work performance Outsourcing or using continuous auditing to increase reliance on internal auditing Increased demand for professional certifications

It can be assumed that the diversity of the changes heightened the requirements for and enlarged the role of internal auditing. As internal auditors have to keep pace with developments in the world, the IAF will adopt accordingly in future.

This literature review has thrown up many questions in need of further investigation:

- As internal and external factors develop in an increasing speed and severity of consequences, the authors suggest conducting literature reviews on this topic on a regular basis.
- Studies are needed to understand the specific costs and benefits of a CRCA system compared to a periodic auditing system.
- Further research should focus on how and to what extent IAF quality factors are evaluated by external auditors.
- As a challenging position of internal auditing between the board of directors and the management could be identified, future studies on exploring the customer dimension of internal auditing are recommended.
- More research needs to be undertaken in the changing nature of the IAF in context with geographic and industry differences and similarities.
- As the IAF has significantly changed in recent years, further research should also concentrate on the development of performance measurement for the internal audit department, as effective performance indicators should always be in line with changes in the underlying.

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