

CULTURAL DIFFERENCES AND SIMILARITIES BETWEEN GERMAN AND CHINESE INTERNAL AUDIT FUNCTIONS

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Abstract

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Cultural differences influence the behavior of companies, including management styles, relationships with employees, stake- and shareholders or social responsibility. Obviously, the concept of corporate governance encompassing the Internal Audit Function (IAF) is seen differently in different cultures. Therefore, conformance with the globally effective “International Professional Practice Framework” (IPPF) for Internal Auditors presuming a culture-free, completely homogeneous IAF with uniform working standards worldwide seems more than difficult. The focus of this study is to compare the IAF characteristics in China and Germany, based on data from Chief Audit Executives (CAE) from both countries. We identify more (culturally influenced) differences than similarities between the German and Chinese IAF, although there can be found a number of fundamental political, economic and cultural similarities between both countries.

Keywords: Internal Audit Function, Standards, Corporate Culture, Governance, Germany, China

1. INTRODUCTION

Cultural differences do not only impact companies, acquisition strategies and management styles, but also the general understanding of corporate governance including the internal audit function (IAF). Additionally, emerging countries such as the booming dragon economy of China might have different politico - economic frameworks (government-controlled market economy) than the “old economies” (free market economies) such as Germany. Consequently, internal auditors in many nations around the globe face the same serious “professional problem” of how to bridge the gap between globally uniform “International Standards for the Professional Practice of Internal Auditing” (IIA, 2017b) and their country-specific cultural environment and ultimately, their culturally influenced IAFs.

This “cultural gap” appears as following: On the one hand, internal auditors must strictly obey the globally effective Standards with no exception. The Standards are the sole basis for mandatory internal and external quality assessments of the IAF. Non-conformance with the IIA-Standards, especially with critical ones, is always negative due to the

presumption, that only auditing in conformance with the Standards guarantees an effective IAF. Therefore, non-conformance might lead to an immediate dropout within an ongoing quality assessment, furthermore to critique or even the dismissal of the head of the IAF. In case of any damage by weak internal controls, the head of IAF as well as responsible executive directors and board members even face liability and compensation claims. The IIA Standards give the following advice: “While differences may affect the practice of internal auditing in each environment, conformance with The IIA’s International Standards for the Professional Practice of Internal Auditing [...] is essential in meeting the responsibilities of internal auditors and the internal audit activity.” On the other hand, conformance rates with the Standards vary significantly with geographical regions such as North America 73%, Europe 67% and East Asia 46% (Bailey, 2016, p. 9).

Because global regions are generally bound to cultural specifics, we concluded that cultural aspects are a major cause for these IAF-differences as our general hypothesis. This conclusion is also in line with the latest research based on global Common Body of Knowledge (CBOK)-data with the result, that

the national culture directly influences the IAF (Eulerich et al., 2017, p. 14). Furthermore, this conclusion also corresponds with comparable research for external auditing. Studies of cross-cultural statutory auditor decisions have shown different judgments based on the same dataset of given information (e.g. Simunic et al., 2017 and Brown et al., 2014). External audit quality as well as professional judgments can vary significantly between national and cultural clusters, even within the same (external) auditing firm (e.g. Ferguson, 2015 and O'Donnell et al., 2010).

To substantiate our general hypothesis, we empirically analyze IAF-specifics in relatively diametric cultures, the German and the Chinese. We found several significant, culturally influenced differences and similarities and tentatively explained them.

We choose Germany and China (i.e. P.R. China) for this cross-cultural comparison, since both countries are strong economies on the one hand, but have significant cultural differences on the other hand. Furthermore, besides the existing research gap regarding internal auditing in between both countries/cultures and several cultural differences (e.g. federal versus centralist administration, human beings as independent or collective individuals, Christianity versus Asian religions), the comparison of Germany and China seems more than challenging and even relevant due to a number of fundamental political, economic and cultural similarities between both countries, that justify the sampling and analysis of these particular two countries and their IAFs. These fundamental similarities are as following:

1. Strong economies interwoven with each other

Both countries obtain powerful national economies with relatively high GDP-growth rates. Therefore, both countries belong to the elite of the "G20"-countries. Over the years, Germany and China have reached remarkable export ratios of their GDP (Germany: 50.9%, China: 36.3%). Furthermore, both national economies are deeply interwoven: Germany is China's largest trading partner and vice versa.

2. Comparable geo-political strength

Both countries are geo-politically leading countries within their regional and continental boundaries. While China is the largest country in Asia by its area size (9.6 million km²) and the number of its population (1.4 billion), Germany has become the leading power in Europe with 82.5 million people or 16.2% of the population of the European Union and as the fourth largest country by its area size (0.4 million km²).

3. Historical linkage between Germany and China

As a role model Germany supported the (imperial) China on the way towards its economic and military modernization in the 19th/20th century (e.g. Krupp was assigned to strengthen Port Arthur, German railways in Shandong and southern China; German concession Qingdao). The Chinese Civil Code, released in 1930, is based on the German prototype ("Bürgerliches Gesetzbuch"). This historical linkage has been stretching into the current time (e.g. know how transfer or exports such as the high-speed train "ICE" of Siemens and the magnetic levitation train "Transrapid" of Thyssen).

4. Remarkable intercultural fit

German culture is in several dimensions of Hofstede's cultural framework much closer to the Chinese culture than other cultures, especially those from Western, but partly also from Asian countries. Within the Hofstede dimension "long-term orientation" the German index (83) almost completely reached the Chinese value (87), and within that being much closer to China than France (63), India (51) or the USA (26). The "masculinity" level of Germany and China were at the same index level (66), differently to France (43), India (56) and the USA (62). In addition, the German "individualism" (67) was obviously closer to China (20) than the individualism of France (71) and the USA (91), with the exception of India (48).

5. Analogical timing of the establishment of national internal auditing structures

Even if we accept differences between the IAFs in Germany and China as identified by Li (2007) and which are explained in this paper later, we can also see structural parallels. The German Institute of Internal Auditors (DIIR) was founded in 1958. The DIIR became a member of the European Confederation of Institutes of Internal Auditing in 1983 and of the IIA in 1995. China established the China Institute of Internal Audit in 1987, which became IIA-member in the same year. Therefore, the profession in both countries follow the worldwide standard setter.

The paper is structured as follows. After a literature review to clarify the concept of national culture, explain briefly Hofstede's cultural dimensions and obtain insights into the current state of research of cultural influence on the IAF, we submit hypotheses as well as a description of the methodology, sample and variables in the following sections. Afterwards we present and discuss our results finishing with our conclusion, limitation and potential future research avenues.

2. THEORY AND LITERATURE

The cultural influence on countries or organizations, but also on compliance systems (Nakano, 2007) or acquisition strategies (Lee et al., 2014), constitutes a virtually uncontested relationship that is observable from early stages in the history of mankind up to the present day. Emerging from the basic theory about influential effects of culture (cultural influenceability) on human activities, the central research strand of the "culture-bound theory" or the so-called "Culturists", respectively, has been developed for more than 50 years. According to the "culture-bound"-approach, political concepts or strategies can only be successfully exported, if culture or country specific characteristics are being adequately accounted for (e.g. Western or Eastern democracies). In contrast, the "culture-free theory" of the so-called "Universalists" insinuates global uniformity or at the very least a trend towards convergence of core cultural values. Following this approach, strategies and concepts can be implemented uniformly on an international level and therefore require no or almost no culture or country specific adjustments (e.g. McDonald's or the Harry Potter book series).

About 30 years ago, the social sciences started to cluster cultures on defined parameters to make cultural values such as family, hierarchy or future orientation comparable. Groundbreaking was the

work of Hofstede with his study "Culture's consequences: International differences in work-related values" (1980). Hofstede identified not only different dimensions of culture, such as "power distance" and "uncertainty avoidance", but he also started to quantify his results. By aggregating his worldwide results in country-indices, Hofstede made it possible to measure cultural differences between countries for the first time. This practice of Hofstede was followed by others (cf. Hall et al., 1990; Trompenaars et al., 1993; Schwartz, 1994 and House et al., 2004).

Later, "intercultural" or "cross-cultural management research" studied how far cultural specifics might influence the management of international companies. This type of research has significantly gained in importance in the recent years and was even characterized as essential for the survival of the mankind (Gannon et al., 2010, p. 4). In the global cross-cultural management research, European and Asiatic stamped "Culturists" are in the majority with their belief that management is a "culture-bound phenomenon" (Rothlauf, 2012, p. 15). Following the mostly American ingrained "Universalists", management principles are culture-free and "independent from cultural conditions, always and everywhere valid" (Holtbrügge et al., 2015, p. 40). This contrast can be summarized in the citations of the protagonists of both approaches, the Culturist Hofstede ("The Business of international business is culture", 1994) and the Universalist Friedman ("The Business of business is business", 1970).

A surprising aspect in the cross-cultural management research is the "cultural misfit" or the significant imbalance of negative over positive research approaches. Thus, an analysis of 1,141 scientific papers in the "Journal of International Business Studies" over 24 years (1989-2012) resulted in a 17fold majority of the "dark side" of intercultural aspects such as structural problems, costs and risks (Stahl et al., 2015, pp. 391-392, 397).

Translating governance structures from one country and culture to another poses many challenges. However, as Schwarzer and Kim (1984) argued, "In order to stimulate cross-cultural research these difficulties must be resolved in adapting inventories for assessment with different national groups" (p. 277).

Regarding the structure and work of the IAF, differences across cultures were expected. Theory and empirical evidence suggest that there are differences in the organization of the IAF and other IAF-related factors across Eastern and Western countries and beside "hard facts" such as company's size, industry, multinationalism, listing or ownership structure, also cultural variables "influence the understanding and work of an IAF. These cultural or 'soft facts' are often directly linked to the history of the company or the leadership approach of a specific CEO. However, the country-specific culture also shapes the IAF" (Eulerich et al., 2017, p. 2). This initiates a "substantial scope for further research into internal audit in the Asia Pacific region" (Cooper, 2006, p. 833).

Research in cultural influence on auditing started with external auditing almost 20 years ago.

Early results were:

- Uncertainty avoidance, collectivism and masculinity lead to less publication of relevant information within the annual reporting (e.g. Zarzeski, 1996).
- Power distance and individualism increase the risk of material misstatement including the possibility of accounting fraud (e.g. Chan et al., 2003).
- Collectivism causes reluctance regarding the limitation of attestations to "save faces" of clients. Uncertainty avoidance correlates with less precise results (e.g. Hell et al., 2009).

Cultural influences on the IAF have been researched rather seldom; "very few researchers have addressed the impact of culture upon the way in which internal as opposed to external audit performs its duties" (Alzeban, 2015, p. 58) and research started not before 2009. Nevertheless, about 15 studies have been published since then (see summary in Appendix A). Referencing the influences of the eight cultural dimensions of Hofstede and House the following correlations were empirically verified (see table 1).

Table 1. Cultural Dimensions (Hofstede, House) and their Influences on the IAF

| <i>No.</i> | <i>Cultural Dimension</i> | <i>Influence on the IAF</i> | <i>Potential cultural effects on the IAF</i> |
|------------|-------------------------------|--|--|
| 1 | Power Distance | - negative (cf. Dicle et al., 2016 ; Alzeban, 2015 and Sarens et al., 2009) | Due to their fear of “supervisors” internal auditors might - report audit findings untruthfully, biased and distorted, - avoid critical questions and - omit risk-oriented topics within their “audit universe”. |
| 2 | Uncertainty Avoidance | - negative (cf. Alzeban 2015; Abdolmohammadi et al., 2011 and Sarens et al., 2009) | Due to uncertainty avoidance, internal auditors might - neglect creative audit approaches (e.g. new audit techniques, brainstorming audit programs, IT-support), - hardly change their position or job, so they cannot obtain professional experience from other industries and - avoid questioning or challenging the status quo of given organizational processes or functions to be audited. |
| 3 | Individualism | - positive (cf. Alzeban, 2015 and Sarens et al., 2009) | Within a more individualistic environment internal auditors might - work more creatively, - find new audit approaches and - get better results. |
| 4 | Masculinity | - negative (cf. Dicle et al., 2016) - no influence (cf. Sarens et al., 2009) | High masculine internal auditors might - act too ego-oriented and - rely too heavily on the importance of money and financial benefits, which can influence the objectivity and independence. |
| 5 | Long-term Outlook/Orientation | - no influence (cf. Sarens et al., 2009) | While strongly focussing on long-term projects, internal auditors might overlook the coverage of short-term risks and ad hoc-improvements. |
| 6 | Assertiveness/Indulgence | - negative (cf. Abdolmohammadi et al., 2011 and Sarens et al., 2009) | Assertiveness might lead to late or even wrong reporting in order to only report the ultimately wanted result. |
| 7 | Performance Orientation | - no influence (cf. Sarens et al., 2009) | Too much weight of performance orientation, especially when related to variable salary or with implausible targets, might bias the objective judgment and professional skepticism. A high number of completely fulfilled audit reports does not necessarily reflect qualitative audit results. |
| 8 | Human Interpersonal Behavior | - positive (cf. Abdolmohammadi et al., 2011) - no influence (cf. Sarens et al., 2009) | Internal auditors, especially when working in companywide or international teams, can achieve better audit results with teamwork. But too much empathy and understanding for auditees or other auditors might also end up in unsatisfied audit results. |

Unfortunately, only one single scientific article with the focus on a comparative analysis of the IAF in Germany and China could be identified (cf. Li, 2007). Instead of comparing both IAFs empirically, the author concentrated on a general benchmarking approach. According to Li (2007, pp. 2-5) the qualitative differences between the German and Chinese IAF are as following:

- more audit experience due to a longer audit history in Germany,

- stronger organizational independence of the German IAF,
- dual-reporting lines in China to internal management and to the state,
- Chinese IAF serves more as a control function of the state, not of the management and
- quality of the IAF in China is lower than in Germany.

In this respect, the authors identify the seemingly underresearched cultural-internal

auditing-comparison between China and Germany as a topic of special interest and relevance, eligible to receive further contribution with regards to the outlined research gap. Moreover, we follow the advice that “these [cultural, annotation by author] dimensions should be investigated in various societies to assess their associations / effects on internal auditing standard setting and practice” (Abdolmohammadi et al., 2011, p. 386).

2.1 Hypotheses

Before setting up hypotheses, some general aspects of Germany and China as well as the current “Hofstede-indices” of the cultural dimensions of Germany and China should be considered.

2.1.1 Intervention of different Stakeholders on the IAF

The IIA-Standards stipulate independence and objectivity as essential for the effectiveness of the IAF (Standard no. 1100). This includes organizational independence (1110), individual objectivity (1120) and impairment to independence or objectivity (1130). However, following the Confucian seniority principle, the “World Values Survey” (2015, p. 316, exh. V138) [Chinese obey their rulers significantly more (11.8) than Germans (2.8)] and the comparison of Hofstede’s power distance [power distance appears more intense in China (80) than in Germany (35)] the fulfillment of these IIA-Standards might become difficult for Chinese internal auditors in their daily work. Chinese audit experts confirm this view, as they evaluated, that “the internal audit units in Germany can keep much more independence during the audit process than their Chinese counterparts” (Li, 2007, p. 4) and that the status of the Chinese IAF is low and its independence bad (Wang et al., 2009, p. 53). Additionally, the traditional harmony concept characterized by avoiding conflicts and problems (especially with superiors) as well as the widespread integration into other corporate departments or functions might lead to less independence of the Chinese IAF due to intervention by management, superiors, directors, boards and also shareholders or other stakeholders. Insofar the 1st hypothesis is formulated as follows:

Hypothesis 1: Stronger intervention of different stakeholders on the IAF occurs in Chinese than in German companies.

2.1.2 Risk-orientation of the IAF

Our second relevant perspective is the potential risk-orientation of the IAF. There are numerous examples that the risk-orientation differs between both countries. Since early times China has been facing catastrophic flooding. Nevertheless, the investment into risk-oriented flood prevention has still not been sufficient, if “more than 300 of China’s 657 cities fail to reach the national standards for flood prevention in urban areas, and more than 90 per cent of older urban areas do not even meet the lowest criteria for flood prevention” (The Telegraph, 2015). Chinese are also relatively less risk-oriented concerning their retirement arrangements as revealed by empirical data (China Internet Information Center, 2015): 62% of Chinese do not have a pension scheme. The capital

gap within the Chinese pension scheme is extremely huge (pensioners would need more than 100 years to create the necessary capital stock). Furthermore, only 25% of Chinese care about a possible insufficient pension. In Germany flood prevention and state-guaranteed as well as private retirement systems are central topics (e.g. several national flood prevention programs with a total value of 5.4 billion Euro have been in effect since 2013 and the state pension planning, which is mandatory for each employee, was organized legally in 1891). While the German culture seems to avoid uncertainty and risks, the Chinese culture seems to be riskier. In addition, the uncertainty avoidance-index of Hofstede suggests a general higher risk orientation of the German culture (65) in comparison to China (30). Therefore, the 2nd hypothesis is stated as follows:

Hypothesis 2: The German IAF is more risk-oriented than the Chinese IAF.

2.1.3 Follow-up System

According to IIA-Standard 2500.A1 the Chief Audit Executive (CAE) “must establish a follow-up process to monitor and ensure that management actions have been effectively implemented or that senior management has accepted the risk of not taking action” (IIA, 2017, p. 20). Because of a deep mistrust in the Chinese society and among the staff of companies in China (e.g. whether agreed audit measures have been implemented on time), stricter controls (concept of Legalism) as well as a stronger follow-up process should be established by the Chinese IAF. Only 8.4% Chinese agreed strongly on the question “I see myself as someone who is generally trusting”, while 35.7% Germans did so (World Values Survey, 2015, p. 403, exh. V160B). Therefore, the proverb “trust is good, control is better” applies more to China and therefore the 3rd hypothesis is:

Hypothesis 3: The follow-up system of the Chinese IAF is more intensive than the German system.

2.1.4 Conformance Rates with the IIA-Standards

The Standards stipulate, that irrespectively of diverse legal and cultural audit environments all Standards have to be complied with in order to meet “the responsibilities of internal auditors and the internal audit activity” (IIA, 2017b, p. 1). However, international conformance rates with the Standards vary significantly with geographical regions with North America at the top (73%), Europe including Germany (67%) and East Asia including China (46%) (Bailey, 2016, p. 9, exh. 4). Since the 19th century, China has increased its antipathy against foreign, especially western, countries. All things negative came from abroad (e.g. opium, colonization, economic and military oppression), including foreign ideas, techniques and standards, unless China can somehow benefit from them (ref. to the anti-west “Ti-Yong”-utilitarianism). Furthermore, the Chinese definition of internal auditing independently from the global IIA-Standards and the tremendous impact of the state might complicate the full conformance with the Standards in China. In addition, Wang (2009) suggests this estimation by stating “the

standardization degree of [Chinese] IA is low" (p. 53). Following that, the 4th hypothesis is:

Hypothesis 4: German internal auditors have generally higher conformance rates with the IIA-Standards than their Chinese colleagues.

2.1.5 Business improvement

According to the definition of internal auditing within the framework of the Standards, the IAF is "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations" (IIA, 2017c). Nevertheless, do German and Chinese internal auditors see this international demand similarly? First, empirical data suggest a different situation in both IAFs: German internal auditors rate business improvement as the activity which adds the second most value (DIIR et al., 2014, p. 26, exh. 21). However, Chinese auditors might see this differently as Li (2009) evaluated: "... IA stresses on supervision function only, checking out violation of rules and regulations, but ignoring how to strengthen the ability of administration, or improve service efficiency to help business managers make related important decisions" (p. 5). The Chinese IAF is probably - at least partially - misused as an "extended arm" of the state with a focus on legal and tax compliance, instead of effectiveness and efficiency of operations. That's why the 5th hypothesis is set up as following:

Hypothesis 5: Business improvement is more relevant for the German IAF than for the Chinese IAF.

2.1.6 Alignment with the Corporate Strategy

Interestingly, both Hofstede-indices used for the argumentation of hypothesis 1 are also suitable for hypothesis 6: power distance (China: 80, Germany: 35) and individualism (China: 20, Germany: 67). The stronger power distance and a lower degree of individualism in China, in conjunction with the Confucian seniority principle and harmony approach, might lead to the Chinese IAFs relatively weak position towards its corporate top management. Consequently, this weak position might lead to a more dependent, uncritical position towards the corporate strategy with the result of a very close alignment to the strategy. However, not as an indication of a strong independent IAF as required by the Standards, though as a culturally enforced uniformity with the strategy assuring self-protection of the IAF. Therefore, the 6th hypothesis is formed as follows:

Hypothesis 6: The Chinese IAF is more aligned with the corporate strategy than the German IAF.

2.1.7 Assurance versus Consulting

In order to perform effectively, Chinese bureaucrats developed the principle of strict auditing and control in conjunction with draconic punishment (based on the concept of Legalism), but also the function of consulting has always existed in China. Both activities have always had a negative image in China: A "weak auditing result" could easily lead to severe punishment (e.g. prison, banishment, execution), an "unfortunate consulting process" resulted normally only in a painful, not deadly "loss of face". Contrary, in the German society assurance as well as consulting are overwhelmingly positively accepted. Additionally, a considerable expected increase of the importance of internal auditing in Germany companies as an in-house consultant from an index of about 2.8 (today) to 3.6 within the coming five years (DIIR et al., 2014, p. 64, exh. 63) and a significantly higher Hofstede-index of indulgence in Germany (40) in comparison to China (24), might strengthen the assumption of more assurance than consulting in China. The lower indulgence score of China (24) suggests, that the Chinese culture favors more auditing, assurance and control than its German counterpart. The 7th hypothesis is therefore called as follows:

Hypothesis 7: The Chinese IAF is characterized by more assurance and less consulting than the German IAF.

3. Data and Methods

In order to empirically test our conceptual model, we rely on secondary data. Our empirical analysis is based on the 2015 CBOK-database, the most comprehensive global research base on the practice of internal auditing. The research, which is conducted and validated by the Institute of Internal Auditors Research Foundation (IIARF), is concerned with the worldwide current knowledge in internal auditing as well as current and future audit activities, IIA-Standards, and core competencies of internal auditors. The CBOK study contains data from over 100 countries and over 10,000 useful survey responses. The survey includes answers from CAE's, internal audit service providers, and internal audit staff. However, we merely include responses from CAE's as we assume that an IAF has only one CAE and that the CAEs have the best understanding of their IAF. This results in a total of n = 241 CAE responses, thereof 99 from Germany and 142 from China. The observations represent a broad spectrum of industries and sizes for companies with an IAF. Table 2 presents some descriptives about the companies.

Table 2. Descriptive Statistics: Company Characteristics

| Variable | Total Sample (n = 241) | | | Germany (n = 99) | | | China (n = 142) | | |
|-------------------------|---------------------------|-----------|-------------|---------------------|-----------|-------------|--------------------|-----------|-------------|
| | Mean | Std. Dev. | Min. / Max. | Mean | Std. Dev. | Min. / Max. | Mean | Std. Dev. | Min. / Max. |
| Listing | 0.2655 | 0.4425 | 0/1 | 0.1717 | 0.3791 | 0/1 | 0.3310 | 0.4722 | 0/1 |
| Multinational Companies | 0.3485 | 0.4775 | 0/1 | 0.5152 | 0.5023 | 0/1 | 0.2324 | 0.4239 | 0/1 |
| Number of Employees | 6,032 | 15,880 | 1/160,002 | 7,938 | 15,729 | 1/100,000 | 4,704 | 15,905 | 2/160,002 |

The size of the dataset has favorable consequences for the statistical power. First of all, because of the relatively large number of different IAF-observations, a broad variety of specific companies is given. The typical company in our study is not-listed (73.4%), operates nationally (65.1%), and has about 6,000 employees on average. We believe that our sample has a great representativeness and allows a generalizability of our results as well as a limitation of the “endogeneity problem” between cultural and politico-economic factors, because of the broad variety and a large number of observations, country-specific effects beside the Hofstede scores can be minimized. Endogeneity generally exists within research problems and their explanatory and problem-solving approaches. Especially in our modern world multi-causality is probably more frequent than mono-causality. Therefore, endogeneity, i.e. the correlation among explanatory variables or between explanatory variables and error terms, cannot be completely excluded. In addition, in the corporate governance research the “endogeneity problem” has been widely focused (cf. Wintokia et al., 2012). With regard to our paper the endogeneity question is, whether cultural and politico-economic factors independently from each other influence the IAF and whether they also influence themselves and if yes, how strong this influence is. In order to develop acceptable assumptions and models in our paper, despite the non-excludable endogeneity, we have considered the following aspects to reduce the impact of endogeneity between culture and politico-economic factors: A highly qualitative and the largest set of data from internal auditors around the world (IIA, CBOK) has been used for the research of this paper, thereof statistically acceptable sample sizes of 99 companies from Germany and 142 from China. Although Germany and China are top export countries, the companies in the sample are mostly operating nationally only without a listing. Nationally operating companies are usually traditionally managed and more focusing on cultural values than international ones. Furthermore, non-listed companies might also keep their national, even regional stakeholder relationships (and therefore values) more intensive than listed multinationals. 6,000 employees as the average company size in the sample might support the conclusion that within these large nationally operating companies the thousands of national employees will probably keep and transmit more national and cultural values than multinationals with almost no national and cultural relationship to their “guest country”. Especially the 2nd and 3rd aspect bring a heavy statistical weight of culture instead of politico-economic specifics into our research in order to address the above mentioned “endogeneity problem”. Because of the IIA protected respondent anonymity, no possible connection to further financial information etc. can be drawn.

3.2 Measures

In this section, we will present all variables that were utilized to measure the structure and work of the IAF, the national culture, and relevant control measures for the companies.

To guarantee a value-adding position of the IAF, the IIA, as the worldwide standard-setter for the

internal audit profession, defines so-called “Core Principles” to articulate internal audit effectiveness. The IIA explains this approach as follows: “For an internal audit function to be considered effective, all Core Principles should be present and operating effectively. How an internal auditor, as well as an internal audit activity, demonstrates achievement of the Core Principles may be quite different from organization to organization, but failure to achieve any of the Principles would imply that an internal audit activity was not as effective as it could be in achieving internal audit's mission.” (IIA, 2017a). Based on all ten Core Principles of effective internal auditing, we developed seven “Basic Requirements of an effective IAF” and identified corresponding questions from the CBOK-questionnaire and variables to measure the characteristics of the IAF using t-testing and regression analysis, and to compare the values in a German and in a Chinese setting. Appendix B represents a synopsis of Core Principles, CBOK-questions, hypothesizes, our variable names and the scales used.

In order to operationalize our empirical results, i.e. different fulfillment levels of the “Basic IAF-Requirements” as dependent variables, we have selected corresponding CBOK-questions, which should suit to these requirements at its best (see Appendix B). We are aware of the limitation, that one single CBOK-question cannot cover the entire dimension of one or even more “Basis IAF-Requirements”. On the other hand, we have intentionally refused alternative approaches, such as „factor score solution“, consisting of a combination of several CBOK-questions per one single variable of the “Basic Requirements” in order to reflect a broader picture of the requirement. We stucked to our “one dimensional approach“, because the chosen CBOK-questions satisfactorily corresponded with the “Basic Requirements of an effective IAF” (at least from our perspective) and an alternative derivation of factor scores for the “Basic Requirements” by a combination of several CBOK-questions would probably not achieve a higher result certainty. The calculation of the “correct” factor scores is presumably just as uncertain as the derivation by single CBOK-questions, given that an additive combination or a weighted/unweighted mean calculation of the factor score might also lead to deformations of the empirical results.

3.3 Institutional Factors - Control Variables

Based on prior literature, four well-established control variables were employed in this study to represent the institutional factors of every observation (respectively company) (e.g. Carcello et al., 2005; Goodwin-Stewart et al., 2006). The first two variables are the number of employees and multinationalism of the company. Both may influence the IAF characteristics of the company (e.g., Lenz et al., 2014). Multinationalism is coded 1 if the company operates multinational and 0 otherwise. The third control variable is listing, a dummy-variable which takes the value of 1 if the company is listed and 0 otherwise. Financial Industry is another dummy-variable to control for the financial sector. Listed companies and/or companies from the financial industry can be characterized as stricter regulated and tend to have a higher business risk, so that both

control variables are common ways to characterize the business environment of the IAF in a company (e.g. Carcello et al., 2005). All four variables are directly influencing the position and importance of an IAF and help to understand, if the control variables or the cultural environment have an effect on IAF characteristics. We try to include only those control variables that have a strong influence on the IAF and try to exclude additional variables (e.g. reporting lines, quality management program etc.) with a weaker impact.

3.3 Models

In a first step, we use t-tests to identify similarities and differences between the two groups (countries). Beside the t-testing, we use linear regressions as well as logistic and ordered logistic regressions (depending on the type of dependent variable) to test the effects of the different country-level cultural variables on our dependent IAF variables. We estimate different models, one per IAF characteristic (as a proxy for a specific dimension). All follow the same structure:

$$IAFcharacteristic_{i=n} = \beta_0 + \beta_1 \text{country dummy} + \beta_2 \text{listing} + \beta_3 \text{multinationality} + \beta_4 \text{financial industry} + \beta_5 \text{no.employees} + \varepsilon$$

4. RESULTS

We analyze the effects of culture on different characteristics of an IAF, which were developed using the Core Principles of the IIA and the data from the CBOK study. Using different models with the same structure of variables allows us to compare the effects of a culture on different IAF characteristics.

4.1 Univariate Results

As a first step, we use a paired-t-test to statistically indicate whether or not the difference between the two groups' averages (mean), a German and a Chinese group, reflects a "real" difference in the population from which the groups were sampled (see summary statistics in table 3 and details in Appendix C).

Table 3. Summary Statistics and Results for Chinese and German Subsample and TTest.

| Variable | Hypothesis | Scale | Germany | | China | | p |
|-----------------------|------------|-------|---------|--------|-------|--------|-----------|
| | | | Obs. | Mean | Obs. | Mean | |
| Findings_Corrections | H1 | 0/1 | 89 | 0.2584 | 113 | 0.1681 | 0.1176 |
| Audit_plan_riskbased | H2 | 0/1 | 93 | 0.8925 | 129 | 0.6202 | 0.0000*** |
| Follow up through IAF | H3 | 0/1 | 89 | 0.2135 | 109 | 0.4128 | 0.0027** |
| IIA_Standards | H4 | 0-12 | 99 | 6.4545 | 142 | 2.8873 | 0.0000*** |
| Business_improvements | H5 | 1-5 | 88 | 0.5682 | 106 | 0.3774 | 0.0078** |
| Aligned_with_Strategy | H6 | 1-6 | 90 | 2.5556 | 115 | 2.3304 | 0.1698 |
| Assur_cons_recode | H7 | 0/1 | 93 | 0.6989 | 127 | 0.7874 | 0.1893 |

The univariate results can be summarized and explained as following:

- 1) **Findings_Corrections:** The intervention in the IAF is not significant ($p = 0.1176$), but Germany has a slightly higher mean (0.2584 compared to 0.1681). Thus, we cannot accept H1. It seems that our explanatory approach, where the Chinese seniority principle (Confucianism) has a higher degree of ruler obedience (China: 11.8%, Germany: 2.8%) is not valid for our data. Nevertheless, the Chinese IAF is mostly implemented in governmentally managed state companies (but the German IAF mostly in private companies) and the Chinese IAF is often integrated in other departments such as Accounting, Controlling or Finance, whereas the German IAF is organizationally independent.
- 2) **Audit_plan_riskbased:** The IAF in Germany has a stronger risk-orientation ($p = 0.0000$ ***), thus we can accept H2. Reasons for this finding can be manifold, e.g. Chinese might act riskier than Germans with their reserved politico-economic focus. Chinese probably challenge the risk more often than Germans, as indicated in a significantly lower uncertainty avoidance index according to Hofstede (30) in comparison to Germany (65) and a corresponding relationship within

the insecurity avoidance indices according to House et al. (China: 4.94, Germany: 5.22).

- 3) **Follow up through IAF:** The Chinese follow-up system is more intensive ($p = 0.0027$ **), thus, we can also accept H3. Empirically, Chinese trust each other significantly less than Germans. A strict social control in China in order to safeguard socio-political harmony (based on the traditional concept of Legalism) as well as a Chinese IAF that wants to demonstrate its hierarchical position as "delegate of the principal" by controlling the auditees again might support this empirical result.
- 4) **IIA_Standards:** The German IAF has a better conformance rate with the Standards ($p = 0.0000$ ***), thus we can accept H4. Ideological aversion against the "West" might be an important reason, including the rejection of "foreign standards" (historically the anti-west "Ti-Yong"-concept). Furthermore, Chinese scope of internal auditing might differ from the internationally "official" scope (Standards), especially because of the impact of the state on the Chinese IAF.
- 5) **Business_improvements:** Business improvement is more relevant for the German IAF ($p = 0.078$ **), thus we can accept H5. The Chinese IAF is primarily the "extended arm of the state (e.g. tax

authorities)", the Chinese IAF focusses more on the control of people (Legalism), whereas the German IAF on processes and operative improvement, whereas Chinese internal auditors might have the image of being theoretical thinkers without practical experience.

- 6) **Aligned_with_Strategy:** The German IAF aligns more with the corporate strategy than the Chinese IAF ($p = 0.1698$, n.s.), we have to reject H6 and explain this interesting result as following: Although in H6 a very close alignment of the Chinese IAF to the corporate strategy was assumed, the German IAF aligns even a bit closer to corporate strategy than the Chinese IAF. Possible explanations could be: the German IAF might obtain a stronger organizational position with good "informational relationships" inside the company network, leading to a deeper inclusion of the German IAF into the corporate strategic process and therefore a better strategic alignment than the Chinese IAF.
- 7) **Assur_cons-recode:** The Chinese IAF focusses less on assurance than on consulting compared to the German IAF ($p = 0.1893$, n.s.), so that we also have to reject H7. Empirical results showed that the Chinese IAF focusses more on consulting than on assurance compared to the German IAF. Possible explanations can be a higher expertise and professionalization of the German IAF with regard to assurance due to several factors (e.g. longer "IAF-history" in Germany). Consulting in China might get "misused" or misunderstood as a less intense control function (instead of more "risky" internal audits with critical results for superiors endangering to "lose the face").

The univariate results indicate IAF-differences between Germany and China within all seven variables, thereof four differences at a significant level. These results seem to support our general hypothesis, that cultural specifics can be seen as major causes for these IAF-differences. To understand the country effects in more detail, we also apply a multivariate analysis with the described model from above.

4.2 Multivariate Results (Multiple Regression):

Our results (see table 4) represent interesting findings regarding the IAF's work in the different cultures.

The 1st model also identifies a weaker influence ("intervention by supervisor") to change given audit findings in China compared to the German companies (-0.6673^*). This result follows the univariate result not supporting H1. Consequently, Confucian seniority principle and Hofstede's power distance gap (Germany: 35 and China: 80) might have ambivalent effects on the IAF:

- the intervention in the IAF could be stronger in China (ref. to the univariate result) and
- it could also be stronger in Germany (ref. to the multivariate result).

The key to understanding this ambivalence might lie in the character of the management (management style). Authoritarian management such

as the "Confucian teacher" or the "Dictatorial manager" can either directly force internal auditors to alter their findings or indirectly expand soft pressure to get "the right audit results" prior to the report writing. On the other hand, the participative management style ("Democratic leader") as predominantly present in Germany, could also lead to reasonable direct interventions by superiors, e.g. if the reported (correct) audit findings should still not be disclosed in formal documents such as internal audit reports.

In our 2nd model, we find striking effects for a stronger risk-orientation of the German IAF, because the implementation of a risk-based audit plan for the country variable (dummy-variable for China) was statistically significantly negative (-1.8575^{***}), so that we can accept H2 (similarly to the univariate result). China has supposedly a higher "risk appetite" than Germany, that is also reflected by the rather different uncertainty avoidance-indices (Hofstede) for Germany (65) and China (30). Furthermore, two control variables indicate a generally significant (positive) risk-orientation in German and Chinese IAFs (listing status: 1.2999^{**} and financial industry: 1.6303^{***}). While listed companies and/or corporations in the financial sector tend to operate large-scale, globally and therefore with enormous risks for workforce, tax revenue and socio-political prosperity, national governments and legislatures require more and stricter governance control, risk management and internal auditing for these types of companies in comparison to less risky medium or even small-sized organizations, e.g. in the handicraft or service industry.

The 3rd model shows a positive significant effect of the Chinese country variable on the follow-up procedure by the IAF (1.2047^{***}) so that we can accept H3 (similarly to the univariate result). Follow up seems to be a necessary organizational, but also cultural, mean of control, obviously more in China than in Germany. Whether it compensates an inherent mistrust of the Chinese IAF towards its colleagues or whether it might correspond with an organizational position demonstrating the authority of the IAF in Chinese companies, remains open. Additionally, negative effects of the listing status (-0.8664^*) and the financial industry (-0.7352) were also identified. These negative effects seem to be reasonable. As argued above, legal and regulatory requirements for listed companies and financial institutions are stricter than for other types of companies, which has led to significantly larger, more effective IAFs, e.g. in Germany: 12,18 FTE of internal auditor capacity per 1,000 bank employees, whereas just 0,70 FTE of auditor capacity per 1,000 employees in industrial companies (DIIR et al., 2014, p. 55). Over the time bank organizations got used to rather formalized internal audits with effective, often automated follow up systems. Due to this follow up effectiveness, IAFs in listed companies and banks probably started reducing their follow up activities, because all initiated measures by the IAF have usually been realized on time without any need for a reminder.

Table 4. Multiple Regression Models.

| <i>Variables</i> | <i>IAF characteristics</i> | | | | | | |
|------------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
| <i>Hypothesis</i> | <i>H1</i> | <i>H2</i> | <i>H3</i> | <i>H4</i> | <i>H5</i> | <i>H6</i> | <i>H7</i> |
| <i>Model</i> | <i>Findings_Correction</i> | <i>Audit_plan_riskbased</i> | <i>Follow up through IAF</i> | <i>IIA_Standards</i> | <i>Business_improvements</i> | <i>Aligned_with_Strategy</i> | <i>Assur_cons_recode</i> |
| β_1 : Country_dummy China | -0.6673 (0.085) z = -1.72 | -1.8575 (0.000) z = -4.33 | 1.2047 (0.001) z = 3.26 | -1.0721 (0.000) z = -3.94 | -0.8260 (0.011) z = -2.55 | -0.6076 (0.037) z = -2.09 | 0.4453 (0.226) z = 1.21 |
| β_2 : Listing | 0.4034 (0.344) z = 0.95 | 1.2999 (0.003) z = 2.93 | -0.8664 (0.036) z = -2.10 | 0.0469 (0.877) z = 0.15 | 0.1324 (0.726) z = 0.35 | -0.4450 (0.166) z = -1.38 | 0.1996 (0.637) z = 0.47 |
| β_3 : Multinationality | 0.0169 (0.966) z = 0.04 | 0.3243 (0.443) z = 0.77 | 0.2703 (0.474) z = 0.72 | 0.8131 (0.004) z = 2.91 | -0.1696 (0.623) z = -0.49 | -0.0204 (0.947) z = 0.07 | -0.9807 (0.011) z = -2.54 |
| β_4 : Financial Industry | -0.2209 (0.640) z = -0.47 | 1.6303 (0.002) z = 3.05 | -0.7352 (0.101) z = -1.64 | 0.1968 (0.533) z = 0.62 | -0.1328 (0.729) z = -0.35 | -1.1927 (0.000) z = -3.49 | -0.5291 (0.173) z = 1.36 |
| β_5 : No_employees | -8.08e-06 (0.541) z = -0.61 | 2.03e-06 (0.837) z = 0.21 | 3.51e-06 (0.696) z = 0.39 | 8.42e-06 (0.224) z = 1.22 | 6.08e-06 (0.502) z = 0.67 | 7.09e-06 (0.457) z = 0.74 | 0.0000346 (0.136) z = 1.49 |
| Model | OLOG | LOG | OLOG | OLOG | OLOG | OLOG | OLOG |
| No. Obs. | 202 | 222 | 198 | 241 | 194 | 205 | 220 |
| LR chi2(5) | 4.05 | 44.45 | 16.39 | 38.67 | 7.98 | 21.11 | 14.58 |
| Prob. Chi2 | 0.5422 | 0.0000 | 0.0058 | 0.0000 | 0.1573 | 0.0008 | 0.0123 |
| (Pseudo) R2 | 0.0196 | 0.1729 | 0.0658 | 0.0455 | 0.0298 | 0.0375 | 0.0540 |

***, **, and *, suggest significant p-values at the p<0.01, 0.05, and 0.10 level respectively.

Our 4th **model** finds a strong negative significant effect for Chinese companies to follow the IIA standards less strictly (-1.0721***), which supports H4, also similarly to the univariate result. Reasons for that lower conformance rate of Chinese IAFs with the Standards can be manifold, reaching from an historical aversion against the “West” (and the Standards are predominantly set by the US-American IIA), the dominance of national Chinese auditing standards (even a non-acceptance of the IIA-Standards might be imaginable) until the possibility of a lack of knowledge of the international professional auditing Standards. The positive effects, if the companies are multinational (0.8131**), are reasonable, if we insinuate a permanent flow of experiences, opinions as well as working standards among all departments and employees in multinational companies.

The 5th **model** shows that business improvements are less important for Chinese IAFs compared to the German ones (-0.8260*), which is in accordance with H5 and also corresponds with the univariate result. This might demonstrate the old-fashioned administrative function of the Chinese IAF (close to the police as a control instrument) and far away from the modern approach of internal auditing which is “designed to add value and improve an organization’s operations” (IIA, 2016, p. 13) and which is therefore concentrated on business improvement as the major task of internal auditing. But the traditional and still existing Chinese “concept of harmony” gives the answer, that the perpetuation of the set regime and stability are more important than anything else, even more important than organizational, operative and financial improvements.

Our 6th **model** results in a negative significant effect (-0.6076*) for the Chinese country dummy, thus Chinese companies do less align their IAFs’ activities with the corporate strategy. Based on that result, we have to reject H6 (similarly to the univariate result). The Chinese IAF seems to be less connected within the strategic process than assumed. The corporate network of the German IAF is probably stronger, possibly because of the highly professional and independent role of the German IAF and its undisputed added value for the company. We also find a significant negative effect for the financial industry type here (-1.1927***), which is hard to understand. A very vague assumption could be the avoidance of any conflict of interest for the IAF in the corporate strategy process. The IAF should be fully objective and unbiased for any strategy audit in the future without any involvement in the prior strategy and planning process.

Our 7th **and last model** shows now significance effects of the country variable on the assurance or consulting focus of the IAF (0.4453 n.s.). Only one effect is significant: Multinationalism has a negative statistical effect on assurance activities of the IAF (-0.9807*). Without having additional data, a sufficient explanatory approach cannot be given.

Overall, our statistical analysis reveals several significant univariate differences (four variables out of seven) and several significant multivariate differences (six out of seven variables) between German and Chinese IAFs. In our understanding these results indicate a strong relationship between the effects of the national culture and the specific

activities and structure of the IAF and therefore a further confirmation for our general hypothesis, that cultural aspects are the major cause of IAF-differences.

5. CONCLUSION

General Results: In this study, we examine whether national culture has an effect on the structure and work of an IAF. In doing so, we use dummy-variables for German and Chinese IAFs and multiple effects of culture on factors that measure the IIA’s activities and alignment. For instance, our findings show that Chinese IAFs do less align their work with the strategy and do have a relatively weak focus on business improvement. However, especially a strong, permanent focus on business improvement is essential in order to appropriately fulfill the position of a modern IAF which adds value to a company. Overall, the differences between German and Chinese IAF’s significantly outweigh their similarities. Basic work processes such as planning or report writing are probably performed in German as well as in Chinese IAFs in a comparable general way, but looking at the details (e.g. risk-orientation in planning, independence at reporting), immediate differences – many of them culturally-influenced – will become visible.

The study suggests within the country culture discussion, that IAFs are not only influenced by the worldwide IIA-Standards, but also by their specific national culture. This is also confirmed by the general hypothesis about significant influence of cultural differences on the German and Chinese IAF. Our results follow prior general research results. Now, for the first time, the rather diametric cultures of Germany and China were projected on the IAFs in both societies empirically. With this study, we also followed the recommendation of prior papers investigating the associations of cultural effects on the practice of IAFs worldwide.

Concerning essential quality criteria, as stipulated in the Global Standards, the Chinese IAF performed significantly worse than the German IAF. This lower conformance rate with the Standards, which was also independently confirmed by Chinese audit experts, might lead to a lower effectiveness of the Chinese IAF.

Practical Implications: When auditing in China, e.g. within audit units in multinational subsidiaries in China, the results of the present study should be taken into consideration in order to achieve sufficient and acceptable audit results. Mitigating the cultural impact on the Chinese IAF, we suggest setting up international audit teams when auditing in China. Additionally, senior management at all levels should become embedded into the audit planning and operation. Audit findings and results should exhibit a high level of transparency and plausibility in order to avoid any suspicion of arbitrariness or manipulation. Critical issues should be openly discussed with no fear, but always trying to save the “faces” of all participants, especially of those being audited. Chinese CAEs in sole Chinese companies should consider more focus on continuing professional development (as required by the IIA-Standard no. 1230), including training and certification of auditors (e.g. CIA, CISA). Furthermore, a continuously running quality assurance and improvement program (as

stipulated in the Standard no. 1300), consisting mainly of internal and external quality assessments and their reporting (Standards 1311-1320), should be focused on. Additionally, the IAF should become organizationally more independent (ref. to Standard no. 1110).

Limitations: Our study is subject to different limitations. First, we use only responses from two countries (Germany and China). This might limit the generalizability of our results to other countries and other cultures. Second, we measure the characteristics of the IAF based on the Core Principles. We only use one variable to measure a specific aspect of the IAF without including a multi-factor approach. As explained before, score models have numerous problems (e.g. causality, weighting, etc.) so we do not see the concrete benefit. Third, future studies can measure the Core Principles with different variables to make another significant contribution to the literature.

Future Research: From a research perspective, our study is a starting point for future research in the area of cultural effects on the IAF. The effects we found of culture on the IAF could be relevant for quantitative, qualitative and experimental work. With the help of different models, we identify relevant significant effects for every cultural dimension, where positive and negative directions were possible. Our approach is the first step to investigate the

influence of soft (cultural) facts with a direct relationship to the IAF.

Although our approach is a new way to analyze and understand the influence of culture on internal auditing, numerous new avenues of research are possible. Beside other methodologies, e.g. experiments or case studies, a deeper analysis of cultural clusters could be a next step in research. In addition, studies on a firm-level could help to understand the challenges of multinational IAFs or the decision-making behind the international organization of IAFs. Furthermore, our results have a potential impact on the discussion of worldwide standards.

Further need for research might be focusing on the following issues:

- Empirical studies on the positive and negative effects of the culturally influenced differences (especially when influences deteriorate the effectiveness of the IAF),
- Including other potential measures for IAF characteristics and the IIA Core Principles, and

Adjustments of the Standards with regard to cultural specifics, corresponding to the adjustments of the Standards for small audit activities, cf. the practice guide "Assisting Small Internal Audit Activities in Implementing the IPPF Standards of Internal Auditing" (IIA, 2011).

REFERENCES

1. Abdolmohammadi, M., & Sarens, G. (2011). An investigation of the association between cultural dimensions and variations in perceived use of and compliance with internal auditing standards in 19 countries. *International Journal of Accounting*, 46, 365-389. <https://doi.org/10.1016/j.intacc.2011.09.004>
2. Alzeban, A. (2015). The impact of culture on the quality of IA: An empirical study. *Journal of Accounting, Auditing & Finance*, 30, 57-77. <https://doi.org/10.1177/0148558X14549460>
3. Bailey, J. A. (2016). Looking to the Future for Internal Audit Standards - Standards Updates, Usage, and Conformance [IIARF, CBOK].
4. Brown, P., Preiato, J., & Tarca, A. (2014). Measuring country differences in enforcement of accounting standards: An audit and enforcement proxy. *Journal of Business Finance & Accounting*, 1-2, 1-52. <https://doi.org/10.1111/jbfa.12066>
5. Carcello, J. V., Hermanson, D. R., Raghunandan, K. (2005). Factors Associated with U. S. Public Companies' Investment in Internal Auditing. *Accounting Horizons*, 19, 69-84. <https://doi.org/10.2308/acch.2005.19.2.69>
6. Chan, K. H., Lin, K. Z., & Lai Lan Mo, P. (2003). An empirical study on the impact of culture on audit-detected accounting errors. *Auditing: A Journal of Practice & Theory*, 2, 281-295.
7. China Internet Information Center (2015). Chinas Mittelschicht fehlt es an Risikobewusstsein, http://german.china.org.cn/business/txt/2015-07/15/content_36064483.htm (downloaded March 12, 2018).
8. Cooper, B. J., Leung, P., & Wong, G. (2006). The Asia Pacific literature review on internal auditing. *Managerial Auditing Journal*, 8, 822-834. <https://doi.org/10.1108/02686900610703769>
9. Dicle, Ü., & Usluer, T. (2016). The Relationship between Culture and Effectiveness of Internal Auditing, an Empirical Study. *International Journal of Contemporary Applied Sciences*, 3, 34-52.
10. DIIR, IIRÖ, SVIR (2014). 2014 Enquête - Die Interne Revision in Deutschland, Österreich und der Schweiz.
11. Eulerich, M., & Ratzinger-Sakel, N. (2017). The Effects of Cultural Dimension on the Internal Audit Function - A worldwide comparison of Internal Audit Characteristics, in: SSRN. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3053619
12. Ferguson, L. H. (2015). Big Four audit quality can differ widely - even at the same firm. Available at <https://www.marketwatch.com/story/big-four-audit-quality-can-differ-widely-even-at-the-same-firm-2015-11-17>
13. Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, 13.09.1970, 122-126. [From this article the transmission "The business of business is business" was deviated.]
14. Gannon, M. J., & Pillai, R. (2010). Understanding global cultures: Metaphorical journeys through 29 nations, clusters of nations, continents, and diversity, 4th ed.
15. Goodwin-Stewart, J., & Kent, P. (2006). The use of internal audit by Australian companies. *Managerial Auditing Journal*, 21, 81-101. <https://doi.org/10.1108/02686900610634775>
16. Hall, E., & Hall, M. (1990): Understanding cultural differences.

17. Hell, R. E., & Wang, D. (2009). Cultural impact on the audit-planning phase. An empirical study in China and France.
18. Hofstede Insights (2018): Compare Countries. Available at <https://www.hofstede-insights.com/product/compare-countries>
19. Hofstede, G. (1994): The business of international business is culture. *International Business Review*, 1, 1-14. [https://doi.org/10.1016/0969-5931\(94\)90011-6](https://doi.org/10.1016/0969-5931(94)90011-6)
20. Hofstede, G. (1980). Culture's consequences: International differences in work-related values.
21. Holtbrügge, D., & Welge, M. K. (2015). *Internationales Management*, 6th ed.
22. House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, Leadership, and Organizations. The GLOBE study of 62 societies.*
23. IIA (2017a). Core Principles. Available at <https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Core-Principles-for-the-Professional-Practice-of-Internal-Auditing.aspx>
24. IIA (2017b). International Standards for the Professional Practice of Internal Auditing (Standards). Available at <https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Standards.aspx>
25. IIA (2017c). Definition of Internal Auditing. Available at <https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Definition-of-Internal-Auditing.aspx>
26. IIA (2011). Practice Guide: Assisting Small Internal Audit Activities in Implementing the International Standards for the Professional Practice of Internal Auditing
27. IIA (2015). Common Body of Knowledge (CBOK). Available at <https://global.theiia.org/iiaif/pages/common-body-of-knowledge-cbok.aspx>
28. Institute for Comparative Survey (2015). World Values Survey. Available at <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>
29. Lee, Y., Hemmert, M., & Kim, J. (2014). What drives the international ownership strategies of Chinese firms? The role of distance and home-country institutional factors in outward acquisitions. *Asian Business & Management*, 13, 197-225. <https://doi.org/10.1057/abm.2014.5>
30. Li, Y. (2007). A comparative study about internal auditing approach between Germany and China. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.558.9797&rep=rep1&type=pdf>
31. Nakano, C. (2007). The Significance and Limitations of Corporate Governance from the Perspective of Business Ethics: Towards the Creation of an Ethical Organizational Culture. *Asian Business & Management*, 6, 163-178. <https://doi.org/10.1057/palgrave.abm.9200216>
32. O'Donnell, E., & Prather-Kinsey, J. (2010). Nationality and differences in auditor risk assessment: A research note with experimental evidence. *Accounting, Organizations and Society*, 5, 558-564. <https://doi.org/10.1016/j.aos.2010.01.003>
33. Rothlauf, J. (2012): *Interkulturelles Management*, 4th ed. <https://doi.org/10.1524/9783486716733>
34. Sarens, G., & Abdomohammadi, M. (2009). Cultural Dimension and Professionalism and Uniformity of Internal Auditing Practice. Available at <https://ssrn.com/abstract=1529033>
35. Schwartz, S. (1994). Beyond individualism and collectivism: New cultural dimensions of work values, in: Kim, U., Triandis, H. C., Kagitçibasi, C., Choi, S. C., & Yoon, G. (Eds.). *Individualism and collectivism: Theory, method and applications*, 85-119.
36. Schwarzer, C., & Kim, M. (1984). Adaptation of the Korean form of the Test Anxiety Inventory: A research note, in: van der Ploeg, H. M., Schwarzer, R., & Spielberger, C. D. (Eds.), *Advances in test-anxiety research* (Vol. 3, 13-68).
37. Simunic, D. A., & Ye, M., & Zhang, P. (2017). The joint effects of multiple legal system characteristics on auditing standards and auditor behavior. *Contemporary Accounting Research*, 1, 7-38. <https://doi.org/10.1111/1911-3846.12242>
38. Stahl, G. K., & Tung, R. L. (2015): Towards a more balanced treatment of culture in international business studies: The need for positive cross-cultural scholarship. *Journal of International Business Studies*, 46, 391-414. <https://doi.org/10.1057/jibs.2014.68>
39. The Telegraph (2015). China flood programme aims to save lives and money. Available at <https://www.telegraph.co.uk/news/world/china-watch/business/china-flooding-sponge-city> (downloaded March 12, 2018).
40. Trompenaars, F., & Hampden-Turner, C. (1993). *Riding the waves of culture.*
41. Wang, D., & Guo, Y. (2009). Study on the internal audit for listed companies. *International Journal for Business and Management* 7, 52-55.
42. Wintokia, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the Dynamics of Internal Corporate Governance. *Journal of Financial Economics*, 3, 581-606. <https://doi.org/10.1016/j.jfineco.2012.03.005>
43. Zarzeski, M. (1996). Spontaneous harmonization effects of culture and market forces on accounting disclosure practices. *Accounting Horizons*, 1, 18-38.

APPENDICES

Appendix A. Empirical Studies of cultural Influences on the IAF

| <i>Author</i> | <i>Title</i> | <i>Year</i> | <i>Empirical basis (sample size)</i> | <i>Reasoning for positive/negative influence on the IAF</i> |
|--------------------------|---|-------------|---|---|
| Dicle / Usluer | The relationship between culture and effectiveness of internal auditing | 2016 | - 192 participants from 46 countries - 76 participants from Turkey and 22 from the USA | <u>positive influence on the IAF by:</u> - a strong position of the Chief Audit Executive (CAE) is important for the effectiveness of the function <u>negative influence on the IAF by:</u> - masculinity and power distance |
| Alzeban | The impact of culture on the quality of internal audits/ing | 2015 | - 67 participants from Saudi-Arabia | <u>positive influence on the IAF by:</u> - individualism <u>negative influence on the IAF by:</u> - power distance - uncertainty avoidance - collectivism |
| Abdolmo-hammadi / Sarens | An investigation of the association between cultural dimensions and variations in perceived use of and compliance with internal audit standards in 19 countries | 2011 | - 2,783 participants from 19 countries - 52.7% USA, no participants from Asia | <u>positive influence on the IAF by:</u> - assertiveness and human orientation lead to high compliance with the Standards <u>negative influence on the IAF by:</u> - uncertainty avoidance causes a weak compliance with the Standards |
| Sarens / Abdolmohammadi | Cultural dimension and professionalism and uniformity of internal audit practice | 2009 | - 1,961 participants from 32 countries | <u>positive influence on the IAF by:</u> - professionalism by less uncertainty avoidance, collectivism and assertiveness and a codified civil law culture (instead of an uncoded common law culture) - uniformity by less power distance and collectivism and a weak economic development no correlation of professionalism and uniformity of the IAF and gender egalitarianism, future orientation, - performance orientation and - human orientation |

Appendix B. Synopsis of Basic IAF-Requirements, CBOOK-Questions and Variables

| "Basic Requirements" of an effective IAF (referencing to the Core Principles no. 1-10) | CBOOK-Questions | Hypothesis | Variable | Scale |
|--|---|-------------------|-----------------------|--------------|
| <u>Independence:</u> Demonstrates integrity (no. 1) and is objective and free from undue influence (no. 3). | <u>Q81:</u> During your internal audit career, have you experienced a situation where you were directed to suppress, or significantly modify, a valid internal audit finding or report? | H1 | Findings_Correction | 0/1 |
| <u>Risk-orientation:</u> Provides risk-based assurance (no. 8). | <u>Q63:</u> What resources do you use to establish your audit plan? | H2 | audit_plan_riskbased | 0/1 |
| <u>Follow up:</u> Demonstrates quality and continuous improvement (no. 6). | <u>Q67:</u> If an audit report has findings that need corrective action, who has the primary responsibility to monitor that corrective action has been taken? | H3 | Follow up through IAF | 0/1 |
| <u>Standard-Conformance:</u> Demonstrates competence and due professional care (no. 2), is appropriately positioned and adequately resourced (no. 5), demonstrates quality and continuous improvement (no. 6) and communicates effectively (no. 7). | <u>Q137:</u> Is your organization in conformance with the Standards? | H4 | IIA_Standards | 0-12 |
| <u>Business Improvement:</u> Promotes organizational improvement (no. 10). | <u>Q124:</u> In your opinion, which are the five internal audit activities that bring the most value to your organization? | H5 | business_improvements | 1-5 |
| <u>Strategic IAF-Alignment:</u> Aligns with the strategies, objectives, and risks of the organization (no. 4). | <u>Q70:</u> To what extent do you believe your internal audit department is aligned with the strategic plan of your organization? | H6 | Aligned_with_Strategy | 1/6 |
| <u>Auditing Focus (Assurance versus Consulting):</u> Is insightful, proactive, and future-focused (no. 9). | <u>Q52:</u> How are internal audit resources at your organization divided between assurance and consulting? | H7 | findings_corr_auditee | 0 / 1 |

Appendix C. Univariate Results (Two-sample t testing with equal variances)

C.1. Findings_Correction, by(china_dummy)

| <i>Group</i> | <i>Obs.</i> | <i>Mean</i> | <i>Std. Err.</i> | <i>Std. Dev.</i> | <i>95% Conf. Interval</i> | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 89 | 0.2584 | 0.0467 | 0.4403 | 0.1657 | 0.3512 |
| 1 (China) | 113 | 0.1681 | 0.0353 | 0.3757 | 0.0981 | 0.2382 |
| combined | 202 | 0.2079 | 0.0286 | 0.4068 | 0.1515 | 0.2644 |
| diff | | 0.0903 | 0.0574 | | -0.0229 | 0.2036 |

diff = mean(0) - mean(1) t = 1.5716

Ho: diff = 0 degrees of freedom = 200

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0

Pr(T < t) = 0.9412 Pr(|T| > |t|) = 0.1176 Pr(T > t) = 0.0588

C.2. Audit_plan_riskbased, by(china_dummy)

| <i>Group</i> | <i>Obs.</i> | <i>Mean</i> | <i>Std. Err.</i> | <i>Std. Dev.</i> | <i>95% Conf. Interval</i> | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 93 | 0.8925 | 0.0323 | 0.3115 | 0.8283 | 0.9566 |
| 1 (China) | 129 | 0.6202 | 0.0429 | 0.4872 | 0.5353 | 0.7050 |
| combined | 222 | 0.7342 | 0.0297 | 0.4427 | 0.6757 | 0.7930 |
| diff | | 0.2723 | 0.0575 | | 0.1590 | 0.3856 |

diff = mean(0) - mean(1) t = 4.7357

Ho: diff = 0 degrees of freedom = 220

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0

Pr(T < t) = 1.0000 Pr(|T| > |t|) = 0.0000 Pr(T > t) = 0.0000

C.3. Follow up through IAF, by(china_dummy)

| <i>Group</i> | <i>Obs.</i> | <i>Mean</i> | <i>Std. Err.</i> | <i>Std. Dev.</i> | <i>95% Conf. Interval</i> | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|---------|
| 0 (Germany) | 89 | 0.2135 | 0.0437 | 0.4121 | 0.1267 | 0.3003 |
| 1 (China) | 109 | 0.4128 | 0.0474 | 0.4946 | 0.3189 | 0.5068 |
| combined | 198 | 0.3232 | 0.0333 | 0.4689 | 0.2575 | 0.3889 |
| diff | | -0.1994 | 0.0656 | | -0.3288 | -0.0670 |

diff = mean(0) - mean(1) t = -3.0375

Ho: diff = 0 degrees of freedom = 196

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0

Pr(T < t) = 0.0014 Pr(|T| > |t|) = 0.0027 Pr(T > t) = 0.9986

C.4. IIA_Standards, by(china_dummy)

| <i>Group</i> | <i>Obs.</i> | <i>Mean</i> | <i>Std. Err.</i> | <i>Std. Dev.</i> | <i>95% Conf. Interval</i> | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 99 | 6.4545 | 0.4878 | 4.8535 | 5.4865 | 7.4226 |
| 1 (China) | 142 | 2.8873 | 0.3863 | 4.6036 | 2.1236 | 3.6511 |
| combined | 241 | 4.3527 | 0.3231 | 5.0162 | 3.7162 | 4.9892 |
| diff | | 3.5672 | 0.6164 | | 2.3530 | 4.7815 |

diff = mean(0) - mean(1) t = 5.7873

Ho: diff = 0 degrees of freedom = 239

Ha: diff < 0 Ha: diff != 0 Ha: diff > 0

Pr(T < t) = 1.0000 Pr(|T| > |t|) = 0.0000 Pr(T > t) = 0.0000

C.5. Business_improvements, by(china_dummy)

| Group | Obs. | Mean | Std. Err. | Std. Dev. | 95% Conf. Interval | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 88 | 0.5682 | 0.0531 | 0.4982 | 0.4626 | 0.6737 |
| 1 (China) | 106 | 0.3774 | 0.0473 | 0.4870 | 0.2836 | 0.4712 |
| combined | 194 | 0.4639 | 0.0359 | 0.5000 | 0.3931 | 0.5347 |
| diff | | 0.1908 | 0.0710 | | 0.0508 | 0.3308 |

diff = mean(0) - mean(1) t = 2.6888
 Ho: diff = 0 degrees of freedom = 192
 Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
 Pr(T < t) = 0.9961 Pr(|T| > |t|) = 0.0078 Pr(T > t) = 0.0039

C.6. Aligned_with_Strategy, by(china_dummy)

| Group | Obs. | Mean | Std. Err. | Std. Dev. | 95% Conf. Interval | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 90 | 2.5556 | 0.1096 | 1.0398 | 2.3378 | 2.7733 |
| 1 (China) | 115 | 2.3304 | 0.1163 | 1.2476 | 2.1000 | 2.5610 |
| combined | 205 | 2.4293 | 0.0813 | 1.1636 | 2.2690 | 2.5895 |
| diff | | 0.2251 | 0.1634 | | -0.0971 | 0.5473 |

diff = mean(0) - mean(1) t = 1.3777
 Ho: diff = 0 degrees of freedom = 203
 Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
 Pr(T < t) = 0.9151 Pr(|T| > |t|) = 0.1698 Pr(T > t) = 0.0849

C.7. Assur_cons_recode, by(china_dummy)

| Group | Obs. | Mean | Std. Err. | Std. Dev. | 95% Conf. Interval | |
|--------------|-------------|-------------|------------------|------------------|---------------------------|--------|
| 0 (Germany) | 93 | 0.6989 | 0.0502 | 0.4842 | 0.5992 | 0.7986 |
| 1 (China) | 127 | 0.7874 | 0.0442 | 0.4981 | 0.7000 | 0.8749 |
| combined | 220 | 0.7500 | 0.0332 | 0.4931 | 0.6845 | 0.8155 |
| diff | | -0.0885 | 0.0672 | | -0.2209 | 0.0439 |

diff = mean(0) - mean(1) t = -1.3169
 Ho: diff = 0 degrees of freedom = 218
 Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
 Pr(T < t) = 0.0946 Pr(|T| > |t|) = 0.1893 Pr(T > t) = 0.9054