

Rosentreter, Sandra Julia; Singh, Penny; Schönbohm, Avo

Working Paper

Research output of management accounting academics at Universities of Applied Sciences in Germany and Universities of Technology in South Africa: A comparative study of input determinants

Working Paper, No. 77

Provided in Cooperation with:

IMB Institute of Management Berlin, Berlin School of Economics and Law

Suggested Citation: Rosentreter, Sandra Julia; Singh, Penny; Schönbohm, Avo (2013) : Research output of management accounting academics at Universities of Applied Sciences in Germany and Universities of Technology in South Africa: A comparative study of input determinants, Working Paper, No. 77, Hochschule für Wirtschaft und Recht Berlin, IMB Institute of Management Berlin, Berlin

This Version is available at:

<https://hdl.handle.net/10419/88922>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



IMB Institute of Management Berlin

Research Output of Management Accounting Academics at Universities of Applied Sciences in Germany and Universities of Technology in South Africa

A Comparative Study of Input Determinants

Authors: Sandra Rosentreter, Penny Singh, Avo Schönbohm

Working Papers No. 77

12/2013

Editors:

Carsten Baumgarth | Gert Bruche |

Christoph Dörrenbächer | Friedrich Nagel

RESEARCH PAPER

**Research Output of Management Accounting Academics at
Universities of Applied Sciences in Germany and Universities of
Technology in South Africa.**

A Comparative Study of Input Determinants

Sandra Rosentreter

Penny Singh

Avo Schönbohm

Paper No. 77, Date: 12/2013

Working Papers of the
Institute of Management Berlin at the
Berlin School of Economics and Law (HWR Berlin)
Badensche Str. 50-51, D-10825 Berlin

Editors:

Carsten Baumgarth

Gert Bruche

Christoph Dörrenbächer

Friedrich Nagel

ISSN 1869-8115

- All rights reserved -

Biographic note:

Sandra Julia Rosentreter, MTech, is currently employed as an Academic Quality and Development Researcher at Durban University of Technology (DUT) in South Africa. Previously, she finished her master's degree in Cost and Management Accounting, graduated cum laude and received the Dean's Merit Award for Academic Excellence of the Faculty of Accounting and Informatics at DUT. She also holds a BA in Business Administration from the Baden-Württemberg Cooperative State University (DHBW) in Germany. Her research interests lie in the field of educational development, national and international education, and training policies as well as human resource development. sandrar@dut.ac.za

Professor **Penny Singh**, PhD, is Co-ordinator of Research in the Faculty of Accounting and Informatics at Durban University of Technology (DUT) in Durban, South Africa. She holds a doctoral degree from the University of KwaZulu-Natal in South Africa. Professor Singh is actively involved in the supervision of master's and doctoral studies at the DUT and the examination of postgraduate studies at South African and international universities. She is widely published, serves on editorial boards and is a reviewer for several peer-reviewed international journals and research foundations. pennysin@dut.ac.za

Prof. Dr. **Avo Schönbohm** is Business Administration Professor, with focus on Management Accounting at the Berlin School of Economics and Law. Before joining the university in 2010, he had worked for several years in various assignments in the industry. His latest responsibility was Vice President for strategic planning at Voith Paper GmbH & Co. KG. He studied Business Administration at the University of Mannheim and the ESSEC Business School, and earned his PhD while working as an assistant professor at the Technical University Kaiserslautern. avo.schoenbohm@hwr-berlin.de

Sandra Julia Rosentreter, MTech, ist derzeit als Academic Quality and Development Researcher bei der Durban University of Technology in Südafrika angestellt. Davor absolvierte sie einen Masterstudiengang zum Master of Technology in der Fachrichtung Cost and Management Accounting an der Durban University of Technology. Zudem studierte sie Business Administration an der Dualen Hochschule Baden-Württemberg. Ihre Forschungsinteressen liegen in den Bereichen der Bildungsentwicklung, nationalen und internationalen Bildungspolitik sowie Personalentwicklung. sandrar@dut.ac.za

Professor **Penny Singh**, PhD, ist Co-ordinator of Research der Faculty of Accounting and Informatics an der Durban University of Technology (DUT) in Durban (Südafrika). Sie promovierte an der University of Kwa-Zulu Natal, ebenfalls in Südafrika. Professor Singh betreut sowohl Masterstudierende als auch Doktoranden an der DUT und evaluiert Masterarbeiten und Dissertationen von Studierenden südafrikanischer und internationaler Universitäten. Sie hat vielfach publiziert, ist Mitglied mehrerer Redaktionsausschüsse und ist Gutachter für verschiedene, international akkreditierte Fachzeitschriften und Forschungseinrichtungen. pennysin@dut.ac.za

Prof. Dr. **Avo Schönbohm** ist seit 2010 Professor für Allgemeine Betriebswirtschaftslehre und Controlling an der Hochschule für Wirtschaft und Recht Berlin. Er hat mehrere Stationen in der Industrie absolviert. In seiner letzten Position verantwortete er die strategische Planung der Voith Paper GmbH & Co. KG. Er studierte Betriebswirtschaftslehre an der Universität Mannheim und der ESSEC Business School. Seine Promotion absolvierte er an der Technischen Universität Kaiserslautern. avo.schoenbohm@hwr-berlin.de

Abstract:

German Universities of Applied Sciences and South African Universities of Technology are vocation-oriented higher education institutions with a particular focus on applied research. Due to comparable educational tasks and research focus of the institutions in both countries, this paper presents findings of a study that investigated factors influencing research output of management accounting academics in Germany and South Africa. Academics in both countries showed a positive attitude towards research and obtaining postgraduate qualifications. Findings revealed that time available for research, and institutional support systems, influenced academics in both countries. Although there was only a difference of half a unit in the overall average of published articles between the two countries, there were big differences in the publication of articles in accredited and non-accredited journals.

Zusammenfassung:

Deutsche Fachhochschulen und südafrikanische Universities of Technology sind praxisorientierte Hochschulen, die sich auf Anwendungsforschung konzentrieren. Wegen vergleichbarem Bildungsauftrag und gleichem Forschungsfokus der Institutionen in beiden Ländern, beschäftigt sich dieses Paper mit Einflussfaktoren auf die Forschungsaktivität von Controlling Akademikern in Deutschland und Südafrika. Neben Einflussfaktoren, wie z.B. Zeit, Qualifikationsprofil, Struktur der Masterstudiengänge und der persönlichen Einstellung der Akademiker zum Thema Forschung, wurde die Rolle der staatlichen Forschungsförderung beleuchtet. Die Forschungsaktivität deutscher und südafrikanischer Controlling Akademiker wird von ähnlichen Einflussfaktoren bestimmt. Ein großer Unterschied zeigte sich in den Beiträgen von südafrikanischen und deutschen Akademikern zu akkreditierten und nicht akkreditierten Fachzeitschriften.

Table of contents

1.	Introduction	6
2.	Background.....	7
	2.1.Universities of Applied Sciences and Universities of Technology.....	7
	2.2.Funding research.....	9
3.	Research methodology.....	10
4.	Findings	12
	4.1.Age and qualification level of academics	12
	4.2.Research output	14
	4.3.Importance of publishing research in journals.....	16
	4.4.Supervision of postgraduate students	18
	4.5.Co-operation for publications	19
	4.6.Other influencing factors on research	20
	4.7.Additional findings	21
	4.7.1.Teaching versus research.....	21
	4.7.2.Master’s program structure	22
5.	Conclusions	24
	References	26
	List of figures and tables.....	30
	Working Papers des Institute of Management Berlin an der Hochschule für Wirtschaft und Recht Berlin	31

1. Introduction

This paper draws on a study that investigated research output of cost and management accounting academics at Universities of Applied Sciences (Fachhochschulen) in Germany and Universities of Technology in South Africa. The New South African Funding Framework (SA, 2004) provides funding to higher education institutions based on research outputs. It is therefore a matter of concern that only a few institutions in South Africa (SA) account for the national research output (De Villiers and Steyn, 2009:43), and that the research output of accountancy academics in South Africa seems to lag far behind those of their counterparts abroad (West, 2006:121; see also Chan, Chen and Cheng, 2005). Van der Schyf (2008:1) concurs that departments of accounting at South African universities have established a culture that is removed from research, being in contrast to the nature of universities. South African Universities of Technology (UoTs) seem to lag behind traditional universities with regard to research output as a consequence of a lack of emphasis on postgraduate qualifications and published research in the pre-merged technikons and the merged institutes of technology (Singh, 2011:1191).

The above also seems to apply to German Universities of Applied Sciences (UoAs) as Lepori and Kyvik (2010:300) confirm that UoAs only account for 4.1% of the total research expenditure in the public higher education sector, thus indicating a low contribution to higher education research. They add that UoAs face challenges to develop research in a context where universities and public research institutes have long established research traditions. Macharzina, Wolf and Rohn (2004:337) tried to evaluate quantitative German research output in business administration which embraces research output in management accounting. They ranked the institutions according to the number of publications in selected journals. They found that not a single UoA was listed among the 101 higher education institutions investigated.

Given the above, this paper investigates the determinants of research output of cost and management accounting academics at German UoAs and SA UoTs, the academics' qualifications, and their quantitative research output. The role of each country's research funding policy on academics' research output has been considered, and other influencing factors on research output such as time, supervision, and support systems have been analysed.

An online-based questionnaire was administered to academic staff in cost and management accounting at four SA UoTs and six German UoAs, of which 35 were returned. In a bid to increase participation, two more academics (from institutions which were already part of the sample) led to an increase in participation by these institutions with 46.7% of South African respondents working for the Durban University of Technology, and 33.3% working for the Berlin School of Economics of Law. While these shares of increased participation could possibly have caused a bias in terms of representation, a significant value for Cronbach's alpha was observed, which indicates a high degree of internal consistency, as well as reliability and validity of this study's results.

The data analysis revealed that time available for research, and institutional support systems influences academics in both countries. SA respondents show a lack of qualifications among their staff which reflects on their research skills and therefore, output. Although there was only a difference of half a unit in the overall average of published articles between the two countries, there were big differences in the publication of articles in accredited and non-accredited journals.

This paper commences with a presentation of the study's background, which is the historical development of SA UoTs and German UoAs. The introduction of the current higher education landscapes and the research funding policy in both countries form the latter part of the study's background. This is followed by a discussion of the research design and methodology employed. Hypotheses underlying this study are illuminated and the most significant findings are presented. This article concludes with a summary and implications for further research.

2. Background

2.1. Universities of Applied Sciences and Universities of Technology

The present German public higher education sector is dominated by three kinds of higher education institutions, namely: universities, Universities of Applied Sciences, and colleges of music, art, or film. There are also special types of German higher education institutions, which are vocational colleges (Berufsakademien). These higher education institutions offer study programs in co-operation with partners in business. The Berlin School of Economics and Law (Hochschule für Wirtschaft und Recht Berlin) has integrated such a vocational college under the Department of Cooperative Studies. In some German states these vocational colleges are granted the status of a University of Applied Sciences.

UoAs are the outcome of the endeavours of the German authorities to deal with a dramatic increase in student numbers in the 1960s (Ash, 2006:254; Onestini and Scheck, 2004:151). On this account, about 100 UoAs were founded (Wolter, 2004:76). This was supposed to unburden the research-oriented universities from the high number of students (Kehm, Michelsen and Vabo, 2010:230). UoAs were typically occupation-related, requiring shorter periods of study (Wolter, 2004:79), as opposed to universities which focused on preparing students for self-study (Dysthe and Webler, 2010:258) according to the Humboldtian idea.

Although the UoAs were initially not intended to carry out research, research at UoAs has nowadays been integrated into institutional strategies, and they are explicitly recognised as research actors on a national level (Lepori and Kyvik, 2012:301). Today, UoAs offer application-based research that provides transfer of knowledge and technology to companies (see Sichler and Heimerl, 2012). The development of a research mission at these institutions has been interpreted differently by various authors. Burgess (1972:105) and Neave (1979:134-159) state that the development of research at

UoAs was driven by a so-called academic drift, which was an attempt by UoAs to become more similar to universities, thus pushing towards a unitary higher education system. Heggen, Karseth and Kyvik (2010:47) disagree, and state that the development of research at UoAs was driven by the need for improving professional practice in occupations for which universities do not train students. Jongbloed (2010:104) counters that the need to strengthen the role of UoAs as regional knowledge providers was a reason for the development of research at UoAs.

Besides their application-oriented research, UoAs also cater for a more practice-oriented education by offering scientifically-based education, tailored to the demands of professional life (Higher Education, 2013). The German Federal Ministry of Education (Bundesministerium für Bildung und Forschung [BMBF], 2013) explains that UoAs offer a wide range of subjects in the engineering, natural, economic, social, and health sciences.

Similar to Germany, South Africa's higher education landscape is divided into three kinds of higher education institutions, namely universities, Universities of Technology, and comprehensive universities (Council on Higher Education [CHE], 2013).

UoTs have their roots in former technikons. The Department of National Education (South Africa, 1988:22) explains that a technikon is defined as a higher education institution whose main educational task is to provide education and training in order to supply the labour market with mid and high-level personnel who possess particular skills and technological and practical knowledge to ensure that they practice their occupation effectively and productively. In an attempt to overcome a complex and discriminatory higher education system, which was a result of more than two decades of apartheid policies, and in order to reduce duplication between institutions closely located to one another, mergers in higher education were introduced in SA's higher education system (Goldman, 2011:38). A merger's meaning embraces the combination of historically disadvantaged institutions with historically advantaged institutions (Wyngaard and Kapp, 2004:186 Hay and Fourie, 2002; see also Habib and Perekh, 2000). Technikons were usually considered a second or third choice after universities, or when membership to international university associations was denied, as technikons were not known as degree-awarding institutions of higher education (CHE, 2010:7-8). This led to a change in designation of technikons to UoTs to enable them to place themselves firmly in the minds of government, industry, parents, and students as regular institutions of higher education (CHE, 2010:8).

Like German UoAs, SA UoTs were never meant to carry out research (Graham, 2002:60), but with the shift in designation from technikon to Institute of Technology and finally to University of Technology, the focus shifted from teaching to applied research, the development of research capacity, postgraduate qualifications, and published research (Singh, 2011:1191). These changes also include the right of UoTs to confer a doctorate, whereas German UoAs are not allowed to award a doctoral degree. Nowadays, UoTs are career-oriented institutions which concentrate on problem-solving in their research and engagement with the community (Backhouse, 2009:3).

Given the above, German UoAs and SA UoTs not only have the same educational task, which is the provision of a career-oriented education, but they also focus on an application-oriented research task. However, comparative studies measuring research output in both countries show a low contribution of German UoAs and SA UoTs to national and international research output.

Chan, Chen, and Cheng (2005), and West (2006) concluded that SA research output in accounting has yet to increase significantly in order to keep up with international research output in the field. SA UoTs in particular seem to occupy the lower ranks when compared to research output of other SA higher education institutions (Singh, 2011; De Villiers and Steyn, 2009). Niewouldt and Wilcock (2005), and Van der Schyf (2008) found that research output in accounting at SA higher education institutions is poor in comparison to research output in other business related disciplines.

Lepori and Kyvik (2010:300) ranked research expenditure in the German higher education sector and found that German UoAs contribute little to German higher education research. Sichler and Heimerl (2012:100) state that research output at UoAs in the social and business sciences has yet to reach the level of research output in the technical disciplines, such as engineering. Macharzina et al. (2004:350-352) showed in their study that UoAs occupy ranks lower than 101 when ranking research output of German higher education institutions according to the number of publications in selected journals in the field of business administration.

2.2. Funding research

The SA and German government try to enhance higher education research by developing different research funding policies.

The German Ministry of Education and Research (FRG, 2010:22) explains that both central and local government have the opportunity to fund German research in their respective areas of responsibility (Wixforth, 2012). Lepori and Kyvik (2010:304) state that specific funding programmes of the Federal Ministry for Education and Research play a significant role in funding research at UoAs. The programmes currently in place are: The FHprofUnt (FHprofUnt - Forschung an Fachhochschulen mit Unternehmen [FHprofUnt – Research at UoAs in co-operation with enterprises], 2013), ProfilINT (Förderlinie ProfilINT [Funding ProfilINT], 2013), SILQUA-FH (Soziale Innovationen für Lebensqualität im Alter [Social innovations for life quality for the elderly], 2013), and IngenieurNachwuchs (IngenieurNachwuchs [Young engineers], 2013).

Industry is an important player in the German research landscape, with more than two thirds of annual funding invested in research coming from the private sector. These funds are spent both on companies' own research, as well as on joint projects with partners from higher education such as UoAs (FRG, 2010:21).

Jaeger and In der Smitten (2012:40) state that the 16 local governments of the Länder fund their higher education institutions on the basis of a ‘three pillar principle’, where the first pillar provides a fixed amount for running costs and necessary investments for the institution. The second pillar is of a performance-oriented nature and provides funding based on output criteria such as teaching, research, organisation, human resources/diversity, and further education (Jaeger and In der Smitten, 2012:27-28). They explain that it is difficult to determine the extent of funding linked to performance-oriented indicators in the different Länder. Berlin, for example, introduced a performance-oriented funding pillar in 2002 that allocates funds in the areas of teaching (60%), research (20%) and gender equality (20%) (Leszczensky and Orr, 2004). The awarding of the research grant is further determined by internationality, publications, and gender equality (Jaeger and In der Smitten, 2009:9). Funding for publications is allocated according to the ratio of the number of publications to the number of lecturers. A provision for innovations made by the Länder for their higher education institutions completes the three pillar principle.

Different research funding regulations in the German Länder make it difficult to point out a common research funding principle applicable to all UoAs in Germany, whereas the South African research funding policy is very specific and applicable for every type of higher education institution. Higher education research is provided according to a funding formula introduced in 2004 by the Department of Education (South Africa, 2004). Figure 1 illustrates the funding formula.

$$F_{(n)} = \begin{array}{c} \text{Teaching Input} \\ \text{Block Grant} \end{array} + \begin{array}{c} \text{Teaching Output} \\ \text{Block Grant} \end{array} + \begin{array}{c} \text{Research Output} \\ \text{Block Grant} \end{array} + \begin{array}{c} \text{Block Grant for} \\ \text{Institutional Factors} \end{array}$$

Figure 1: New funding framework for SA Higher Education Institutions
 (Adapted from: De Villiers and Steyn, 2009:46)

Block grants in the year (n) are distributed according to student enrolments year (n-2), qualifications awarded in year (n-2), research output in year (n-2), and certain other institutional data for year (n-2) (De Villiers and Steyn, 2009:46). The research Output Block Grant is divided into two parts. Part one provides funding for publications in accredited journals, doctoral degrees, and research master’s degrees (De Villiers and Steyn, 2009:60). Part two intends to support those institutions with a research output below the national research output norm in year (n-2) (De Villiers and Steyn, 2009:46): The lower the research output, the higher the research development grant allocated to these institutions; this is done to bolster research development and output.

3. Research methodology

As stated earlier, the aim of this study was to investigate the determinants of research output of cost and management accounting academics at German UoAs and SA UoTs. Based on the above aim and the background of the study, four hypotheses (H) have been established.

H1: Staff at SA UoTs and German UoAs are equally qualified.

H2: SA academics' research output is higher than the German academics' research output because of the supportive SA research funding policy.

H3: Supervision of master's thesis promotes research output of academics in both countries as staff can publish together with students.

H4: There is a shortage of critical research resources such as time and support systems in both countries.

The target population for this study was all academics at UoTs in SA and all UoAs in Germany teaching and/or supervising cost and management accounting at master's level.

This study was conducted in 2011. At the time of the study, a review of the UoAs and UoTs programs revealed that four UoTs in SA and six UoAs in Germany offered master's degrees in cost and management accounting. The sample for this study was confined to specific types of people who could provide the desired information, as they are the only ones who have it and they conformed to set criteria by the researcher (Sekaran, and Bougie, 2009:276). Therefore, purposive sampling was used to identify the academics at the four UoTs in SA and six UoAs in Germany that offer a master's degree in cost and management accounting, so that they could provide the desired information in order to test hypotheses and answer the research question.

Due to the cross cultural nature of this research, two issues had to be addressed, namely response equivalence and timing of data collection. Sekaran and Bougie (2009:219) explain that response equivalence is ensured by adopting uniform data collection procedures in the different cultures. Therefore, the same online-based questionnaire was administered to SA and German academics. As an online survey was used, the timing of data collection was synchronised by sending out the questionnaire to academics in both countries on 3 November 2011. The questionnaire was available in German and English.

In Germany and SA, thirty-five questionnaires were returned. Five questionnaires had to be disregarded, as there were vast sections left unanswered by respondents, or they did not indicate whether they teach/supervise at master's level in cost and management accounting.

One German and one SA academic were involved in the questionnaire administration process. Both academics sent out the link to the questionnaire via email to relevant colleagues, and encouraged potential respondents to participate. Four follow-up e-mails were sent to respondents over a period of three months to remind and encourage them to participate, The fact that two academics from institutions which were part of the sample (namely Durban University of Technology and Berlin School

of Economics and Law) were actively involved in the data collection process reflected on their institutions' participation in this study because a little less than half of the South African respondents (46.7%) were from DUT, and amongst the German respondents, a third (33.3%) were from the Berlin School of Economics and Law. Eleven of the German respondents did not indicate the name of their institution; a possible reason for this could be that they wished to maintain anonymity. Data were handed in for analysis by the end of January 2012.

The data was analysed using version 18.0 of the Statistical Package for Social Sciences (SPSS), and a statistician was consulted. Quantitative data were analysed in terms of a descriptive statistic using frequency distribution, cross tabulations, and T-tests. Cronbach's alpha was determined to ensure reliability of this study. As a guideline, it is said that a Cronbach's alpha value above 0.7 is acceptable for research purposes. While the increased participation of two institutions might have biased results in terms of representation, the overall reliability score for this study was 0.855. A content analysis was carried out to analyse qualitative data. Semi-structured interviews were conducted telephonically with respondents where answers were either incomplete, difficult to understand or where further information was required. Only participants, who had indicated on their questionnaire that they were willing to participate in a follow-up interview, and who provided their contact details, could possibly be interviewed. Findings arising from the semi-structured interviews were added to the questionnaire data and analysed accordingly.

4. Findings

4.1. Age and qualification level of academics

As shown in Figure 2, most of the German respondents (80%) were between the ages of 41 and 60 years, whereas a little more than half of the SA respondents (66.7%) were under the age of 41. Among the German respondents, only 10% were under the age of 41 and none were younger than 31 years, while 26.7% of the SA academics were younger than 31, and 40% were between the ages of 31 to 40.

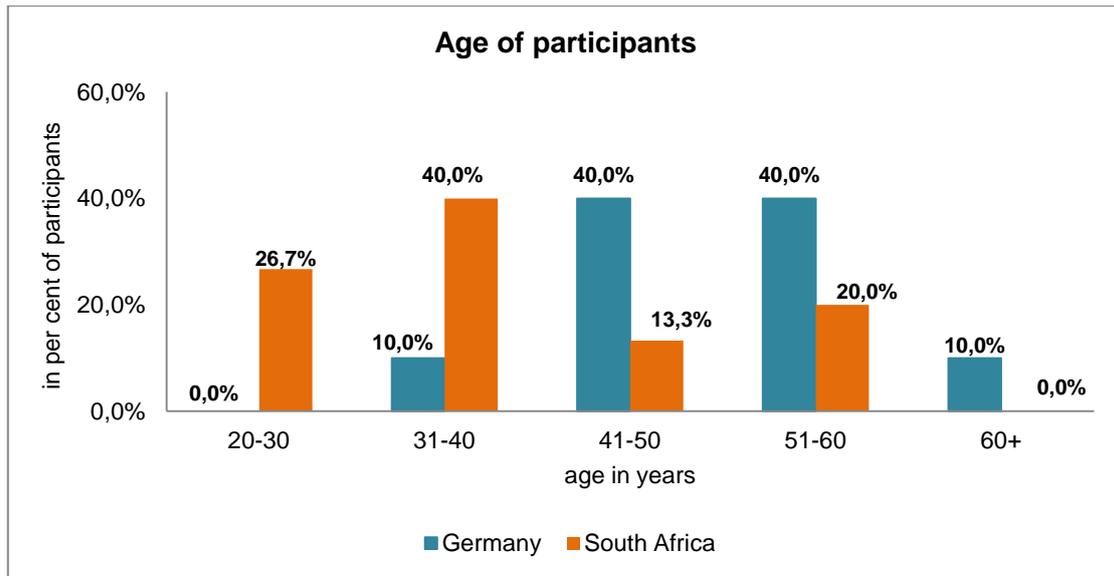


Figure 2: Age of participants

All in all, the SA academics were younger than the Germans. Different appointment policies may explain the difference in the age profile of staff. German UoAs usually require a minimum of a doctorate plus five years of postdoctoral work to be appointed as a full professor (Enders, 2001:10). Historically, the appointment policy of UoTs in South Africa did not require a doctorate. This is supported by the fact that the majority of SA master's graduates (76%) are under the age of 39 (CHE, 2012:14). In 2009, the Department of Higher Education and Training decreed that academics must improve their qualifications to a minimum of a master's degree by 2012 (Singh, 2011:1191), further indicating that academics were previously appointed with levels lower than a master's. West (2006:123) adds that doctoral qualifications have not been the norm for appointments to academics in SA, as there is a massive shortage of highly qualified academics in the field of accounting.

The different appointment policies also reflect on the qualification profile of academics. Figure 3 shows that 85% of German respondents had a doctorate. Almost half (47%) of SA respondents were qualified at levels lower than a master's, another 40% held a master's degree and only 13% held a doctorate.

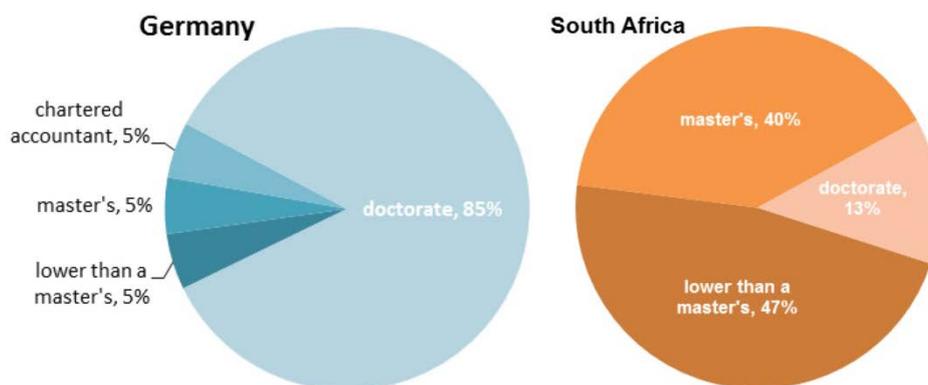


Figure 3: Qualification profile of respondents in Germany and South Africa

Hence, the first hypothesis which stated that academics in both countries are equally qualified could not be maintained. However, almost half (46.7%) of the SA respondents were registered for a postgraduate qualification indicating a movement towards upgrading qualifications among the SA academics.

4.2. Research output

Qualification levels of academic staff play a significant role with regard to research output, as quality of academic staff is critical to the success of the research missions at universities (CHE, 2009:73). Findings of this research revealed that of those SA respondents who engaged in publishing, 2.3 articles per year on average were published in accredited and non-accredited journals. Overall SA respondents published half a unit less than the average of 2.8 articles published by the German respondents. Against the background of the specific SA research funding policy applicable to all UoTs, which provides for funding to be allocated according to a higher education institution's research output, it was assumed that SA cost and management accounting academics at UoTs produce more research output than German cost and management accounting academics at UoAs. As shown in Table 1, hypothesis 2 could not be verified.

	Average publications per year and academic		
	Accredited journals	Non-accredited journals	Overall
Germany	0.7	2.1	2.8
South Africa	1.1	1.2	2.3

Table 1: Quantitative research output

Although there is only a difference of half a unit in the overall average of published articles, there were big differences in the publication of articles in accredited and non-accredited journals. The SA Department of Higher Education published a list of accredited journals (SA, 2004), which includes journals that appear in the ISI indexes, the International Bibliography of Social Sciences (IBSS), and a list of approved SA journals (Department of Higher Education and Training – List of accredited journals, 2013). The researchers applied the same list and metrics (with the exception of the list of SA journals approved by the SA Department of Higher Education) to determine publication in accredited journals for the German academics.

The South Africans publish almost twice as many articles (1.1 units per year) in accredited journals as the Germans who published on average 0.7 units in accredited journals. Figure 4 presents the reasons for publishing in accredited journals as stated by the respondents. 36.4% of the SA and 58.3% of the German respondents indicated that their main motive for publishing was that publishing research in accredited journals was the mark of a good academic. None of the Germans stated that it

is a university requirement or that it brings revenue, whereas 18.2% of the South Africans specified these reasons as their motive. This can be explained by the SA funding policy, since the government drives higher education institutions towards self-sufficiency in terms of income generation through output, and therefore provides subsidy per unit of research output (Singh, 2011:1192; De Villiers and Steyn, 2009:62). Similar percentages of respondents (9.1% SA and 8.3% Germans) thought that publishing in accredited journals looks good on their CV. 16.7% of the German respondents indicated that they thought that their article was good if accepted for publication - none of the South Africans gave this response as a motive for publishing in accredited journals.

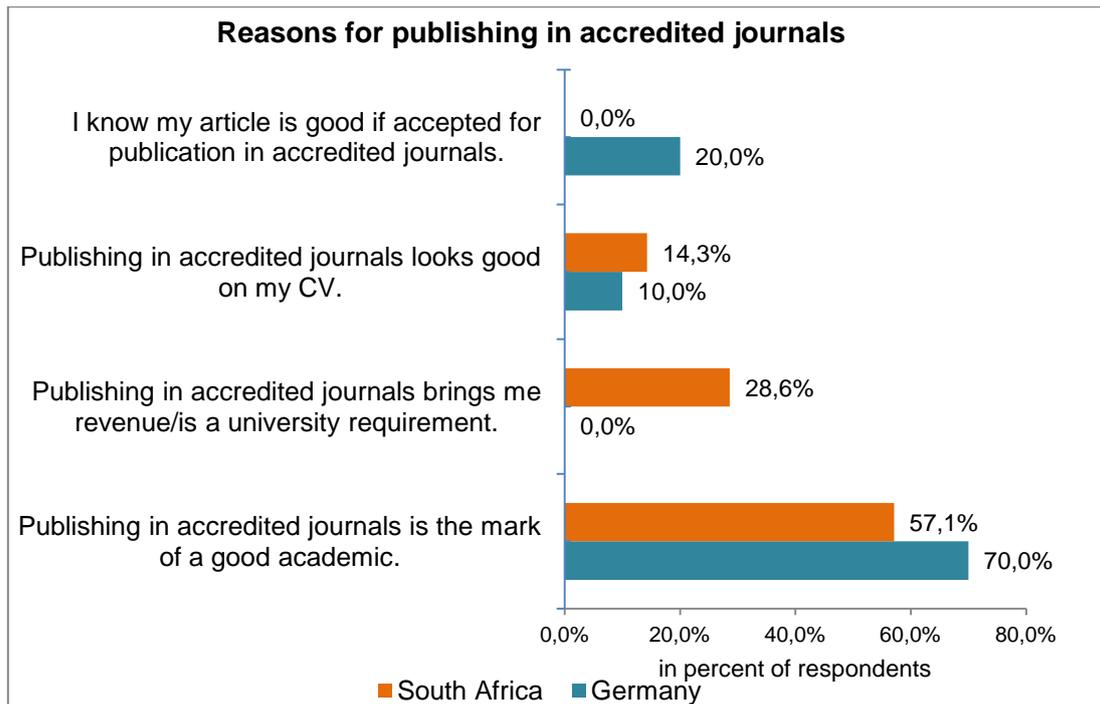


Figure 4: Reasons for publishing in accredited journals

German respondents publish 2.1 units on average per year in non-accredited journals. This is almost twice the amount (on average 1.2 units per year) published by SA respondents in non-accredited journals.

Over a third (33.3%) of the Germans stated that non-accredited journals are the most suitable tool to reach practitioners. This finding was very surprising, since this answer was not provided as an option on the questionnaire; the 33.3% stated this under the option 'other'. More information on this answer was gathered via the semi-structured interviews. It was found that UoAs focus on applied research, which is mainly relevant to practitioners. According to the interviewees, accredited journals are not read by practitioners, as they are too scientific. Hence, it would be advisable to publish in non-accredited journals, in order to reach the right audience in the field of applied research. Sichler and Heimerl (2012:109) concur, as they suggest that research conducted by UoAs should be published in so-called open-access journals which are less stringent in their methodical requirements but which have a strong emphasis on accessibility for the general public, and thus enable the findings to be

discussed and widely spread. They add that this would eventually allow UoAs to manifest their role as providers of application-oriented research in the higher education sector.

As shown in Figure 5, the majority of the SA respondents (71.4%) thought that publishing in non-accredited journals was a good way to gain experience in publishing. Only 8.3% of the Germans felt the same way. Similar percentages of respondents in SA (14.3%) and Germany (16.7%) indicated that there are only few accredited journals publishing research in cost and management accounting. Therefore, 47.6% of the German respondents did not see a positive outcome of their attempts to publish in accredited journals, as it may only serve to discourage academics from publishing.

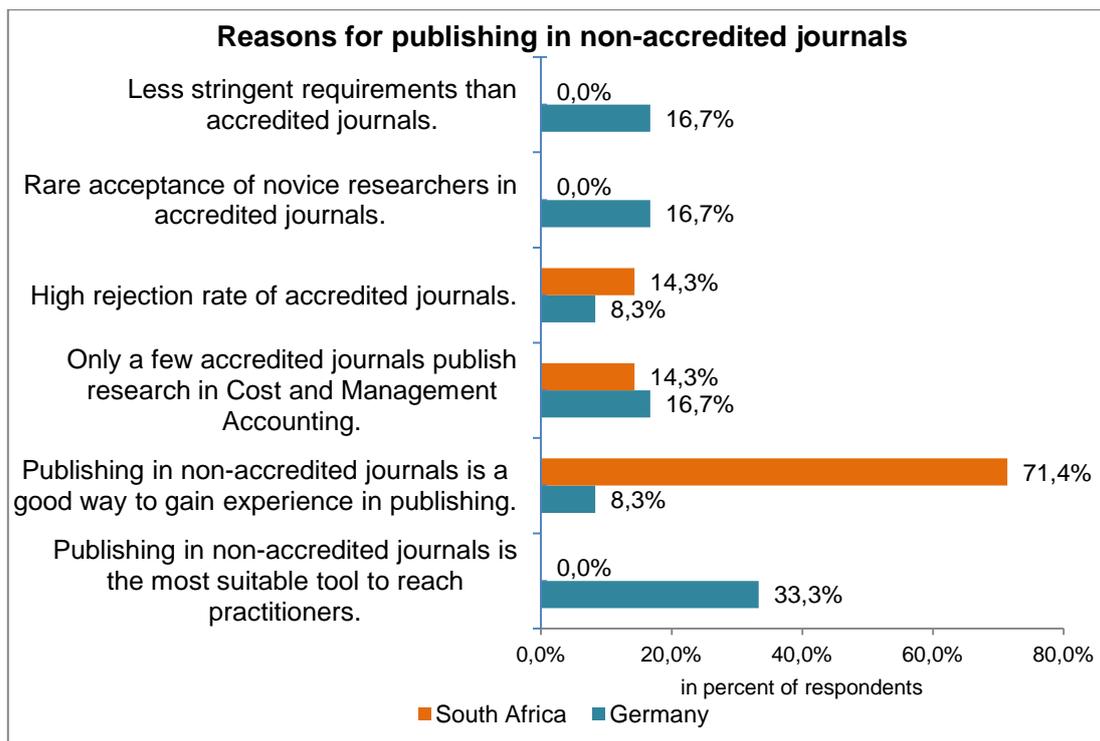


Figure 5: Reasons for publishing in non-accredited journals

4.3. Importance of publishing research in journals

In order to determine another influencing factor on research output of cost and management accounting academics, a section of the questionnaire asked respondents how important they considered publishing research in journals. Figure 6 presents the findings.

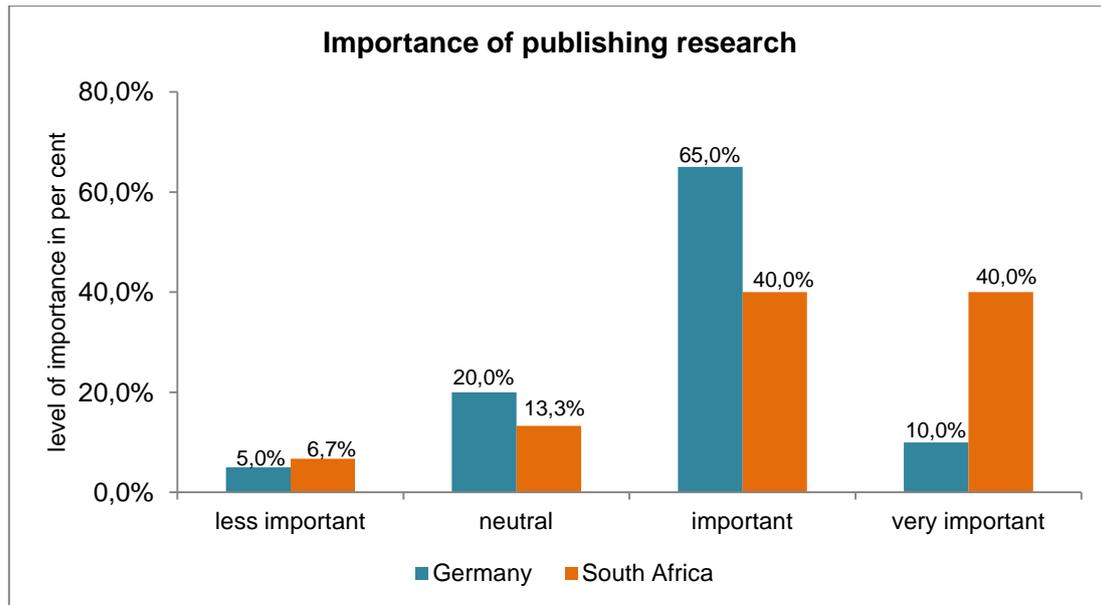


Figure 6: Importance of publishing research

Similar percentages of respondents in both countries (80% SA and 75% Germans) thought that publishing research in journals was important or very important, with similar percentages indicating that it was less important (6.7% of SA and 5% of Germans). The number of South African respondents who considered publishing in journals important, was evenly split between the two 'important' categories (40% important and 40% very important), whereas the Germans showed a different scoring pattern. Almost two-thirds (65%) of the German respondents considered publishing research in journals important and only 10% thought publishing research in journals was very important. Once respondents indicated their opinion on the importance of publishing research, they were asked to explain their choice of importance in an open-ended question. The answers were then divided into the three following categories: making research visible, fulfillment of the institutional and academic research mission, and earning of financial resources. Table 2 presents the findings.

Answer category	Respondents' country of origin	
	Germany	South Africa
Making research visible	x	x
Fulfilment of the institutional and academic research mission	x	X
Earning of financial resources		X

Table 2: Responses on the choice of importance of research

Making research visible: Reasons stated by the respondents for the importance of making research visible were to prevent other researchers from using the same (possibly incorrect) approach for conducting research, to stimulate further discussion and research on the published research findings,

to contribute to a body of knowledge, and to reveal the current state of science. Fulfillment of the institutional and academic research mission: answers stated in this category were mostly short statements made by respondents. Responses include: “academics need to be involved in scholarly work and publishing in research journals”, “it is important for an academic to engage in research and thereafter publish your research”, “we are researchers, we want to be a university (not only a university of technology)”, and “a university has to do research”. It must be noted that this category was only selected by the SA respondents. A possible explanation may be the strong emphasis on applied research, the development of research capacity, postgraduate qualifications, and published research at UoTs (Singh, 2011:1191). None of the German respondents felt that it was important to publish research in journals for the fulfilment of the institutional research mission. This correlates with Lepori and Kyvik (2010:301), who state that the German UoA research sector is still in between an experimental phase and the integration of research missions into their institutional strategies.

Earning financial resources was only stated as an important reason for considering publishing research in journals by the SA respondents, which might be due to the SA funding policy, as research articles published in accredited journals attract direct funding in the form of a monetary reward given to the institution. Depending on the policy of the institution, all or a percentage of this money (while the rest is maintained by the institution) is given to the academic, or the said amount is placed in the academics’ research account to be used by the academic for research purposes.

4.4. Supervision of postgraduate students

Geertsema and van Niekerk (2009:924) suggest that more postgraduate students should be involved in research, in order to improve research output and attract more funding. However, this requires supervision by adequately qualified and skilled academic staff. One question on the questionnaire asked about the respondents’ level of agreement with the following statement: ‘Being a promoter of master’s or doctoral studies enhances my research output’. Over a third (38.46%) of SA respondents disagreed with this statement, while only 16.67% of the German respondents disagreed (see Figure 9).

Those Germans who disagreed stated that master’s dissertations are only transferable to research output units in exceptional cases due to their limited quality, as no new insights are gained from these works. They added that it is especially rare that a student work is published in accredited journals. They stated further that the quality of dissertations was better ten years ago. They ascribe the drop in quality to the increase in the number of students they have to supervise. In other words, a supervisor does not have sufficient time for intensive and high quality supervision. However, almost half of the Germans (44.44%) believed that being a promoter of master’s or doctoral studies enhances their research output. They explained that they publish together with their students. The 38.5% of South Africans who did believe that their research output is enhanced by being a promoter of postgraduate students stated that “the more you are involved in students research, the more you read and the more

you learn in the process and at the end you have more publications as you publish together with them”.

Hypothesis 3 of this study suggested that supervision of master’s thesis promotes research output of academics in both countries as staff can publish together with students. Findings reveal that this hypothesis might be applicable for German respondents rather than for their SA counterparts, as 38.5% of German respondents agreed and 38.5% of SA respondents disagreed with the statement that being a promoter of master’s or doctoral studies enhances their research output. One SA respondent who selected ‘neutral’ explained that “on the one hand, it requires quite a lot of time if you want to be a good supervisor, on the other hand you get input which you can use for research as well”.

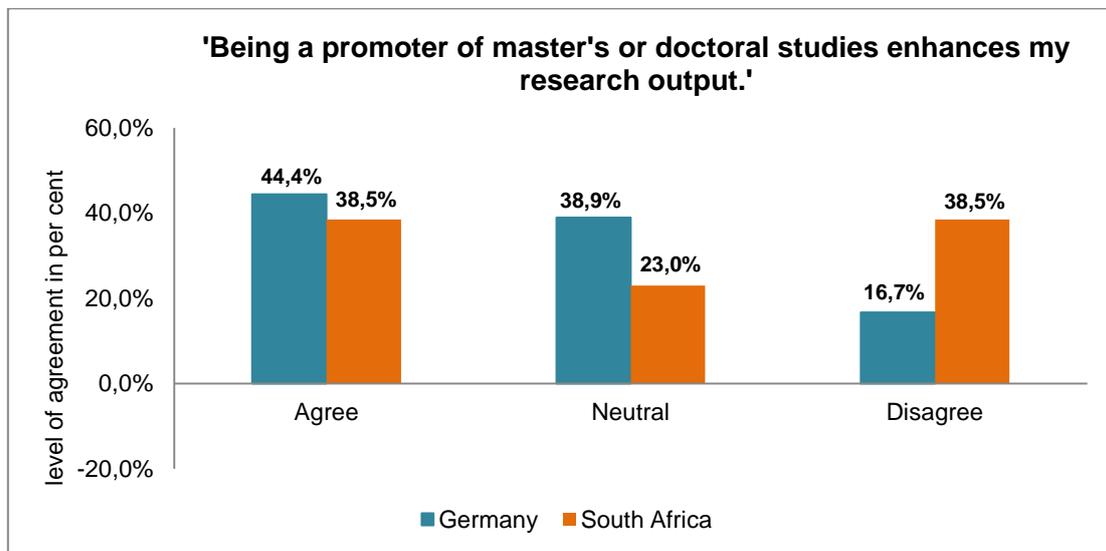


Figure 7: Level of agreement with the statement ‘being a promoter of master’s or doctoral studies enhances my research output’

4.5. Co-operation for publications

Apart from gaining input for their research by supervising postgraduate students, academics might also co-operate with other academics, universities, or institutions to enhance their research output. Almost two thirds (64.7%) of German respondents publish on their own research, which suggests that they have sufficient material to do so. The majority (71.4%) of SA respondents stated that they did not publish on their own research, and hence co-operate for publications. They further indicated that they co-operate mostly with colleagues in the following order, from other institutions, their department and institution, academics from other countries, their research supervisors, and their students. The SA and the German respondents felt that co-operation for publications promotes collegiality, exposes them to new practices, and gives their research more credibility if published with more accomplished authors.

4.6. Other influencing factors on research

Time is one of the critical factors to research output most discussed in literature (Bland and Schmitz, 1986:26; Creswell; 1986:90; Nieuwoudt and Wilcocks, 2005:58; Schulze, 2008:651; Geertsema and van Niekerk, 2009:924). 20.5% of SA respondents (20.5%) and 20% of German respondents cited that time available for research is the factor that most affects research activity. Respondents were asked how much time they had available for research (assuming their whole workload was 100%). Figure 10 shows that the majority of respondents in both countries (Germany, 79% and SA, 53.3%) have less than 20% of their time available for research.

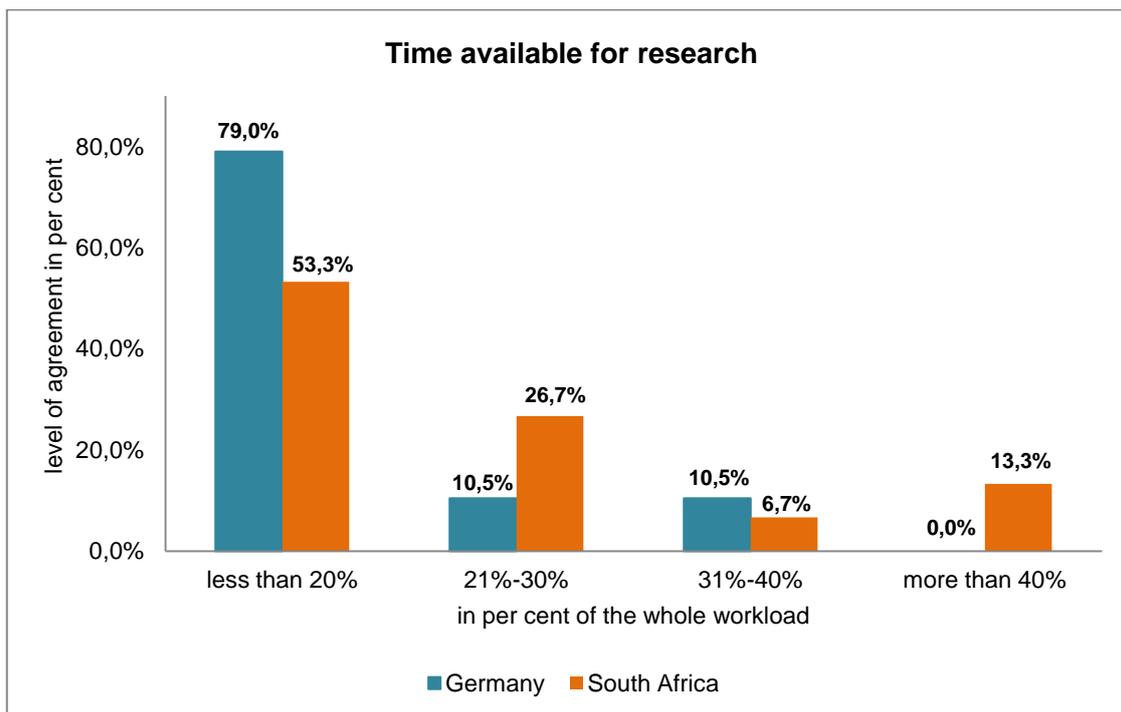


Figure 8: Time available for research

A quarter (25.7%) of German respondents had much less time for research than their SA counterparts. Only 33.34% of the South Africans and 21.06% of the Germans had between 20 to 40% of their time available for research, which would be ideal according to Bland and Schmitz (1986:26).

Nieuwoudt and Wilcocks (2005:52) state that time is money, and therefore financial reward systems for research output has to be taken into account when evaluating SA accounting academics' perceptions and attitudes regarding research. In response to the statement: 'Publishing research brings me personal financial benefit', 38.5% of the SA respondents agreed and 33.3% of the German respondents disagreed, indicating that there is a lack of financial research support at German UoAs. Moreover, a third of the Germans (33.3%) indicated that they would do research if they had sufficient funding. Lepori and Kvyrik (2010:300) contribute that reports from UoAs are full of complaints about the lack of financial resources to conduct research. That is in alignment with the study's findings as over two-thirds (68.4%) of the German respondents indicated that a support system for conducting

research at their institution neither motivated nor demotivated them, as they engaged in research out of self-motivation and interest, whereas the majority (85.7%) of SA respondents felt that a support system at their institution had a motivating effect on their research endeavours. SA respondents explained that they were aware of the financial, leave, and other benefits offered by their institution to members of staff engaged in research.

Given the above, this study confirms that there is a shortage of critical research resources such as time and support systems in both countries. Whereas both countries show similar patterns for time available for research, SA respondents felt better supported in their research endeavours by their institution than their German counterparts. Hypothesis 4 could therefore be substantiated.

4.7. Additional findings

The following section outlines additional findings of the study. Although the information provided did not directly serve to test hypotheses, it provides for a wider understanding of the issues underlying this research paper.

4.7.1. Teaching versus research

Although there seems to be a wide understanding regarding the importance of publishing research in journals in both countries, academics' workload is also determined by teaching.

In order to find out what the SA and German cost and management accounting academics think about the combination of teaching and research at their institutions, they were asked about their level of agreement to several statements. Figure 7 shows that research and teaching seem to be equally important to 78.6% of SA respondents and 72.2% of German respondents. 44.4% of the German respondents indicated that they were more interested in doing research than participating in teaching activities, while 42.9% of the SA respondents did not indicate a preference for teaching or research, choosing 'neutral' as answering possibility.

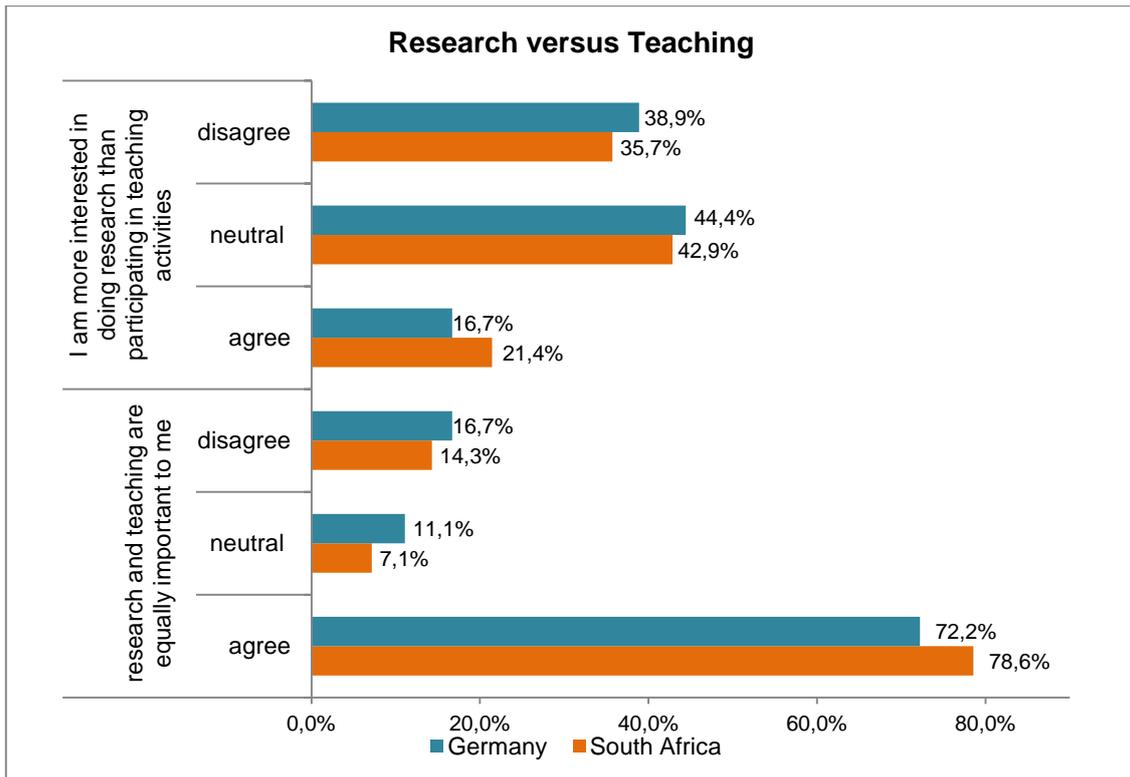


Figure 9: Research versus teaching

4.7.2. Master's program structure

100% of the German respondents indicated that a course-worked based master's with completion of a minor dissertation was the norm in Germany. All of the SA respondents (100%) stated that the master's degree at their institution was obtained by writing a dissertation only. When asked why the offered master's program was structured this way, almost half of the South Africans (45.5%) chose 'development of students' research skills' as the reason. This is in alignment with the South African Higher Education Qualifications Framework (HEQF), which states that the primary purpose of a master's degree is to educate and train researchers who can contribute to the development of knowledge at an advanced level, and to prepare graduates for advanced and specialised professional employment (South Africa, 2007:27).

Over half of the German respondents (52.9%) indicated that the structure of the master's programs offered at their UoAs complied with the demands of the industry.

Although the purposes of the programs are different, 82.4% of the German and 76% of the SA respondents believe that their master's program adequately develops students' ability to conduct research. When asked in an interview how the master's program develops student's ability to conduct research, the German interviewees stated "the written Bachelor's dissertation lays the foundation for research activity in the master's study". They further stated "the Bachelor's dissertation is a crucial

step to research work, and that the dissertation written during the master's study deepened already existing research skills".

The South Africans believed that close guidance of a supervisor and the completion of a dissertation developed students' research ability. This correlates with Drennan and Clark's (2009:484) findings that the completion of a thesis is most beneficial to develop students' research skills. 22.67% of the German respondents share the same opinion as Drennan and Clark. Further findings to the question regarding what is most beneficial to develop students research ability are illustrated in Figure 8.

SA respondents (20%) found that attending research skills building courses are most beneficial to develop students' research ability. The second most beneficial aspect for 21.3% of the Germans and 17.8% of the South Africans is the students' involvement in academic research. South Africans (15.6%) felt that the completion of a dissertation was the third most beneficial aspect for the development of research abilities, whereas the German respondents (12%) rated attending researchskills building courses on rank three.

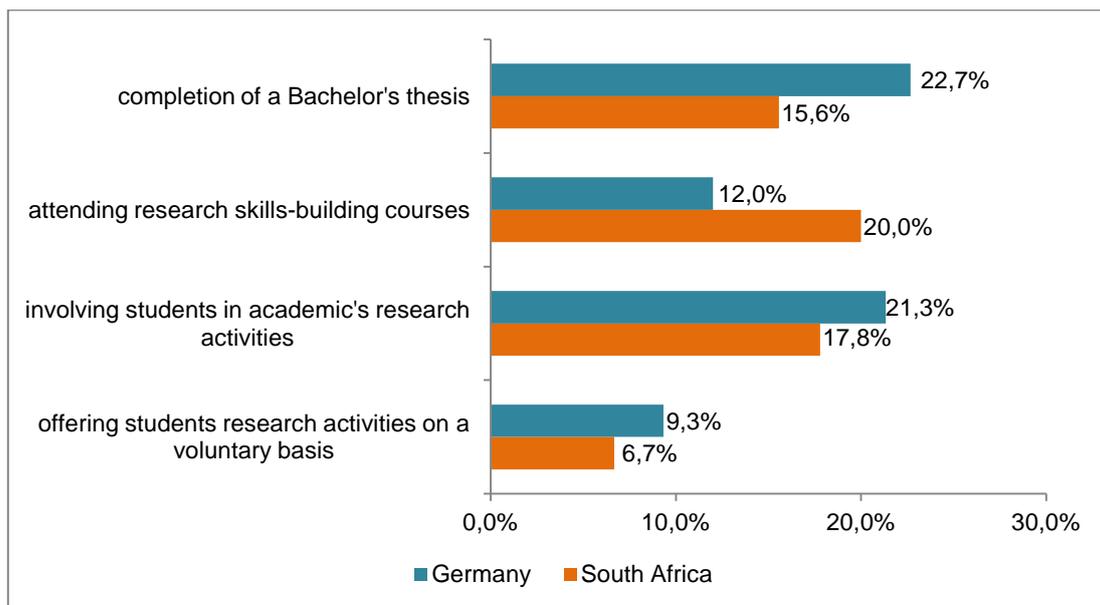


Figure 10: Activities most beneficial for the development of research abilities

Offering research activities on a voluntary basis was not seen as very beneficial for the development of research abilities in both countries, as only 9.3% of the German respondents and 6.7% of the SA respondents chose this answer possibility.

The SA respondents also indicated that research by full dissertation earned a higher subsidy from the Department of Higher Education and Training, as compared to the coursework master's (see SA, 2004).

5. Conclusions

German UoAs and SA UoTs are both vocational-oriented higher education institutions that carry out applied research. Despite comparable educational and research tasks, both higher education institutions find themselves placed in different research funding environments. Whereas SA tries to steer towards a research intensive higher education sector by providing for funding to be based on the institutions' research output, there are no research funding laws commonly applicable to all higher education institutions in Germany. Findings of this study revealed that SA's research funding policy led to a higher proportion of publications in accredited journals by cost and management accounting academics at SA UoTs, whereas German cost and management accounting academics at UoAs clearly prefer to publish in non-accredited journals, as they believe that non-accredited journals are the appropriate vehicle to reach their target readers, who are practitioners rather than scientists.

Apart from the difference in the qualification profile of academic staff, UoAs are not allowed to confer a doctorate as opposed to their SA counterparts, and whereas German master's programs are by course-work and the completion of a minor thesis, SA master's programs are by research only. However, research and teaching was considered equally important in both countries.

German respondents felt that supervision of master's students had a positive effect on their research output, while acknowledging that students' work can seldom be transferred to a publication in accredited journals due to the quality of master's dissertations. They also prefer to publish on their own work, as they have sufficient research material. SA respondents were undecided about the effect of supervision on their research output. The majority of SA respondents co-operated with colleagues from other institutions or their own institution for the purposes of publishing.

Time was one of the factors that equally affected German and SA respondents, as academics in both countries claimed that time is critical to their research output and the majority only had less than 20% of their whole working time available for research. However, SA respondents felt better supported in their research endeavours in this regard by their higher education institution than their German counterparts.

Further study into the provision and impact of institutional support on research productivity could benefit institutions in their endeavour to further increase their research output by providing their academics with research funding, a research-friendly working environment, research incentives, and developmental workshops. Since this study revealed time as being a critical factor to research output, investigations into workload re-organisation could enhance research output by gaining more time available for research. This could be done by investigating possibilities of institutions' policy changes in order to incorporate workload re-organisation and the importance and necessity of time available for research.

This research was conducted at UoAs in Germany and UoAs in SA only. Further research embracing comparable institutions to the SA UoTs in other countries, like the former polytechnics in the United

Kingdom or the UoTs in Australia, could highlight significant findings which would also shed light on the overall development of the academic systems in different countries.

References

- Ash, M. (2006). Bachelor of what, master of whom? The Humboldt Myth and historical transformations of higher education in German-Speaking Europe and the US. *European Journal of Education*, 41 (2): 245-267.
- Babbie, E.R. (2010). *The practice of social research*. 12th ed. Belmont: Wadsworth Cengage.
- Backhouse, J. (2009). Technological innovation at universities in South Africa: Towards industrial and socio-economic development. Paper presented at the South African Technology Network (SATN) Second Annual Conference, 16 - 17 July, Cape Peninsula University of Technology, Bellville Campus. Cape Town, South Africa.
- Badat, S. (2011). A generation of growth. Proposal for a national programme to develop the next generation of academics for South African higher education institutions. May edition. Pretoria: Higher Education South Africa.
- Bundesministerium für Bildung und Forschung [Federal Ministry of Education and Research]. Research at UoAs. (2013). [Online]. <<http://www.bmbf.de/en/864.php>> (Accessed: 23 May 2013).
- Burgess, T. (1972). *The shape of higher education*. 1st ed. London: Cornmarket Press.
- Chan, K. C., Chen, C. R. and Cheng, L. T. W. (2005). Ranking research productivity in Accounting for Asia-Pacific universities. *Review of Quantitative Finance and Accounting*, 24 (1): 47-64.
- Council on Higher Education. (2009). Higher Education Monitor: The state of higher education in South Africa. A report of the CHE Advice and Monitoring Directorate, Pretoria, South Africa.
- Council on Higher Education. (2010). UoTs – Deepening the debate. Kagisano No. 7. Pretoria: Government Printer.
- Council on Higher Education. (2012). *Postgraduate studies: A statistical profile*. [Online]. <http://www.che.ac.za/documents/d000196/CHE_MonitorProjectV7.pdf> (Accessed: 19 June 2013).
- Council on Higher Education. (2013). [Online]. Overview. <<http://www.che.ac.za/heinsa/overview/>> (Accessed: 23 May 2013).
- Department of Higher Education and Training – List of approved journals. (2013). [Online]. <<http://www.assaf.co.za/department-of-higher-education-and-training-accredited-journals/>> (Accessed: 23 July 2013).
- De Villiers, A. P. and Steyn, A. G. W. (2009). Effect of changes in state funding of higher education on higher education output in South Africa: 1986 - 2007. *South African Journal of Higher Education*, 23 (1): 43- 68.
- Dysthe, O. and Webler, W. D. (2010). Pedagogical Issues from Humboldt to Bologna: The case of Norway and Germany. *Higher Education Policy*, 23 (2): 247-270.
- Federal Republic of Germany. Federal Ministry of Education and Research. (2010). *Federal Report on Research and Innovation*. Berlin: BMBF - German Federal Ministry of Education and Research.
- FHprofUnt - Forschung an Fachhochschulen mit Unternehmen (FhprofUnt – research at UoAs in co-operation with enterprises). (2013). [Online]. <<http://www.bmbf.de/de/1952.php>> (Accessed: 29 May 2013).

- Förderlinie ProfilINT (Funding ProfilINT). (2013). [Online]. <<http://www.bmbf.de/de/1956.php>> (Accessed: 29 May 2013).
- Geertsema, J.C. and Van Niekerk, F. (2009). Strategies for university improvement : The research profile change at a South African non-research-intensive university. *South African Journal of Higher Education*, 23 (5): 912-934.
- Goldman, G. A. and Coetzee, J. (2004). Change readiness for the University of Johannesburg. Paper presented at the 3rd TUT / Polytechnic Namibia International conference, 3-4 November, Pretoria, South Africa.
- Graham, G. (2002). *Universities: The recovery of an idea*. 1st ed. Thorverton: Imprint Academic.
- Habib, A. and Parekh, A. (2000). Transforming South Africa's university system: The case for strategic mergers. *Perspectives in Education*, 18 (3): 39-51.
- Hay, D. and Fourie, M. (2002). Preparing the way for mergers in South African higher and further education institutions: An investigation into staff perceptions. *Higher Education*, 44 (1): 11-131.
- Heggen, K., Karseth, B. and Kyvik, S. (2010). The relevance of research for the improvement of education and professional practice. In Kyvik, S. and Lepori, B. (Eds). *The Research Mission of Higher Education Institutions Outside the University Sector*, pp. 45-57. Dordrecht: Springer.
- Higher Education. (2013). [Online]. <<http://www.bmbf.de/en/655.php>> (Accessed: 23 May 2013).
- IngenieurNachwuchs [Engineer offspring]. (2013) [Online].<<http://www.bmbf.de/de/7152.php>> (Accessed: 29 May 2013).
- ISI, IBSS and SA DHET – FOR 2012 SUBMISSION. (2013). [Online]. <http://supportservices.ufs.ac.za/dl/userfiles/Documents/00000/336_eng.pdf> (Accessed: 05 June 2013).
- Jackson, S. L. (2011). *Research methods: A modular approach*. 2nd ed. Wadsworth: Cengage Learning.
- Jaeger, M. and In der Smitten, S. (2009). Evaluation der leistungsbezogenen Mittelvergabe an die Berliner Hochschulen [Evaluation of performance oriented funding to higher education institutions in Berlin]. [Online]. <http://www.dzhw.eu/pdf/pub_fh/fh-200901.pdf> (Accessed: 30 September 2013).
- Jaeger, M. and In der Smitten, S. (2012). Ziel- und Leistungsvereinbarungen als Instrument der Hochschulfinanzierung [Goal and performance agreements as higher education funding tool]. [Online]. <http://www.dzhw.eu/pdf/pub_art/23/mag-201203_seite5-6> (Accessed: 30 September 2013).
- Jongbloed, B. (2010). The regional relevance of research in UoAs. In Kyvik, S. and Lepori, B. (Eds). *The Research Mission of Higher Education Institutions outside the University Sector*, pp. 25-27. Dordrecht: Springer.
- Kehm, B. M., Michelsen, S. and Vabo, A. (2010). Towards the two-cycle degree structure: Bologna, reform and path dependency in German and Norwegian universities. *Higher Education Policy*, 23 (2): 227-245.
- Lepori, B. and Kyvik, S. (2010). The research mission of UoAs and the future configuration of higher education systems in Europe. *Higher Education Policy*, 23 (3): 295-316.
- Leszczensky, M. and Orr, D. (2004). Staatliche Hochschulfinanzierung durch indikatorgestützte Mittelverteilung Dokumentation und Analyse des Verfahrens in 11 Bundesländern [Public

- Higher Education funding through allocation by indicators. Documentation and analysis of procedures in 11 Ländern]. [Online]. <http://www.dzhw.eu/pdf/pub_kia/kia200404.pdf> (Accessed: 30 September 2013).
- Macharzina, K., Wolf, J. and Rohn, A. (2004). Quantitative evaluation of German research output in Business Administration: 1992-2001. *Management International Review*, 44 (3): 335-359.
- Naidoo, R. (1998). Levelling or playing the field? The politics of access to university education in post-apartheid South Africa. *Cambridge Journal of Education*, 28 (3): 369-383.
- Neave, G. (1979). Academic drift: Some views of Europe. *Studies in Higher Education*, 4 (1): 143-159.
- Nieuwoudt, M. J. and Wilcocks, J.S. (2005). The attitudes and perceptions of South African accounting academics about research. *Meditari: Research Journal of the School of Accounting Sciences*, 13 (2): 49-66.
- Onestini, C. and Scheck, U. (2004). Federalism and Lander autonomy: the higher education policy network in the Federal Republic of Germany. *The Canadian Journal of Higher Education*, 34 (2): 150-153.
- Sekaran, U. and Bougie, R. (2009). *Research methods for business: A skill building approach*. 5th ed. Chichester: John Wiley and Sons.
- Sichler, R. and Heimerl, P. (2013). Praxisorientierte Forschung in Wirtschafts- und Sozialwissenschaften an Fachhochschulen [Applied research in social sciences and economics and business sciences at Universities of Applied Sciences]. *Zeitschrift für Hochschulentwicklung*, 7 (2): 99-116.
- SILQUA-FH (Soziale Innovationen für Lebensqualität im Alter [Social innovations for life quality of the elderly]). (2013) [Online]. <<http://www.bmbf.de/de/13214.php>> (Accessed: 29 May 2013).
- Singh, P. (2011). Transformation and performativity in universities in South Africa. *South African Journal of Higher Education*, 25 (6): 1190-1204.
- South Africa (SA). Department of National Education. (1988). *A Philosophy for Technikon Education (NATED 02-118)*. Pretoria: Government Printer.
- South Africa (SA). Department of Higher Education and Training. (2004). [Online]. A new funding framework: How Government grants are allocated to higher education institutions. <<http://www.education.gov.za/LinkClick.aspx?fileticket=fcXw4P4qxAk%3D&tabid=452&mid=1037>> (Accessed: 29 May 2013).
- South Africa. Department of Higher Education and Training. (2007). *The Higher Education Qualifications Framework*. Pretoria: Government Printer.
- Van der Schyf, D.B. (2008). Five recent developments' impact on the traditional academic culture of departments of Accounting at South African universities. *Meditari: Research Journal of the School of Accounting Sciences*, 16 (2): 1-12.
- Wagenhofer, A. (2006). Management Accounting Research in German-Speaking Countries. *Journal of Management Accounting Research*, 18 (10492127): 1-19.
- West, A. (2006). A commentary on the global position of South African Accounting research. *Meditari: Research Journal of the School of Accounting Sciences*, 14 (1): 121-137.
- Wixforth, J. (2012). Langfristige Entwicklung der außeruniversitären Forschungsförderung in Deutschland [The long term development of non-university research funding in Germany]. *Wirtschaftsdienst*, 92 (3):193-201.

- Wolter, A. (2004). From state control to competition: German higher education transformed. *The Canadian Journal of Higher Education*, 34 (3): 73-104.
- Wyngaard, A. and Kapp, C. (2004). Rethinking and reimagining mergers in further and higher education: A human perspective. Perspectives in higher education. *South African Journal of Higher Education*, 18 (1): 185-201.

List of figures and tables

Figure 1: New funding framework for SA Higher Education Institutions	10
Figure 2: Age of participants	13
Figure 3: Qualification profile of respondents in Germany and South Africa	13
Figure 4: Reasons for publishing in accredited journals	15
Figure 5: Reasons for publishing in non-accredited journals	16
Figure 6: Importance of publishing research	17
Figure 7: Level of agreement with the statement 'being a promoter of master's or doctoral studies enhances my research output'	19
Figure 8: Time available for research	20
Figure 9: Research versus teaching	22
Figure 10: Activities most beneficial for the development of research abilities	23
Table 1: Quantitative research output	14
Table 2: Responses on the choice of importance of research	17

Working Papers des Institute of Management Berlin an der Hochschule für Wirtschaft und Recht Berlin

- 1 Bruche, Gert/Pfeiffer, Bernd: Herlitz (A) – Vom Großhändler zum PBS-Konzern – Fallstudie, Oktober 1998.
- 2 Löser, Jens: Das globale Geschäftsfeld „Elektrische Haushaltsgroßgeräte“ Ende der 90er Jahre – Fallstudie, Oktober 1998.
- 3 Lehmann, Lutz Lars: Deregulation and Human Resource Management in Britain and Germany – Illustrated with Coca-Cola Bottling Companies in Both Countries, March 1999.
- 4 Bruche, Gert: Herlitz (B) - Strategische Neuorientierung in der Krise - Fallstudie, April 1999.
- 5 Herr, Hansjörg/Tober, Silke: Pathways to Capitalism - Explaining the Difference in the Economic Development of the Visegrad States, the States of the Former Soviet Union and China, October 1999.
- 6 Bruche, Gert: Strategic Thinking and Strategy Analysis in Business - A Survey on the Major Lines of Thought and on the State of the Art, October 1999, 28 pages.
- 7 Sommer, Albrecht: Die internationale Rolle des Euro, Dezember 1999, 31 pages.
- 8 Haller, Sabine: Entwicklung von Dienstleistungen - Service Engineering und Service Design, Januar 2000.
- 9 Stock, Detlev: Eignet sich das Kurs-Gewinn-Verhältnis als Indikator für zukünftige Aktienkursveränderungen?, März 2000.
- 10 Lau, Raymond W.K.: China's Privatization, June 2000.
- 11 Breslin, Shaun: Growth at the Expense of Development? Chinese Trade and Export-Led Growth Reconsidered, July 2000, 30 pages.
- 12 Michel, Andreas Dirk: Market Conditions for Electronic Commerce in the People's Republic of China and Implications for Foreign Investment, July 2000, 39 pages.
- 13 Bruche, Gert: Corporate Strategy, Relatedness and Diversification, September 2000, 34 pages.
- 14 Cao Tingui: The People's Bank of China and its Monetary Policy, October 2001, 21 pages.
- 15 Herr, Hansjörg: Wages, Employment and Prices. An Analysis of the Relationship Between Wage Level, Wage Structure, Minimum Wages and Employment and Prices, June 2002, 60 pages.
- 16 Herr, Hansjörg/Priewe, Jan (eds.): Current Issues of China's Economic Policies and Related International Experiences – The Wuhan Conference 2002 - , February 2003, 180 pages.
- 17 Herr, Hansjörg/Priewe, Jan: The Macroeconomic Framework of Poverty Reduction An Assessment of the IMF/World Bank Strategy, February 2003, 69 pages.
- 18 Wenhao, Li: Currency Competition between EURO and US-Dollar, June 2004, 18 pages.
- 19 Kramarek, Maciej: Spezifische Funktionen des Leasings in der Transformationsperiode, Juni 2004, 32 pages.
- 20 Godefroid, Peter: Analyse von Multimedia-Lern/Lehrumgebungen im Fach Marketing im englischsprachigen Bereich – inhaltlicher Vergleich und Prüfung der Einsatzfähigkeit an deutschen Hochschulen, September 2004, 48 pages.
- 21 Kramarek, Maciej: Die Attraktivität des Leasings am Beispiel polnischer Regelungen der Transformationsperiode, April 2005, 33 pages.
- 22 Pan, Liu/Tao, Xie: The Monetary Policy Transmission in China – „Credit Channel“ and its Limitations.
- 23 Hongjiang, Zhao/Wenxu, Wu/Xuehua, Chen: What Factors Affect Small and Medium-sized Enterprise's Ability to Borrow from Bank: Evidence from Chengdu City, Capital of South-western China's Sichuan Province, May 2005, 23 pages.
- 24 Fritsche, Ulrich: Ergebnisse der ökonometrischen Untersuchung zum Forschungsprojekt Wirtschaftspolitische Regime westlicher Industrienationen, March 2006, 210 pages.
- 25 Körner, Marita: Constitutional and Legal Framework of Gender Justice in Germany, November 2006, 14 pages.
- 26 Tomfort, André: The Role of the European Union for the Financial Integration of Eastern Europe, December 2006, 20 pages.
- 27 Gash, Vanessa/Mertens, Antje/Gordo, Laura Romeu: Are Fixed-Term Job Bad for Your Health? A Comparison between Western Germany and Spain, March 2007, 29 pages.
- 28 Kamp, Vanessa/Niemeier, Hans-Martin/Müller, Jürgen: Can we Learn From Benchmarking Studies of Airports and Where do we Want to go From Here? April 2007, 43 pages.
- 29 Brand, Frank: Ökonomische Fragestellungen mit vielen Einflussgrößen als Netzwerke. April 2007, 28 pages.
- 30 Venohr, Bernd/Klaus E. Meyer: The German Miracle Keeps Running: How Germany's Hidden Champions Stay Ahead in the Global Economy. May 2007, 31 pages.
- 31 Tomenendal, Matthias: The Consultant-Client Interface - A Theoretical Introduction to the Hot Spot of Management Consulting. August 2007, 17 pages.
- 32 Zenglein, Max J.: US Wage Determination System. September 2007, 30 pages.
- 33 Figeac, Alexis: Socially Responsible Investment und umweltorientiertes Venture Capital. December 2007, 45 pages.
- 34 Gleißner, Harald A.: Post-Merger Integration in der Logistik - Vom Erfolg und Misserfolg bei der Zusammenführung von Logistikeinheiten in der Praxis. March 2008, 27 pages.
- 35 Bürkner, Fatiah: Effektivitätssteigerung im gemeinnützigen Sektor am Beispiel einer regionalen ‚Allianz für Tanz in Schulen‘. April 2008, 29 pages.

- 36 Körner, Marita: Grenzüberschreitende Arbeitsverhältnisse - Grundlinien des deutschen Internationalen
Privatrechts für Arbeitsverträge. April 2008, 22 pages.
- 37 Pan, Liu/Junbo, Zhu: The Management of China's Huge Foreign Reserve and its Currency Composition.
April 2008, 22 pages.
- 38 Rogall, Holger: Essentiales für eine nachhaltige Energie- und Klimaschutzpolitik. May 2008, 46 pages.
- 39 Maeser, Paul P.: Mikrofinanzierungen - Chancen für die Entwicklungspolitik und Rahmenbedingungen
für einen effizienten Einsatz. May 2008, 33 pages.
- 40 Pohland, Sven/Hüther, Frank/Badde, Joachim: Flexibilisierung von Geschäftsprozessen in der Praxis:
Case Study „Westfleisch eG - Einführung einer Service-orientierten Architektur (SOA). June 2008, 33
pages.
- 41 Rüggeberg, Harald/Burmeister, Kjell: Innovationsprozesse in kleinen und mittleren Unternehmen. June
2008, 37 pages.
- 42 Domke, Nicole/Stehr, Melanie: Ignorieren oder vorbereiten? Schutz vor Antitrust Verstößen durch
Compliance“-Programme. June 2008, 25 pages.
- 43 Ripsas, Sven/Zumholz, Holger/Kolata, Christian: Der Businessplan als Instrument der
Gründungsplanung - Möglichkeiten und Grenzen. December 2008, 34 pages.
- 44 Jarosch, Helmut: Optimierung des Zusammenwirkens maschineller und intellektueller Spezialisten.
January 2009, 35 pages.
- 45 Kreutzer, Ralf T./Salomon, Stefanie: Internal Branding: Mitarbeiter zu Markenbotschaftern machen –
dargestellt am Beispiel von DHL. February 2009, 54 pages.
- 46 Gawron, Thomas: Formen der überörtlichen Kooperation zur Steuerung der Ansiedlung und Erweiterung
von großflächigen Einzelhandelsvorhaben. April 2009, 43 pages.
- 47 Schuchert-Güler, Pakize: Aufgaben und Anforderungen im persönlichen Verkauf: Ergebnisse einer
Stellenanzeigenanalyse. April 2009, 33 pages.
- 48 Felden, Birgit/Zumholz, Holger: Managementlehre für Familienunternehmen – Bestandsaufnahme der
Forschungs- und Lehraktivitäten im deutschsprachigen Raum. July 2009, 23 pages.
- 49 Meyer, Susanne: Online-Auktionen und Verbraucherschutzrecht – ein Rechtsgebiet in Bewegung.
Zugleich ein Beitrag zu Voraussetzungen und Rechtsfolgen des Widerrufsrechts bei Internetauktionen.
December 2009, 29 pages.
- 50 Kreutzer, Ralf T.: Konzepte und Instrumente des B-to-B-Dialog-Marketings. December 2009, 40 pages.
- 51 Rüggeberg, Harald: Innovationswiderstände bei der Akzeptanz hochgradiger Innovationen aus kleinen
und mittleren Unternehmen. December 2009, 31 pages.
- 52 Kreutzer, Ralf T.: Aufbau einer kundenorientierten Unternehmenskultur. December 2009, 59 pages.
- 53 Rogall, Holger/Oebels, Kerstin: Von der Traditionellen zur Nachhaltigen Ökonomie, June 2010, 28
pages.
- 54 Weimann, Andrea: Nutzung von Mitarbeiterpotenzialen durch Arbeitszeitflexibilisierung – Entwicklung
eines optimierten Arbeitszeitmodells für eine Abteilung im Einzelhandel, June 2010, 35 pages.
- 55 Bruche, Gert: Tata Motor's Transformational Resource Acquisition Path – A Case Study of Latecomer
Catch-up in a Business Group Context, October 2010, 28 pages.
- 56 Frintrop, Philipp/Gruber, Thomas: Working Capital Management in der wertorientierten
Unternehmenssteuerung bei Siemens Transformers, November 2010, 35 pages.
- 57 Tolksdorf, Michael: Weltfinanzkrise: Zur Rolle der Banken, Notenbanken und „innovativer
Finanzprodukte“, November 2010, 20 pages.
- 58 Kreutzer, Ralf T./Hinz, Jule: Möglichkeiten und Grenzen von Social Media Marketing, December 2010,
44 pages.
- 59 Weyer, Birgit: Perspectives on Optimism within the Context of Project Management: A Call for Multilevel
Research, January 2011, 30 pages.
- 60 Bustamante, Silke: Localization vs. Standardization: Global approaches to CSR Management in
multinational companies, March 2011, 29 pages.
- 61 Faltin, Günter/Ripsas, Sven: Das Gestalten von Geschäftsmodellen als Kern des Entrepreneurship, April
2010, 22 pages.
- 62 Baumgarth, Carsten/Binckebanck, Lars: CSR-Markenmanagement – Markenmodell und Best-Practice-
Fälle am Beispiel der Bau- und Immobilienwirtschaft, September 2011, 46 pages
- 63 Lemke, Claudia: Entwurf eines Modells zur serviceorientierten Gestaltung von kleinen IT-Organisationen
in Forschungseinrichtungen Theoretische Überlegungen und methodische Konzeption als erste
Ergebnisse eines Forschungsprojektes an der HWR Berlin, October 2011, 43 pages
- 64 Greiwe, Joris/Schönbohm, Avo: A KPI based study on the scope and quality of sustainability reporting by
the DAX 30 companies, November 2011, 31 pages
- 65 Lemke, Claudia: Auszug aus der Modellierung des IT-Dienstleistungsmodells „proITS“ am Beispiel der
Struktur von Forschungseinrichtungen und deren IT-Service – Erkenntnisse aus einem
Forschungsprojekt an der HWR Berlin, February 2012, 46 pages.
- 66 Grothe, Anja/Marke, Nico: Nachhaltiges Wirtschaften in Berliner Betrieben – Neue Formen des
Wissenstransfers zwischen Hochschule und Unternehmen, March 2012, 40 pages.
- 67 Meyer, Susanne/Fredrich, Jan: Rechtsgrundlagen einer Pflicht zur Einrichtung einer Compliance-
Organisation, May 2012, 19 pages.
- 68 Schönbohm, Avo/Hofmann, Ulrike: Comprehensive Sustainability Reporting – A long road to go for
German TecDax 30 companies, June 2012, 23 pages.
- 69 Baumgarth, Carsten/Kastner, Olga Louisa: Pop-up-Stores im Modebereich: Erfolgsfaktoren einer
vergänglichen Form der Kundeninspiration, July 2012, 33 pages.

- 70 Bowen, Harry P./Pédussel Wu, Jennifer: Immigrant Specificity and the Relationship between Trade and Immigration: Theory and Evidence, October 2012, 32 pages.
- 71 Tomenendal, Matthias: Theorien der Beratung – Grundlegende Ansätze zur Bewertung von Unternehmensberatungsleistungen, December 2012, 35 pages.
- 72 Schönbohm, Avo: Performance Measurement and Management with Financial Ratios – the BASF SE Case, March 2013, 26 pages.
- 73 Olischer, Florian/ Dörrenbächer, Christoph: Concession Bargaining in the Airline Industry: Ryanair's Policy of Route Relocation and Withdrawal, April 2013, 26 pages.
- 74 Dörrenbächer, Christoph/ Gammelgaard, Jens/ McDonald, Frank, Stephan, Andreas/ Tüselmann, Heinz: Staffing Foreign Subsidiaries with Parent Country Nationals or Host Country National? Insights from European Subsidiaries, September 2013, 27 pages.
- 75 Aschfalk-Evertz, Agnes/ Rüttler Oliver, Goodwill Impairment Testing according to IFRS in the United Kingdom - An empirical analysis of the discount rates used by the thirty largest FTSE 100 companies, November 2013, 28 pages.
- 76 Stockklauser, Stephanie/ Tomenendal, Matthias, The Value of Political Consulting – A Segmentation of Services and Evaluation Tools, December 2013, 40 pages.

Special Edition:

Ben Hur, Shlomo: A Call to Responsible Leadership. Keynote Speech at the FHW Berlin MBA Graduation Ceremony 2006. November 24th, 2006, Berlin City Hall, April 2007, 13 pages.