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The Interplay of Outsourcing Risks and Benefits

A Study of Business Process Outsourcing in the German Banking Industry

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Abstract

What is the influence of outsourcing risks on outsourcing benefits? Although outsourcing literature reveals findings on outsourcing risks and outsourcing benefits, their interplay has hardly been analyzed. Using data from 218 German banking managers within the context of Business Process Outsourcing (BPO), it turns out that financial and performance related risks and benefits heavily interplay. In addition, strategic considerations such as the concentration on core business and the ability to react to market changes have substantial impact on the perception of financial and performance risks and benefits. The findings of this paper can be used to analyze effective risk mitigation instruments and to design risk measurement models incorporating risk and benefit correlations.

1 Introduction

The examination of outsourcing — the purchase of a good or service that was previously provided internally [LaHi93] — has been a domain of IS research for several years now. When considering outsourcing, most of the academic discussions have addressed the questions of "why", "what", "which" and "how" to outsource as well as "the outcome of outsourcing" [DGHJ04]. This research provides findings to connect research on "how to outsource" and "the outcome of outsourcing" by analyzing the interplay of outsourcing risks and outsourcing benefits. Neither outsourcing risk [AuPR98] nor outsourcing benefit [LeMK04] can be described by a single measure. They are multi-dimensional constructs which heavily depend on

each other [AuPR98]. To assure a successful outsourcing arrangement, their interplay has to be analyzed to implement effective risk mitigation instruments and to design sophisticated risk measurement models using both risk and benefit correlations. Based on the outsourcer's perspective, we therefore aim at answering the following research questions:

- What is the influence of outsourcing risks on outsourcing benefits?

The research question addresses the concern that all outsourcing risks are financially driven and do only negatively impact the achievement of cost savings on the benefit's side [LaWi98]. But if also quality and strategic related risks affect cost savings and also negatively influence the strategic flexibility, outsourcers should account for these interplays in their outsourcing decision and also in the risk management activities during the delivery phase.

To approach this research question, a research model incorporating both risks and benefits has been developed and tested subsequently in an empirical study conducted on BPO in the German banking industry. The structure of the paper is as follows: In section 2, related research on outsourcing risk and benefit are presented to provide a theoretical base for the research model. Subsequently, in section 3 the research model comprising outsourcing risk and benefit measures is introduced and information provided on data collection and sample characteristics. The empirical results as well as their limitations are outlined in section 4. This paper closes with a summary of the results and provides some implications for further research (section 5).

2 Related Research

In this section, the building blocks of the research model are discussed. As primary research objective the concept of outsourcing benefits are first introduced. As these benefits can be periled by several undesirable outcomes, the concept of outsourcing risk is subsequently discussed to provide a theoretical base for the relation of risks and benefits. As this paper addresses risks and benefits in the context of BPO, current research findings on risks and benefits of BPO are outlined.

2.1 Outsourcing benefits

Multiple researches have been conducted to analyze outsourcing benefits [DGHJ04]. There are many reasons why companies choose to outsource. Academic effort has concentrated on factors

that influence the sourcing decision. Theories like Transaction Cost Economics [Coas37] and the Resource-Based View (RBV) [Barn86] explain the outsourcing decision from a theoretical point of view and have been tested thoroughly in empirical studies. Fundamentally, three drivers for outsourcing have been identified: economic, strategic and technological reasons [LoVe92]. The most important *economic* driver is anticipated cost reduction, as several researchers report. Companies are eager to reduce their overall expenditures (personnel, hard- and software) and discuss any sourcing scenario (incl. off-shoring arrangements) to find out which is the most cost effective one [AnSt98; LaWi98]. On a *strategic* level the demand for more flexible processes and IT systems which support the business in times of rapid change and global reach is often quoted [QuHi94]. This desire often results in the concept of focussing on core competencies through divestment of non-core areas [Quin99]. In times of tight budgets, companies need to allocate capital in the most efficient way and source out those activities which not provide substantial value to their core business. *Technologically*, companies expect to improve their operations through the access to new technology and skilled people by sourcing to a service provider specialized in the respective area [LaWi98]. Thus, quality improvement is often a vital reason to source out.

As this research aims at analyzing the interplay of risk and benefits, outsourcing benefits are viewed as potential benefits.

2.2 Outsourcing risks

Several researchers have addressed the importance of outsourcing risk research [DGHJ04; AuBR05]. However, a consistent definition of outsourcing risk has not emerged. In rational decision theory, the concept of risk reflects the variation in the distribution of possible outcomes, their likelihood and their subjective values [Knig21]. The theory suggests that decision-makers deal with decisions under uncertainty in a rational way, i.e., by computing different alternatives and selecting the option that best suits their personal risk-return profile, which is generally risk-averse [Yate92]. However, empirical studies indicate that this theoretical view is not consistent with how managers deal with risky choices in reality: several studies have shown that managers follow a less precise calculus, not using accurate probability calculations [MaSh98]. Instead managers follow a magnitude of undesired outcome concept neglecting the outcome probability. Therefore, Perceived Risk Theory (PRT) [Bauer67] will be used to analyze manager's risk perception. PRT analyzes the risk a person subjectively associates with the consequences of a decision. By doing this, it is possible to analyze individual risks using

only one measure instead of two (loss severity and loss probability) - thus overcoming the problem of how to combine these parameters.

Cunningham [Cunn67] distinguishes perceived risk into several dimensions called risk facets that are described in the following table and which are based on [FePa03].

No.	Risk facet	Description
1	Performance risk	The possibility of not performing as expected and therefore failing to deliver the desired benefits.
2	Financial risk	The risk to pay more money than initially anticipated.
3	Safety risk	The risk to damage the consumer's health or threaten his life due to the acquisition of the product.
4	Security (privacy) risk	The risk of misuse of private information, e.g. transaction data.
5	Opportunity / time risk	Loss of time when making a bad purchasing decision by wasting time researching and making the purchase decision.
6	Psychological risk	The risk that the selection or performance of the producer will have a negative effect on the consumer's peace of mind or self-perception.
7	Social risk	The potential loss of status in one's social group as a result of adopting a product or service.

Table 1: Perceived Risk Facets

As this research concentrates on manager's perception towards outsourcing in an organisational context, risk facets no. 4 – 7 are excluded. In addition, strategic risk replaces safety risk [Cunn67] as in this research context there is no threat to the life and health of the manager involved, but rather its equivalent for the organizational unit the manager is responsible for.

2.3 Business Process Outsourcing

BPO seems to be one of the largest areas of growth in the outsourcing market [Gart04]. Within this paper, BPO is defined as the delegation of one or more entire business processes to third party providers, including the software and hardware that support those processes [HaMe00]. A business process is defined as a "set of logically related tasks performed to achieve a defined business outcome" [Dave05]. Thus, BPO is the combination of application development/maintenance outsourcing, IT infrastructure outsourcing and the outsourcing of business activities which are not IT supported like business process re-design.

While practitioners and researchers alike agree on the importance of understanding the benefits and risks of BPO, this issue has so far only been addressed by a few authors [GeFr05], and there is a serious lack of theoretical and empirical knowledge on the impact and antecedents of BPO benefits and risk. One elementary question thus is whether the benefits and risks of ITO and BPO are basically the same, or if they differ in structure and magnitude and thus each justify a research domain on their own. The only available research on this issue is a paper by Gewald and Franke [GeFr05] showing that out of 15 initially investigated risks, 11 are higher in BPO

than in ITO, 2 are regarded as identical and 2 are considered lower in BPO than in ITO. One additional risk previously ignored, i.e., "misuse of trust," is identified as specific to BPO. This serves a methodological base of this paper as some findings from ITO can be transferred to the context of BPO. However, it hardly provides insights on the relation of BPO benefits and risks.

3 Research Model and Methodology

Within this section, the hypotheses of the research model are introduced. In addition, some facts and insights on the methodology used are given.

3.1 Hypotheses and Research Model

Taking the considerations of section 2, the risk measures analyzed here are performance, financial and strategic risks. The achievement of cost advantages, quality improvements and the focus on core competencies will be used as benefit measures (see section 2.2). The proposition is that these measures interplay, the following provides hypotheses on their relations.

Performance risk becomes evident when the outsourcer does not receive the service as expected. This risk is closely related to service debasement as described by [AuPR98]. Service debasement occurs, if the service provider is either not capable or not willing to execute the process as expected by the outsourcer. Not achieving the desired quality standard implies that possible quality improvement will hardly be accomplished. As already outlined, quality improvement has been recognized by several researchers as an important outsourcing reason [DGHJ04]. For outsourcing business processes banks expect benefits of better service quality [ECB04]. This might be achieved by faster execution and/or lower error/failure rates [BCLW04]. Moreover, banks expect the service provider to continuously improve the process to achieve further efficiency [ReBa01]. However, if the service provider does not even provide the minimum performance level, quality improvements will hardly be achieved.

Hypothesis 1: Performance risk negatively influences the achievement of quality improvements.

Performance risk might also have financial effects. As outlined by Lacity and Willcocks [LaWi98] quality related issues often have cost related impacts. If the desired quality level is not achieved, the outsourcer can either increase monitoring activities and call for penalties (if

possible) or allocate internal resources to compensate for quality losses [WiLa99]. As a result, there are unexpected management costs or costly contractual amendments [AuPR98]. In other words, the outsourcer has to pay more than he expected which is used here financial risk (see section 2.1).

Hypothesis 2: Performance risk is positively related to financial risk.

Outsourcing business processes inhibits the potential to exploit vendor's superior knowledge and capabilities with the process [WHFL04]. However, the prerequisite to gain these advantages is a sustained and reliable process quality. In addition, the outsourcer will be limited in its strategic flexibility. New products or services of the outsourcer which affect the way the outsourced process is executed can hardly be introduced, since even 'the old' products are incorrectly processed. Thus, the outsourcer becomes dependent on the service provider and burdens a loss of innovation capabilities [WHFL04]. This negatively influences outsourcer's strategic flexibility, i.e. increases strategic risk.

Hypothesis 3: Performance risk is positively related to strategic risk.

The presence of financial risk might be substantially affected by strategic risk [LaWi98]. Although outsourcing may hinder the bank to quickly react to market changes or implement strategic decisions, the bank might be able to simply allocate additional internal or external staff to over come these deficiencies. In both cases, the bank has to pay more for the process than expected resulting in rising financial risk.

Hypothesis 4: Strategic risk is positively related to financial risk.

If there are severe strategic risks, the outsourcer has to pay more attention to the outsourced process. By increasing internal process know-how and improving the relationship with the vendor the outsourcer might be able to reduce the risk of lock-in and incentives the vendor to exploit his superior capabilities. By doing this, the outsourcer will have a hard time to focus on his core business and enhance his core competencies [LaWi98; DGHJ04]. Managers and operative staff will not be free to create value for the firm [Earl96]. Instead they will be busy to compensate for the loss of strategic flexibility.

Hypothesis 5: Strategic risk negatively influences the focus on core competencies.

If the outsourcer heavily depends on the service provider and burdens therefore a loss of innovative capacity, he hardly contributes to the achievement of quality improvements [Earl96; WHFL04]. Achieving quality improvements means to analyze process inefficiencies and to identify operational ways to accelerate process execution and/or to lower error rates. This particularly becomes evident, if the outsourcer has not retained sufficient process experts which could help the service provider to improve the process.

Hypothesis 6: Strategic risk negatively influences the achievement of quality improvements.

The achievement of quality improvements implicates that the outsourcer does not have to pay special attention to quality issues. Thus, outsourcer's management and operative staff are free to improve core business [AuBR05].

Hypothesis 7: The achievement of quality improvements is positively associated with the focus on core competencies.

As operational excellence occurs, the service provider does not have to allocate resources to these processes. More transactions can be executed; error handling activities can be reduced. As a result, process costs of the service provider decrease which can be – at least partially – passed on to the client (outsourcer) [LaHi93; LaWi98].

Hypothesis 8: The achievement of quality improvements is positively associated with the achievement of cost savings.

Finally and most prevailingly, the achievement of cost savings is negatively affected by the occurrence of financial risk [AuPR98; HiLa00]. Additional, unexpected costs might consume anticipated cost savings. Even if fix prices are negotiated which represent a drastic reduction of process costs, extra management costs or hidden costs by the service provider (e.g. pricing new services exceptionally) might compensate these benefits.

Hypothesis 9: Financial risk negatively influences the achievement of cost savings.

3.2 Methodology and sample characteristics

The research model depicted in the previous section has been operationalized and transferred into a structural equation model (SEM). The SEM will be analyzed using Partial Least Squares (PLS) method [Chin98]. In contrast to covariance-based approaches (e.g. LISREL or AMOS), PLS has minimal requirements on measurement scales, sample size, and residual distribution

[Chin98]. It is particularly suitable if a more explorative analysis is preferred. As there is no strong theoretical foundation on the actual impact of outsourcing risk measures on outsourcing benefit measures, an explorative approach seems to be appropriate. Furthermore, one construct/latent variable (LV) has been operationalized in formative mode and PLS is the only algorithm that allows to both applying formative and reflective indicators (for the distinction of formative and reflective indicators cp. e.g. [JaMP87]).

Each LV in the research model is represented by a set of indicators, which were measured on a fully anchored 7-point Likert scale, ranging from "strongly agree" to "strongly disagree" for the LV quality improvements (QI), cost savings (CS) and focus on core competencies (CC). Performance risk (PR), financial risk (FR) and strategic risk (SR) were measured using scales from "very high" (risks) to "very low" (risks). Whenever possible, existing measures from prior empirical studies were adopted. The questionnaire was pre-tested independently with managers from different banks which were not included in the final sample. Based on the insights acquired in these pre-tests, the questionnaire was modified and finalized.

For this research the 200 largest banks in Germany were chosen, based on their total assets as reported in the balance sheet of the year 2003. The cumulated balance sheets of the 200 largest banks account for ca. 90% of the cumulated balance sheet of the German banking market.

To assess the interplay of risks and benefits, the managers in charge of four different banking processes were selected as units of analysis, which are generally not regarded as areas of core competence for banks: back office/settlement processes for transactions in securities, consumer credits, domestic payments and foreign exchange/money market. All 200 top banks were contacted by phone to personally identify the managers responsible for the business processes mentioned above. To increase the response rate and ensure that only the managers fill out the questionnaire themselves, the managers were identified and contacted personally. Some banks did not have all four business processes, therefore only 593 questionnaires (instead of the maximum number of 800) were sent out.

In total, 218 analyzable questionnaires from 126 banks were returned. This equals a response rate of 36.8% among managers and 63% of the banks. Taking the bank responses, the cumulated assets of the responses accounted for roughly 80% of the total cumulated German banking balance sheet. The response rate amongst large banks (assets > EUR 20bn) was exceptionally high (79.6%). The distribution of the banking groups (private banks, savings banks, cooperative banks, other banks) is representative.

4 Empirical Results

This section comprises the results from the PLS analysis, the discussion of key findings as well as limitation considerations. For analysis of the data, the software pls-graph, version 3.0, developed by Wynne Chin, has been used.

4.1 Model validation

4.1.1 Measurement model specification

All manifest variables used in the model have been derived from other studies. The manifest variables for measuring the latent variables (LV) are given in the table below. The LV CC has been operationalized in formative mode; all others are in reflective mode.

Indicator	LV	Mean	SD	Related Research
a16: The service provider will not provide the promised service.	PR	3.61	1.42	[Earl96; AuBR98]
a17: The service provider will not perform the process to the desired quality (speed and accuracy) and quantity.		4.32	1.48	
a18: The service provider will agree on more beforehand than he will actually deliver during the outsourcing venture.		4.59	1.56	
a19: The originally calculated business case will not include all the actual costs?	FR	4.76	1.42	[Earl96; LaWi98; HiLa00]
a20: Unanticipated costs will emerge that reduce the calculated cost savings?		4.74	1.42	
a21: The anticipated cost savings will not be achieved?		4.62	1.42	
a28: The bank loses its ability to react flexibly to changes in the market.	SR	4.34	1.62	[Earl96; WHFL04]
a29: The bank loses its ability to improve its position in the market by means of internal optimization procedures?		4.15	1.62	
a30: The bank loses know-how that is required to remain competitive in future markets?		4.68	1.58	
a34: Our bank can carry out the process internally at lower cost than an external service provider.	CS	3.63	1.60	[AnSt98; LaWi98; HiLa00]
a35: Our internal production costs are higher than the price		4.33	1.53	
a36: Outsourcing lowers the costs that arise from executing a business process.		4.40	1.44	
a37: Overall, I believe that outsourcing is an appropriate measure to lower the costs within this business process.		4.44	1.51	
a44: An external service provider has the potential to perform the process at a higher quality than our bank.	QI	3.74	1.48	[LaWi98]
a45: An external service provider is able to perform the process faster and/or at a higher accuracy than our bank.		3.68	1.49	
a46: By outsourcing the quality of executing the process will be improved.		3.53	1.48	
a93: By outsourcing the bank's processes can be better directed towards its core business.	CC	4.50	1.46	[GrCT96]
a94: By outsourcing the bank's IT systems can be better directed towards its core business.		4.13	1.49	

Table 2: Indicators

4.1.2 Formative measurement model

In the research model, "focus on core competencies" has been operationalized in formative mode since the indicators meet the criteria put forward in [JaMP87] for formative measurement models. According to the findings of both [DiWi01] and [Chin98], there are five critical issues determining the quality of the formative measurement model: (1) content specification, (2)

indicator specification, (3) indicator reliability, (4) indicator collinearity and (5) external validity.

Content specification consists of defining the scope of the latent constructs to be measured. The construct "focus on core competencies" was precisely defined and their domain intensively discussed, ensuring the proper specification of the applicable content of the construct.

Indicator specification comprises the identification and definition of indicators which constitute the construct. The indicators used in this model were identified by intensive literature review and have been validated through several pre-tests with senior bank managers who were knowledgeable about the topic of this research.

Indicator reliability analyzes the importance of each individual indicator that forms the construct. Two quantitative arguments have to be accounted for: (1) the sign of the indicator needs to be correct as hypothesized and (2) the weighting of the indicator should be at least 0.2 as proposed by [Chin98]. The model tested shows correct signs, sufficient weights (a93: 0.757; a94: 0.323) and are significant at the 0.05 level.

Because formative measurement models are based on linear equation systems, substantial *indicator collinearity* would affect the stability of indicator coefficients. Neither the analysis of correlations of indicators nor the calculation of variance inflation factors (all indicators fall far below the threshold of 10 [KlKM88]) necessitated the rejection of any indicators used. Therefore, all indicators were retained as no redundancy was identified.

External validity aims at ensuring that all indicators which form a construct are actually included in the model. Following [DiWi01], external validity can be analyzed by creating a phantom construct which is measured using reflective indicators. If the formatively measured construct strongly and significantly correlates with the reflective measured construct, external validity is given. The correlations of constructs within the tested model were all strong and significant at the 0.01 level. Thus, it is shown that the formative indicators used in this study actually form their respective constructs.

4.1.3 Reflective measurement model

The quality of the reflective measurement model is determined by (1) convergent validity, (2) construct reliability and (3) discriminant validity [BaYi88].

Convergent validity is analyzed by indicator reliability and construct reliability. In the model tested, all loadings are significant at the 0.001 level and above the recommended 0.7 parameter

value (significance tests were conducted using the bootstrap routine with 500 samples [Chin98]; results see appendix).

Construct reliability was tested using two indices: (1) the composite reliability (CR) and (2) the average variance extracted (AVE). Estimated indices were above the recommended thresholds [BaYi88] of 0.6 for CR and 0.5 for AVE (see appendix).

Discriminant validity of the construct items can be analyzed by looking at the cross-loadings. As for the reflective indicators, the loadings of each indicator are higher for their respective constructs than for any other construct. Furthermore, the square root of the AVE for each construct is higher than correlations between constructs. Therefore, the indicators of different constructs are not related to each other and discriminant validity of the latent variables is high.

As outlined in section 2, risk is closely related to benefit as it is variation in the distribution of possible outcomes. In particular, H1 and H9 might be tautological. Thus, indicator collinearity across constructs has to be analyzed. However, neither the analysis of correlations of indicators nor the calculation of variance inflation factors (all indicators fall far below the threshold of 10 [KlKM88]) supports this concern.

4.1.4 Structural model

After reviewing the measurement model, the explanatory power of the structural model is evaluated. The explanatory power is examined by looking at the squared multiple correlations (R^2) of the dependent variables. Encouragingly 49.2% (R^2=0.492) of the variation in financial risk is explained by performance and strategic risk. The R^2 value for cost advantages (R^2=0.341), quality improvements (R^2=0.305), focus on core competencies (R^2=0.335) and strategic risk (R^2=0.289) can be interpreted as moderate explanatory power according to Chin [Chin98](1998).

Predictive power is tested by examining the magnitude of the standardized parameter estimates between constructs together with the corresponding t-values that indicate the level of significance. All path coefficients exceed the recommended 0.2 level. The exception is the impact of strategic risk on focus on core competencies (H5). Additionally, as bootstrapping reveals, all path coefficients except H4 are highly significant (at the 0.001 level). Analysis of the overall effect size (f^2) reveals that all constructs have moderate effect except H5. However, small f^2 scores do not necessarily imply an unimportant effect [Cohe88]. Thus, all hypotheses have been proven to be correct except H5. The following figure shows the structural model findings.

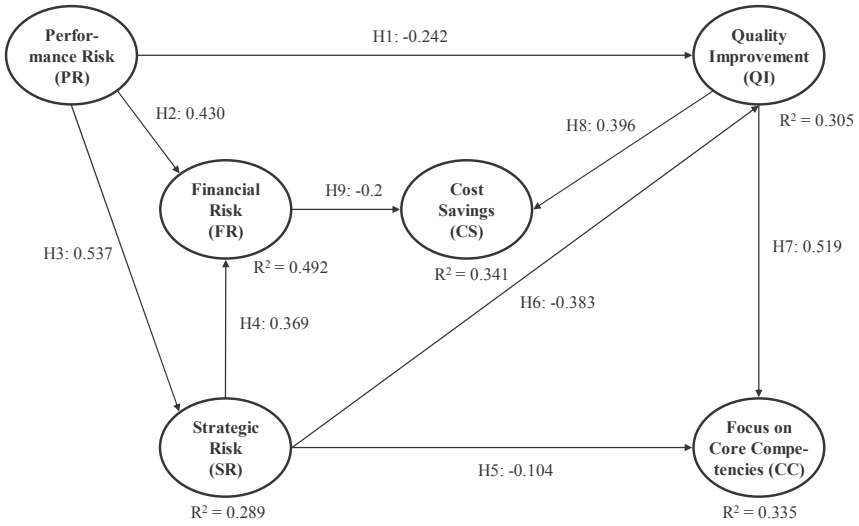

Figure 1: Research Model Results

4.2 Key findings

This study is the first quantitative analysis on the interplay of BPO risks and benefits. The results are very encouraging, and the high response rate indicates the importance of the topic and the interest of practitioners in the results of this research.

The data analysis reveals that almost all hypotheses hold as expected, showing significant loadings. The R^2 values of the dependent variables are satisfactorily high, indicating the high degree of explanatory power of its predecessors.

Quality improvements are negatively affected by performance and strategic risks (significant path coefficients (H1 and H6) as well as satisfactory high R^2). The influence of performance risk (H1) indicates that outsourcers are often confronted with basic quality issue making the achievement of high quality standards unreachable. This might be an indication that the BPO market is still immature and adopters are often confronted with more basic problems. This has been recognized for IT outsourcing a decade ago [LaHi93] and might now be applicable for the relatively new phenomenon BPO. This includes also the presumption that the service provider is not willing to increase quality due to opportunistic behaviour [AuPR98].

The influence of strategic risk (H6) suggests that there is a principal negative relation between outsourcing efficiency and flexibility gains. This contradiction has not been analyzed in outsourcing context before.

Financial risk can thoroughly be explained by performance and strategic risk (H2 and H4) as their explanatory power is exceptionally high (0.492) and path coefficients are high and

significant. The impact of performance risk on financial risk indicates that the outsourcer often has to either compensate vendor's underperformance internally entailing additional costs or is confronted with extra charges by the service provider although he expected the services to be included (see similar findings by [HiLa00]).
The influence of strategic risk shows that strategic considerations can significantly affect the financials of an outsourcing deal. If new products are launched or the existing portfolio is re-arranged, the service provider has to change his operations to fully accomplish outsourcer's requirements. As this is "extra work", the service provider will claim for "extra charge". Previous findings have revealed that "extra charges" occurs due to opportunistic behaviour of the service provider or inexperience of the service provider and/or the outsourcer [Earl96; AuPR98]. The relation between strategic and financial issues has hardly been addressed in outsourcing research before (see [LaWi98] on a similar topic).

Strategic risks can be partially explained by performance risks (H3). Process errors and/or long execution times imply operational difficulties impeding the bank to quickly react to market changes or to implement new strategies. As decreasing flexibility has even been recognized as an important reason to backsource [HiLa00], the role of performance problems become particularly interesting. In addition, the outsourced operations analyzed here are near bank's core business. Thus, quality problems have a direct and substantial influence on bank's market success.

The focus on core competencies depends substantially on the achievement of quality improvements (H7), but is only slightly affected by strategic risk (H5). This indicates that the bank will only be able to focus on its core business, if objectives – such as quality improvements – are achieved. Thus, allocation of staff to core business activities depends on the degree of operational excellence. This relation has hardly been recognized in outsourcing context before.
On the other side, the presence of strategic risk does not hinder the bank to focus on his core business. Even if the bank is not able to react quickly to market changes, the bank is still able to intensify activities to improve its core business. One reason might be that the service provider has to deal with consequences of strategic risk whereas the focus of core competencies can only be achieved internally.

The achievement of cost savings is significantly influenced by the achievement of quality improvements and the presence of financial risk (H8 and H9). The impact of quality improvements extends findings of Lacity and Willcocks [LaWi98] to BPO context. In addition, it shows that managers are confident that quality improvements achieved by the service provider will be passed over to the bank and imply further cost reductions.

Contrastingly, financial risks negatively affect the achievement of cost savings. Although this contributes to empirical studies reporting the failure of outsourcing ventures due to cost escalations, it does not imply that cost savings are compensated by losses due to the occurrence of financial risk.

4.3 Limitations

This study has focused on the German banking industry. Therefore, the results are only indicative for other industries and countries. As there are different national and industrial outsourcing regulations, the importance and awareness of risks differ. When switching to other countries, cultural differences entail additional risks and a change of risk severity [Dibb03].

5 Conclusion and further research

This research is the first quantitative study analyzing the interplay of outsourcing risks and benefits. It has been shown that not only performance and financial related risks and benefits strongly interrelate. But also the vital impact of strategic risks and benefits (focusing on core competencies) on financial and performance risks and benefits bring new light in outsourcing success research: researchers can use these findings to better analyze the consequences of risk mitigation instruments, such as the outsourcing contract. In addition, they are able to develop risk measurement models incorporating risk and benefit correlations. Further research could illuminate how the interplay of risks and benefits change over time – when risks turn to losses and/or benefits are achieved.

Practitioners can use the findings to better understand the existence and development of overall risk and benefits formation. This enables them to construct effective risk mitigation instruments and to design precise risk measurement models in the design phase. Firms in the decision phase benefit from the results by incorporating the perspective of quality and strategic related risks

and benefits and their interplay with financially driven objectives. As BPO is still a relative new phenomenon, these insights may be of special interest for the market.

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Appendix

The following table shows the loadings of reflective indicators. All items are significant at the 0.001 level. Only indicator a34 is reverse coded.

Construct	Item	Loading	CR	AVE
Performance risk	a16	0.879	0.936	0.829
	a17	0.932		
	a18	0.918		
Financial risk	a19	0.942	0.951	0.865
	a20	0.948		
	a21	0.899		
Strategic risk	a28	0.928	0.923	0.801
	a29	0.917		
	a30	0.836		
Cost savings	a34*	-0.841	0.923	0.749
	a35	0.859		
	a36	0.876		
	a37	0.884		
Quality improvements	a44	0.930	0.963	0.897
	a45	0.950		
	a46	0.959		

Table 3: Constructs and Loadings