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Sourcing, Risk and the Financial Market

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SOURCING, RISK AND THE FINANCIAL MARKET

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Abstract:

Outsourcing has become a commonly accepted alternative of strategic management. But how do stockholders rate the corporate decision to divest parts of the former business? We study the stock market reaction of outsourcing announcements of the global financial services industry, using event study methodology and multivariate cross-sectional regression analysis. We analyze a sample of 162 outsourcing transactions between 1997 and 2004 in order to investigate the drivers of excess returns to shareholders of outsourcers and insourcers in the global financial services industry. The analysis studies the impact of independent variables, the driving factors. Our findings indicate that many of these factors have significant explanatory power, indicating that capital market's reaction to an outsourcing announcement might at least partly be forecasted. Partnering with experienced service providers significantly benefits the outsourcer. Evidence indicates that insourcers significantly benefit from large deals and transactions relating to traditional IT processes.

Keywords: Sourcing, Outsourcing, Insourcing, Global Financial Services Industry, Event Study

1 SOURCING, RISK AND THE FINANCIAL MARKET

The examination of the outsourcing phenomenon, the process when a service provider takes ownership of corporate resources and manages those resources on behalf of the outsourcer (Kern et al. 2002), is a domain of the IS community for several years now. In recent times the questions "why to outsource" and "what to outsource" have been succeeded by the question "how to outsource", i.e. how to make best use of the opportunities enabled by the ability to use resources from outside the own company. An integral part of the "how"-question is an assessment of the risks associated with conducting outsourcing, multiple papers have been written on this issue and shed light on it from several different perspectives. We aim to extend this knowledge by adding the component of a neutral referee, the capital market. If publicly listed companies announce outsourcing deals, the capital markets react to this announcement. The reaction can either be positive or negative, depending on the assumptions of the investors regarding the impact on the business model of the outsourcing company and the bottom line benefits resulting from the deal. As the upcoming regulation of the "Basel II" capital accord (Basel Committee on Banking Supervision 2004) requires banks to consequently measure their risks and provide capital to cover potential losses resulting from operations, the banking sector is positioned as a primary target for risk related research. As outsourcing naturally inherits a great deal of risk, the capital markets are assumed to pay special attention to the anticipated risk in the outsourcing deal and if it outweighs the potential chances (e.g. higher earning potentials), arising from outsourcing. Outsourcing is not a risk free business (for an overview on the risks of outsourcing identified in current IS literature see (Aubert et al. 1998; Quélin and Duhamel 2003)), nevertheless it is constantly on top of the corporate agenda. Recently published market surveys unanimously report outsourcing to be the bright spot in IT services for the years to come. Market research firm Gartner Group for

example estimates the worldwide market for IT outsourcing to grow from 160 to 230 billion USD (from 2002 to 2007) and the market for business process outsourcing to expand even stronger from 110 to 175 billion USD in the same time frame (Caldwell and Young 2003). Also academics share this view (Lancellotti et al. 2003; Lacity et al. 2004; Willcocks et al. 2004) and support the case of a market which *is large and growing* (Lancellotti et al. 2003), still requiring more research.

The focus of this paper is on outsourcing activities of the global financial services industry. We chose that sector for two reasons: (1) This industry is the second largest buyer of outsourcing services, just after public bodies (Caldwell 2003). (2) The financial services industry has an immediate focus on risk, as several national and international regulatory bodies have issued legislations that enforce banks to re-think their risk management and incorporate operational risk, the risk of losses resulting from inadequate or failed internal processes, people and systems or from external events (Basel Committee on Banking Supervision 2004). This type of risk also applies to outsourcing.

We used event study methodology and multivariate cross-sectional regression analysis to capture the reactions of the stock market, which is regarded as taking a neutral perspective, to analyze the perceived level of risk, inherent in an outsourcing decision. The outsourcing announcement is actually the first publicly available indication that two companies are engaging in sourcing arrangements. According to market information efficiency (Fama 1970), investors will act upon this newly available information and will adapt their stock trading strategies accordingly. We focus on a dedicated sector, the financial services industry and we do not restrict our sample to IT outsourcing but assess the full scope of strategic options also including application maintenance or business process outsourcing. By conducting this research we aim to provide researchers as well as practitioners with valuable information on how shareholders perceive the decision to engage in outsourcing projects and what the key drivers for a positive or negative reaction of the capital markets are.

The paper is structured as follows: We provide an overview on the current state of research regarding outsourcing and event studies in related fields. Thereafter we developed hypotheses grounded by theoretical considerations and provide information on the methodology of our study. Finally we display the results and close the paper with a discussion and conclusion.

2 CURRENT STATE OF RESEARCH

The impact of outsourcing on people, organizations and information systems has fascinated researchers soon after the first outsourcing mega-deal (commonly regarded as being Kodak in 1989 (Hirschheim and Dibbern 2002)) has been initiated. IS research has adopted the outsourcing phenomenon as an area of research interest since the last decade of the foregone century and its attractiveness to the IS community remains unbroken (Dibbern et al. 2004). Outsourcing research traditionally addresses three major questions: (1) why a corporation should employ outsourcing as a strategic tool, (2) what to outsource and (3) how outsourcing should be conducted (e.g. contractual or relationship matters)? The most current area of interest is the discussion of the possible implications of outsourcing. Authors are increasingly investigating also the undesirable outcomes of outsourcing and assess ways to avoid them. An early assessment of the risk of outsourcing has been conducted by (Earl 1996), further active contributor to the discussion on this field are (Aubert et al. 1998; Currie 1998; Willcocks et al. 1999) from 1998 onwards investigating the risk factors to avoid when conducting outsourcing engagements. A review of the literature conducted by (Quélin and Duhamel 2003) revealed the main risks of outsourcing as identified in the relevant literature. They listed the dependence on the supplier, hidden costs, loss of know-how, service provider's lack of necessary capabilities and social risk as the topmost named risks. For this paper we exclude the assessment of social risk which has been classified by Quélin and Duhamel as only regionally important in practice.

Several empirical studies have been conducted in comparable fields. In the following we highlight the most important ones for our topic and give a brief abstract of their key findings. (Hunton et al. 2000) analyzed a sample of 77 information systems IS outsourcing announcements between 1990 and 1997.

They found evidence that capital markets react positively on the announcements and abnormal returns were greater for smaller firms than for larger firms (defined by the market value). (Gilley and Rasheed 2000) studied the effect of outsourcing of peripheral and near-core tasks on a firm's financial and non-financial performance. They find no significant direct effect of outsourcing, but conclude that outsourcing interacting with corporate strategy and environmental dynamism has an effect on firm performance. (Glassman 2000) examined 27 companies which undertook large information technology outsourcing initiatives between 1993 and 1999. Focus of this study was on IT mega deals. The author found an average gain in shareholder value of 5.7 per cent over the general market trend from two months prior to two months after the announcement (abnormal return). Glassman concluded that outsourcing creates value to shareholders as outsourcing has become a management technique that can reduce risk and increase flexibility by making costs variable. (Albright 2003) built on the study provided by Glassman. The research timeframe has been extended to cover a data set of 45 deals from 1993 to 2002. Similar to the previous study, Albright concluded that outsourcing has a positive effect on shareholder value. Additionally, he concluded that selective outsourcing is the superior strategy. (Frag and Krishnan 2003) examined information technology outsourcing deal announcements between January 1994 and August 2001. They concluded that capital markets react positively to IT outsourcing announcements of IT industry firms and service industry firms. They find positive market reactions to strategic sourcing projects, but not for cost-cutting projects. (Oh and Gallivan 2004) analyzed a sample of 97 information technology outsourcing deal announcements between 1998 and 2001. Contrasting prior research, they find only weak evidence with respect to investors' positive reaction to IT outsourcing announcements. Specifically, they detect that abnormal returns are negatively associated with asset specificity and with contract size. They found no evidence regarding a significant association of abnormal returns and contract duration or between abnormal returns and cost-reducing IT outsourcing announcements.

3 HYPOTHESES

Our research approach aims to conjoin the risks of outsourcing as identified in IS-literature with theoretical constructs adopted from agency theory. We assume that the capital market assesses both considerations and thus derive the level of risk inherent to a specific transaction. Furthermore we assume that an investor's decision to invest or divest is to a large extent influenced by the level of risk as perceived by the stockholders. Higher risk levels can be associated with potential divestments while a lower level might lead to an increasing investment in the company.

Size of contract: The resource dependency theory (Pfeffer and Salancik 1978; Cheon et al. 1995) argues that companies exchange resources to reduce uncertainty and to increase their ability to compete with other market participants. Outsourcing in order to secure external resources or capabilities is a manifestation of resource dependency between client and vendor. The monetary size of the contract is expected to play a significant role in determining the level of dependency (Oh and Gallivan 2004). Thus, as contract volume increases, the outsourcer becomes more dependent on the vendor. Additionally, monitoring costs and contract volume are positively correlated (Jensen and Meckling 1976). We measure this source of risk by the deal size (agreed contract volume).

Hypothesis 1: Due to increased dependency, higher monitoring costs and general risks of large projects, investors are expected to react negatively towards larger sourcing announcements.

Duration of contract: Considering the dynamism at which business processes and technologies become outdated signing a long-term contract with a service provider may be risky. Not only business uncertainty, but also technological uncertainty exacerbates the risk of long-term contracts, due to the potential for technological discontinuities. The proposed duration of the contract plays a significant role in many types of outsourcing arrangements (Oh and Gallivan 2004). Companies engaging into long-term contractual arrangements face increased risks as they lose flexibility to react on future developments (Willcocks and Lacity 1999; Lacity 2002; Young and Hood 2003). A worst case scenario locks the client in to a poorly-performing vendor, constraining the client's flexibility (Oh and

Gallivan 2004). In fast-changing market environments frequent strategic changes might be essential to maintain a superior market position. In addition, being legally bound to a service provider prevents the outsourcer from assessing newer technologies or business concepts and benefiting from superior offerings and services already available in the market place.

Hypothesis 2: We expect investors to react negatively towards outsourcing contracts having a long duration.

Deal complexity: Recently, the focus has shifted from characteristics of the ideal outsourcing contract to the practicalities of actually making outsourcing relationships work. Researchers have developed differentiations to describe various philosophies of managing outsourcing relationships. (Fitzgerald and Willcocks 1994) propose two extremes as “simple transactional contracts” and “full partnership-based relations”. Initially, many outsourcing arrangements implied total outsourcing to a single vendor (Huber 1993; Venkatraman and Loh 1994). Today, however multi-vendor-deals receive wider attention (Currie 1998; Gallivan and Oh 1999). This can be attributed to greater propensity of firms to engage in selective or “smart” sourcing (Earl 1996; Lacity et al. 1996) or functional outsourcing (Grover et al. 1996). Multi-vendor outsourcing arrangements are now a common part of the outsourcing landscape (Gallivan and Oh 1999). As on one hand, the outsourcer might benefit from the advantages mentioned above, on the other hand balancing out for the downsides is needed. In order to measure the impact of the different deal constellations, we differentiate between simplistic one-to-one relationships and multi-vendor arrangements and measure the capital market reaction to both relationships. We measure this deal characteristic with a binary variable, “0” for deals including a single vendor, “1” for deals employing more than one vendor.

Hypothesis 3: Outsourcers can reduce risks and increase their specific relationship power, therefore we expect capital markets to approve of deals including multi-vendor relationships.

Experience of the service provider: Business experience is a relevant factor in leveraging economies of scale (Bain 1954). An experienced insourcer that has performed a multitude of deals is in a better position to leverage synergies and to benefit from economies of scale and scope. We thus expect that capital markets reward higher returns to deals that have been announced by an experienced service-provider. Furthermore experienced vendors are assumed to have built in-house learning experience on avoiding the pitfalls of outsourcing projects (Willcocks and Lacity 1999; Lassig et al. 2003). This is expected to lead to a higher level of programmability (the ability to specify appropriate behaviour of the vendor in advance) due to experience in contract negotiations and possibly from failed contract clauses in the past. Also the risk that arises from a vendor pretending to have capabilities that in reality are not present is mitigated as this behaviour would probably have been noticed before in the market reducing the number of deals closed (Willcocks et al. 1999). Experience of the service provider is measured by the cumulated number of previously acquired deals.

Hypothesis 4: Experienced service providers are in a better position to mitigate risks, therefore capital markets react positively towards deal announcements including experienced vendors.

Transaction focus: Apart from cost considerations, outsourcing is also a strategic option for companies to concentrate on their core competencies (Prahalad and Hamel 1990; Quinn and Hilmer 1994). The resource based view argues that a firm’s competitive advantage is build on skills and resources that are provided internally (Barney 1991; Grant 1991; Cheon et al. 1995). In this view, outsourcing of activities should be used as a temporary solution while companies build their own internal capabilities (Dragonetti et al. 2001). While not directly addressing the outsourcing decision, it is implied that outsourcing of non-core activities leads to saving resources (cash, time, staff, technological resources, managerial attention) to be used in core activities (Bettis et al. 1992; Dragonetti et al. 2001), ultimately leading to an enhanced competitive position (D’Aveni and Ravenscraft 1994). On the other hand, several authors have noted that outsourcing of core activities may lead to declining innovations (Kotabe 1990; Gilley and Rasheed 2000). We clustered business functionalities in four functional types in order to differentiate between core and non-core activities: IT-Infrastructure outsourcing (ITI), Application Development and Maintenance outsourcing (ADM),

Administrative Processes outsourcing (APO) and, finally, Business Process outsourcing (BPO). (Friedrich and Gellrich 2004) have shown that outsourcing of ITI and ADM functions can be stated as “non-core”, while “typical” core financial processes are covered in APO and BPO. For service providers, traditional IT-related processes are scalable, flexible, homogeneous and usually standardized. Ultimately this leads to less complex integration projects associated with lower levels of risk.

Hypothesis 5: We expect sourcing of non-core activities such as ITI and ADM to be rewarded by capital markets. We expect outsourcing announcements relating to core activities such as APO or BPO not to be approved by capital markets.

Financial reliability of the service provider: A financially reliable vendor reduces the level of risk as the probability for a default and therefore the threat to the customer of not being able to produce its own services is reduced (Michell and Fitzgerald 1997; Lassig et al. 2003). A financially viable service provider becomes increasingly less risk averse, it therefore becomes attractive to pass risk from the customer to the vendor (Eisenhardt 1989), thus reducing the risk of the customer firm. Furthermore a financially stable vendor is generally more likely to be a reliable partner for the future of the engagement which reduces the risk of dependence on the service provider. As indicator for financial reliability we used the Return-on-Equity (RoE) of the service provider. A high RoE indicates that a company operates efficiently and profitable with its equity.

Hypothesis 6: Vendors providing a positive financial performance bear less risk, therefore capital markets react positively towards deal announcements including service providers having a high RoE.

An overview of analyzed factors and their interdependence with sourcing risk is provided in Figure 1.

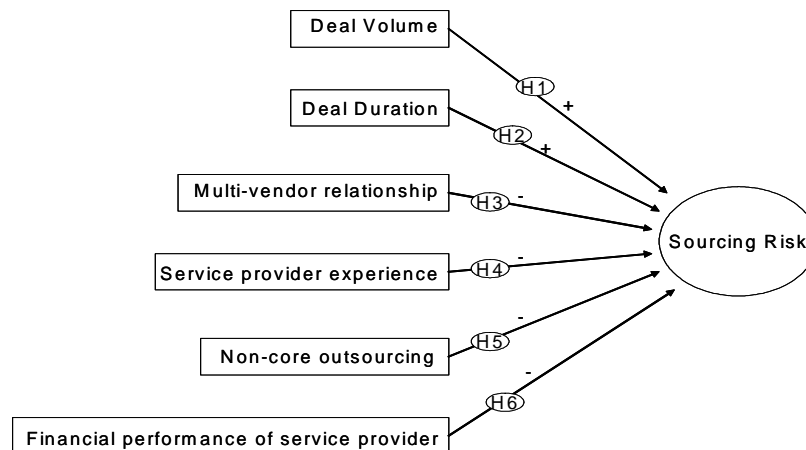


Figure 1: Research model of current study

4 METHODOLOGY, SAMPLE DESIGN AND DATA

Using event study methodology including OLS regression and the market model we analyze outsourcing transactions announced by the financial services industry that have been publicly announced between January 1997 and March 2004. The event study methodology applied in this paper relies on the standard market model based approach suggested by (Fama et al. 1969), perpetuated by (Brown and Warner 1980; Brown and Warner 1985; MacKinlay 1997) and used by (Beitel et al. 2004). As market indices we applied the MSCI World Banks, MSCI World Insurances and World Financial Services Index, according to the industry classification of the outsourcer; for the vendors we have used the S&P 500. We extracted all financial services by thorough research of outsourcing literature. Additionally, we conducted a comprehensive investigation of global financial newspapers

included in LexisNexis using a variety of keywords such as “outsourcing in financial services”. This way we derived a unique database of financial services outsourcing deals covering a timeframe from January 1997 to March 2004 including a total of 272 deals in the global financial services industry with a deal volume larger than 10 million USD. To verify and complement relevant fundamental information for these 272 deals (e.g. event date, outsourcer, insourcer, type of deal, deal value) we extracted and evaluated the official first press announcement regarding the signing of the specific outsourcing contract. As the exact identification of the correct announcement date (i.e. event date in terms of this study) is crucial to provide correct results for this analysis, we spent extensive and comprehensive research regarding this issue. If we were unsure about the first press deal announcement or if we found evidence of information trickling we eliminated the observation since it is crucial for the event study to use the first date when the information reaches the market – otherwise results would be erroneous. The majority of the press releases were published on the outsourcer’s and insourcer’s investor relations websites. To complement this investigation we have also performed checks for any pre-announcements and for other events that might have additional effects on the specific company’s stock market performance (confounding effects). All financial services related industry specifications (i.e. Banking, Insurance, and Other Financial Services) were based on the specific Bloomberg classification. During the course of this study we will use this industry classification to provide further analysis.

Of these 272 transactions no precise event date could be identified for 76 deals, for additional 14 deals the involved companies are not publicly listed (e.g. smaller private banks) so that no relevant financial data could be extracted. In order to account for outliers and to avoid a bias of the results we removed 20 outlying observations (sensing). Thus, our final verified data set includes 162 outsourcing transactions in the global financial services industry within the timeframe from January 1997 to March 2004 and each transaction being larger than 10 mio USD. For 104 deals we were able to verify the fundamental information for both parties, i.e. outsourcer and insourcers. For 18 transactions, reliable data could be retrieved for the outsourcer only, for 40 cases for the insourcer only.

These 162 transactions encompass 124 different financial services companies that have engaged into outsourcing activities, termed outsourcers in the context of this study, and 59 observations for service providers that have engaged into service providing activities, termed insourcers (or vendors) in the context of this study. Service providers are, on average, more profitable than outsourcers (Return-on-Equity of 16.91 per cent vs. 14.05 per cent) also they are seem to be more cost efficient (Cost-Income-Ratio of 63.08 per cent vs. 65.50 per cent). The average market-to-book-ratio (MTB) is 2.72 for outsourcers and 4.83 for service providers, while the average price-earnings ratio is 15.76 per cent and 24.42 per cent, respectively (all data provided by Bankscope and Datastream). As outsourcers stem from the financial services industry and the vast majority of insourcers stems from the service providing industry, the different performance figures need careful interpretation.

5 ANALYZED VARIABLES

The absolute size of the outsourcing transaction is measured by the variable “**deal size**”. The contract value was available for 97 transactions. The average contract value is 595.27 million USD. The maximum value is 5bn USD, minimum value is 10 million USD. For outsourcers, the size of the contract reflects the amount of operational costs now sourced externally. For insourcers, the value reflects an additional revenue stream. The deal length of the transaction is measured by the variable “**deal length**”. The average deal length of transactions in our sample is available for 110 transactions, the mean is 7.51 years. Some outsourcing deals encompass more than one vendor (**additional vendor**). We find nine deals in our data sample containing more than one vendor. The sourcing business experience of an insourcer is measured by the **total number of insourcing deals** by a specific service provider. On average, insourcers in the sample have performed 13.8 insourcing transactions. We differentiate four different **functional areas** of financial institution’s outsourcing. 56 deals are in the area of BPO, 5 in APO, 33 in ADM and 66 deals are in ITI (2 deals could not be

categorized due to missing information). **Return-on-Equity** for the outsourcers is on average 14.40 per cent, for the insourcers 16.40 per cent. As control variables we introduce several additional variables, i.e. the **market capitalization** of the sourcing partners, the **ratio of the absolute deal size in relation to the market capitalization**, the **industry sector** of the outsourcer as well as the **year** of the transaction. Table 2 provides an overview on the independent and control variables.

6 RESULTS

6.1 Event study results

Cumulative abnormal returns for outsourcers and insourcers are presented in Table 1 in the appendix. Shareholders earn, on average, slightly negative (but mainly no significant) returns in most of the analyzed event windows. For the outsourcers we detect negative CARs in all analyzed event windows. For the event window [-1;1] we detect a significant negative CAR of -0.68 per cent. For the insourcers, we detect negative CARs in eight of the analyzed twelve event windows. The event window [-3;3] displays a significant positive CAR of 0.86 per cent. On a first glance, these results differ from previous related findings which mainly report positive cumulated abnormal returns. But readers should keep in mind that we focus on one industry (the financial services sector) and included not only IT-related sourcing announcements. Thus, our results are not really comparable to results from other studies focusing on various industries or cover only IT outsourcing (Glassman 2000; Hunton et al. 2000; Albright 2003). The following section provides results of the cross-sectional multivariate regression for outsourcers and service providers.

6.2 Regression results

Cumulated abnormal returns are analyzed separately for clients and service providers. Table 3 provides an overview of the results for the total model. They have been generated using cross-sectional multivariate OLS regression analysis. Relevant event windows have been taken according to significant results in the event study. Adjusted R² are 0.23 and 0.33, for outsourcers and service providers, respectively. F-values are highly significant at 1.87 and 2.24. Figure 2 provides a detailed overview of the results relating to the hypotheses specified above.

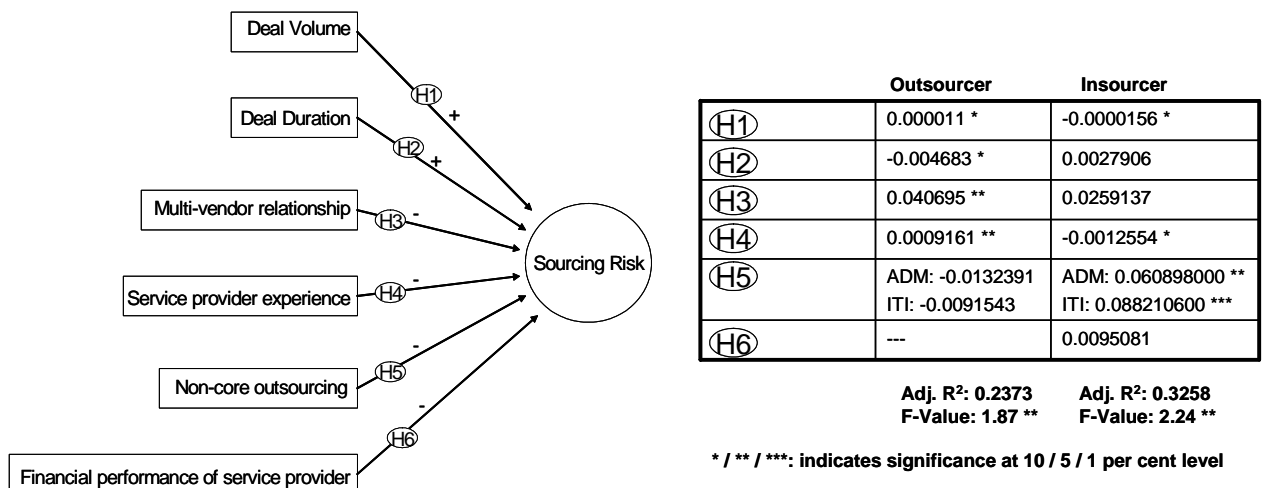


Figure 2: Overview: OLS-regression results

Hypothesis 1 suggests that investors do not approve of large deals since they provide more potential for sourcing risks. Our results do not provide consistent support for the hypothesis. Outsourcers

significantly benefit from large deals (positive coefficient at the 10 per cent level). Service providers, on the other hand, receive significant negative returns when engaging in large transactions. Obviously, at least for the outsourcers, investors seem to evaluate other factors positively associated with deal size and potentially outweighing the risks attributed with large deal volumes. As large deals provide more potential to leverage synergies they can create cost advantages a fact which also benefits the outsourcer. According to **Hypothesis 2** we expected long deals to bear increased risks. For the outsourcers our analysis yields a significant negative coefficient. For outsourcers, investors do not approve of long deals. This finding supports our expectations. Though longer deals provide a stable structure for strategic business planning, the downsides (e.g. inability to source operations back in, strategic inflexibility and being locked in to service providers offering outdated technology) outweigh potential upsides. In **Hypothesis 3** we formulated the expectation that deals including an additional vendor or sub-contractor provide potential for increased risks. Our results do not provide grounds to support this hypothesis. Outsourcers including an additional vendor into the transaction significantly benefit from this constellation. We find a positive and highly significant coefficient. Outsourcers that engage into multi-vendor relationships increase their specific relationship power and decrease their individual dependency risk. According to **Hypothesis 4** we expected capital markets to react positively towards deal announcements including experienced service providers. Our results significantly support that hypothesis. Clients engaging in partnerships with experienced service providers are significantly rewarded by capital markets. Experience, counted as number of past deals, can be viewed as an appropriate proxy for risk-reducing qualities and abilities. For the service providers, our results are counter-intuitive, as the coefficient is significant, but negative. If a service-provider has already closed a multitude of transactions investors might fear that an additional deal creates too much pressure on the already stretched organization. **Hypothesis 5** suggests that sourcing of traditional IT-related services provide less risk potential. Our results show that service providers engaging in traditional IT-transactions (ITI, ADM) are significantly rewarded by investors. Provision of scalable, standardized homogeneous services which are less complex to integrate compared to typical finance processes is highly rewarded by investors on capital markets. In **Hypothesis 6** we formulated that financially successful service providers account for less risk. Our empirical findings do not provide significant support for this hypothesis. Relating to another financial performance figure, our results suggest that service providers significantly benefit from transactions including clients that display a large cost-income-ratio. Sourcing in currently cost intensive operations is rewarded by investors as these operations provide a potential to harvest synergies and cost-reductions.

6.3 Limitations of the study

The premise of this study was, as for all event studies, that outsourcing is attributed with certain risks for the involved companies and that announcements provide information about future cash flows and have the potential to impact a company's market value. Although a comprehensive attempt was made to control for confounding variables, all potentially confounding variables may not be considered in this study. For example, future studies could control for characteristics of risk sharing, incentives and penalties defined in the contract between the sourcing partners. Similarly, controlling for sourcing activities of the specific financial services company thus gaining a measure for the firm's vertical integration and sourcing experience might be useful in future studies. For service providers market structures and environmental dynamism can be a fruitful area of further research. Generally, it can be stated that finding the "right" variables and providing appropriate concepts to operationalize the assumptions and hypotheses is a challenge in itself. We suggest this area as a topic for further academic research. The same holds true for measuring risk inherent to sourcing contracts. Although we measured risk with a variety of variables we were unable to provide any evidence that capital markets react adversely towards certain deal attributes. Again, this can be due either to employing incorrect variables or that capital markets are missing a comprehensive understanding of the risks inherent in outsourcing (or at least investors believe that potential upsides of sourcing arrangements outweigh potential downsides and risks).

7 CONCLUSION

The results of the study did not in every case match up with our expectations. Three insights are of special interest:

(1) Partnering with experienced service providers significantly benefits the outsourcer. This implies that the stock markets react in a conservative way if it comes to large and risky projects such as outsourcing engagements. Senior management in charge of outsourcing decisions should bear this finding in mind when selecting the service provider. Capital markets perceive less risk when the insourcer is experienced.

(2) Service providers significantly benefit from large deals. Although that insight may not come as a surprise it may well be useful for vendors and their pricing department. Therefore this knowledge may also benefit the outsourcer during contract negotiations. Though one might argue that large deals bear high potentials for operational risk for the vendor, they also provide increased potential to leverage synergies and uncover economies of scale. Obviously, these upsides outweigh risky downsides.

(3) Service providers significantly benefit from deals relating to traditional IT processes. Once again the capital markets position themselves as conservative. This is interesting as the market for ITI is nowadays rather competitive thus resulting in diminishing margins. More and more service providers try to locate other areas for profit generation which are still not dominated by a multitude of capable vendors. One focus of interest is APO and BPO where numerous service providers are currently undertaking steps to enter these markets. It is noteworthy that the capital markets actually do not value these shift in vendor strategy.

In conclusion our study provides beneficial ideas to academics as well as practitioners. Further insights are needed in order to understand complex sourcing relationships in the light of the influential factor of risk. Practitioners gain useful insights in order to maximize market impact (thus shareholder value) of their sourcing thus corporate strategies.

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9 APPENDIX

Event Window	Obs.	CAR in %	Min	Max	Pos.	Neg.	P-Value
Outsourcer							
{0}	122	-0.02%	-7.12%	6.76%	61	61	0.9152
[-1;1]	122	-0.68%	-12.24%	9.01%	51	71	0.0235
[-3;3]	122	-0.22%	-12.31%	24.19%	55	67	0.6410
[-10;1]	122	-0.75%	-31.72%	13.86%	59	63	0.1986
[-10;10]	122	-0.55%	-27.36%	38.86%	57	65	0.4898
[-20;20]	122	-1.36%	-48.80%	45.95%	59	63	0.2464
Insourcer							
{0}	144	-0.04%	-11.29%	20.63%	78	66	0.8743
[-1;1]	144	0.20%	-14.06%	18.19%	75	69	0.5603
[-3;3]	144	0.86%	-26.49%	24.68%	78	66	0.0869
[-10;1]	144	-0.73%	-100.69%	25.85%	63	81	0.4535
[-10;10]	144	-0.24%	-95.01%	51.36%	69	75	0.8439
[-20;20]	144	-1.01%	-97.73%	52.45%	63	81	0.5154

Table 1: Event study results. Abnormal returns have been calculated using OLS-regression. OLS-parameters have been estimated for a period of 252 trading days (1 trading year) ***/**/* indicate significance at the 1/5/10 percent level.

Independent Variables	Description	Obs.	Mean	Std.-Dev.	Min	Max
Deal Size	sizeabs	97	595,2784	940,9599	10	5000
Deal length	length	110	7,518182	2,346115	3	15
Additional vendor	addvendo	9			0	1
Number of deals acquired by the insourcer	numdeals	162	13,84568	13,68663	1	36
BPO	bpo	56			0	1
APO	apo	5			0	1
ADM	adm	33			0	1
ITI	iti	66			0	1
Return-on-Equity of insourcer	roeis	141	0,164065	0,187736	-0,913	0,4485
Control Variables						
Market Cap of OS	mcapos	121	24420,64	24480,95	124,849	113951
Market Cap of IS	mcapis	144	57574,8	71757,79	120,28	230207
Deal size/Market cap. of outsourcer	relsizeos	73	0,06979	0,125939	0,00046	0,74266
Deal size/Market cap. of insourcer	relsizeis	87	0,045857	0,106388	0,00034	0,62229
Banking	banking	93			0	1
Insurance	insuranc	33			0	1
other FS	fs	36			0	1
Return-on-Equity of outsourcer	roeos2	106	0,144075	0,130863	-0,3633	0,4535
Market-to-Book-Ratio of outsourcer	mtbos2	108	2,513241	1,630973	0,57	9,72
Market-to-Book-Ratio of insourcer	mtbis2	142	4,81507	3,190094	0,75	19,49
Cost/Income-Ratio of outsourcer	cios2	84	64,68619	10,73688	34,92	94,45
Relative Size (Mcap OS/ Mcap IS)	relsize2	103	5,040415	16,31466	0,00065	128,876
Relative Profitability (RoE OS / RoE IS)	relprof2	91	0,983146	4,528786	-9,1349	37,4815
1997	y97	0			0	0
1998	y98	8			0	1
1999	y99	12			0	1
2000	y00	25			0	1
2001	y01	28			0	1
2002	y02	51			0	1
2003	y03	35			0	1
2004	y04	3			0	1

Table 2: Independent and control variables.

dependent Var.	Cumulated Abnormal Return (CAR) of OS [-1;1]		Cumulated Abnormal Return (CAR) of IS [-3;3]	
Event Window	60		60	
N	0,2373		0,3258	
Adj. R ²	1,87 **		0,0452	
F-Value	2,24 **		0,04332	
Variable	Coefficient	P> t	Coefficient	P> t
sizeabs	0,000011000 *	0,0510	-0,000015600 *	0,0720
length	-0,004683000 *	0,0640	0,002790600	0,5140
addvendo	0,040695000 **	0,0280	0,025913700	0,3490
numdeals	0,000916100 **	0,0580	-0,001255400 *	0,0840
apo	-0,024032000	0,3790	0,066105800	0,1210
adm	-0,013239100	0,4660	0,060898000 **	0,0240
iti	-0,009154300	0,5740	0,088210600 ***	0,0010
roeis	0,003946100	0,9330	0,113477600	0,1360
mcapos	-0,000000389	0,1440	0,000000465	0,3270
mcapis	-0,000000217 **	0,0190	-0,000000167	0,2300
relsizeos	0,019188500	0,5870	0,068400100	0,2190
relsizeis			0,187781400 **	0,0300
banking	0,009629800	0,3900	-0,018403700	0,3100
fs	0,003658100	0,8190	-0,040033700	0,1040
roeos2			0,009508100	0,8610
mtbos2	0,007777500 **	0,0220		
cios2			0,002110600 **	0,0350
relsize2	-0,000222800	0,4040	-0,000615300	0,1440
relprof2			0,000219800	0,9290
y98			0,047970400	0,3850
y99	0,060300100	0,0960		
y00	0,057694400 **	0,0320	0,076587600 **	0,0500
y01	0,073818200 ***	0,0100	0,116745600 ***	0,0070
y02	0,051047000 **	0,0500	0,110172500 ***	0,0090
y03	0,079779500 ***	0,0030	0,108304200 **	0,0110
_cons	-0,058488400	0,1350	-0,290590300 ***	0,0040

Table 3: Total model: OLS-regression results for the cumulated abnormal returns of outsourcers and service providers. ***/**/* indicate significance at the 1/5/10 per cent level.