

**SOURCING RISK AND THE CAPITAL MARKET'S PERSPECTIVE**  
**A STUDY OF THE GLOBAL FINANCIAL SERVICES INDUSTRY**

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*Outsourcing has become a widely accepted option in strategic management. This paper examines how stockholders rate the corporate sourcing decision with regard to risk specific factors associated with this transaction. Using event study methodology and multivariate cross-sectional OLS-regression, we analyze a sample of 162 outsourcing transactions of the global financial services industry between 1997 and 2004 in order to investigate the risk-specific drivers of excess returns to shareholders. We chose this sector for its special focus on risk mitigation due to the tight regulation with regard to operational risk. Our findings indicate that risk mitigating strategies like short deal durations, partnering with experienced service-providers or including additional vendors significantly benefits the outsourcer. Insourcers, on the other hand, significantly benefit from transactions relating to traditional IT processes— an area where they have build the longest expertise thus reducing their business risk.*

**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], has been 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 enhance the knowledge on risk in outsourcing by including the view of a neutral referee, the capital market in our analysis. 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 risk 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 due to the loss of direct control for the outsourcer, the capital markets are assumed to pay special attention to the anticipated risk in the outsourcing deal: 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.

Up to now, little attention has been devoted to the risk specific factors that may influence investors' reaction once a sourcing transaction has been announced. It is still unclear how capital markets react on sourcing announcements of companies, especially of highly integrated financial services institutions. It can be assumed that investors perceive deals and specific deal characteristics differently. It is of high interest to find out how capital markets react to certain

sourcing risk specifics and which common deal characteristics are positively (or negatively) rewarded by capital markets.

The objective of this paper is to understand risk specific factors that affect abnormal stock returns around sourcing announcements of the global financial services industry. No other study we are currently aware of provides an in-depth analysis of the factors that influence the value creation process in 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. Additionally, in contrast to the studies we are currently aware of, we consider a variety of business functions that can be sourced out apart from the sole IS/IT function. First, we split “IT-outsourcing” into sourcing of IT-infrastructure (ITI) and Application Development and Maintenance (ADM), second, we consider Administrative Processes Outsourcing (APO) and Business Process Outsourcing (BPO). Thus, while narrowing down the focus of our study to one specific industry, we broaden the perspective by considering the financial services value chain as a whole.

This 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 on 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.

## 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 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 regard 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.

## HYPOTHESES

Outsourcing can be described as the act of transferring or subcontracting out all or parts of the functions of a firm to an external party [Lonsdale 1999; Gilley et al. 2004]. [Frag and Krishnan 2003] define an outsourcing engagement "...to occur when one firm, the outsourcing firm, hires another firm, the vendor, to host, develop, or manage" parts of their business functions. In the context of this study we use the term "outsourcer" for the financial services company that contracts out parts of its formerly internal business functions, and the term "insourcers" (or "vendor", or "service provider") for the service providing insourcing company.

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 et al. 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 negotiation power by employing multiple vendors, therefore we expect capital markets to react positively towards 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 et al. 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 risk, 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 2003] 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.

## **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 deals from a general outsourcing database. To the extracted deals we added all events found in a thorough research of outsourcing literature. Additionally, we conducted a comprehensive investigation of global financial newspapers for outsourcing deals. The search was conducted within the news database LexisNexis which encompasses the leading finance and business journals on a global basis. A variety of search strings and keyword such as “outsourcing and financial services” has been scrutinized. 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, and other specific deal characteristics) 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. More than 80 per cent of the press releases were published on the outsourcer’s and insourcer’s investor relations websites. For cases where we were unable to extract the relevant data from the investor relations websites we had to rely on the relevant newspaper article. 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 cleaned and 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.

## **ANALYZED VARIABLES**

The absolute size of the outsourcing transaction (in million USD) 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 (in years) 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 1 provides an overview on the independent and control variables.

## RESULTS

### Event Study Results

Cumulative abnormal returns for outsourcers and insourcers are presented in Table 2 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, performed for the significant event windows, for both, outsourcers and service providers.

### Regression Results

Cumulated abnormal returns are analyzed separately for clients and service providers. Table 3 provides an overview of the results. 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  $R^2$  are 0.23 and 0.33, for outsourcers and service-providers, respectively. F-values are highly significant at 1.87 and 2.24.

Hypothesis 1 suggests that investors do not value large deals since they provide a higher level of sourcing risk. 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 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, 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 (or at least standardizable), 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. Insourcing currently cost intensive operations is rewarded by investors as these operations provide potential to harvest synergies, reducing operating costs on a transactional basis.

## CONCLUSION

This study attempted to shed additional light on the relationship between sourcing risk and stock market performance by examining financial services outsourcing practices and their impact on stockholder performance. This paper is neither a clinical case study nor a detailed ex-post performance analysis. Premise of this study was that outsourcing is attributed with certain risks for the involved companies and that outsourcing announcements provide information about future cash flows that 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. Future studies should control for characteristics of risk sharing, incentives and penalties as 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 a useful future insight. 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 paper contributes to the ongoing discussion both in academia and practice about the merits and drawbacks of outsourcing, and how to improve the design of outsourcing contracts with regard to the sourcing risk perspective. Our analysis revealed evidence of significant capital market returns for two event windows, both being close to the original announcement of the deal.

Three findings are of special interest:

- (1) As anticipated, the empirical analysis confirmed that 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.
- (2) 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 this shift in vendor strategy.
- (3) The study also confirmed that service providers significantly benefit from large deals. Although that insight may not come as a surprise it might benefit the outsourcer during contract negotiations. The argument that large deals bear a higher level of risk for the vendor was not supported. Obviously the upsides of increased potential to leverage synergies and uncover economies of scale outweigh risky downsides.

In conclusion our study provides beneficial ideas to academics as well as practitioners. Most of the prior work on sourcing focused on IT-related sourcing activities and employed a heterogeneous sample of cross-industry outsourcers, mainly from the US. We attempted a finer-grained study by focusing on a specific industry, the global financial services industry. We also adopted a broader perspective of sourcing activities by analyzing a variety of

value-creating business actions, not only IT-related. Our results suggest that certain types of sourcing activities and specific transaction characteristics that mitigate perceived risks indeed do have a significant, positive influence on stockholder performance.

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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## APPENDIX

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	numdealis	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	0.1640649	0.1877358	-0.913	0.4485

  

Control Variables						
Market Cap of OS	mcafos	121	24420.64	24480.95	124.8487	113950.5
Market Cap of IS	mcapis	144	57574.8	71757.79	120.28	230206.6
Deal size/Market cap. of outsourcer	relsizeos	73	0.0697896	0.1259385	0.00046	0.74266
Deal size/Market cap. of insourcer	relsizeis	87	0.0458567	0.1063877	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	0.1440745	0.1308633	-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	128.8763
Relative Profitability (RoE OS / RoE IS)	relprof2	91	0.9831463	4.528786	-9.13494	37.48148
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 1: Independent and control variables.

Event Window	Obs.	CAR in %	Min	Max	Pos.	Neg.	P-Value
<b>Outsourcer</b>							
{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
<b>Insourcer</b>							
{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 2: 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) prior to the event window [-20;20]. \*\*\*/\*\*/\* indicate significance at the 1/5/10 per cent level.

dependent Var. Event Window	Cumulated Abnormal Return (CAR) of OS [-1;1]		Cumulated Abnormal Return (CAR) of IS [-3;3]	
	N	Adj. R <sup>2</sup>	N	Adj. R <sup>2</sup>
	60	0.2373	60	0.3258
F-Value	1.87 **	0.0452	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
numdealis	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: OLS-regression results for the cumulated abnormal returns of outsourcers and service-provider. \*\*\*/\*\*/\* indicate significance at the 1/5/10 per cent level.