

## Researchreport

# The Impact of Business Process Outsourcing on Bank Performance

GERMAN BANKS ACHIEVE SIGNIFICANT IMPROVEMENTS IN PROFITABILITY AND COST EFFICIENCY THROUGH BUSINESS PROCESS OUTSOURCING. THIS EFFECT STEMS FROM AN INCREASE IN REVENUES RATHER THAN FROM A REDUCTION OF THE BANKS' WORKFORCE

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### Introduction

A widely held view says that Business Process Outsourcing (BPO) is good for shareholders but bad for employees. Many observers conjecture that cost reductions from outsourcing come at the cost of employee lay-offs. In one of the first empirical studies on this subject (Fritsch et al., 2007) we conclude that one view is correct while the other is wrong.

BPO is gaining importance among new forms of business to business exchanges. Hence academic research has started to focus on BPO and postulates that it bears unique potential that, however, is accompanied by severe risks. By leveraging the core capabilities of both the outsourcer and the vendor, BPO can even be a source of competitive advantage. On the other hand, researchers also propose that BPO can be utilized to reduce costs and achieve efficiency rents.

But do these expectations match reality? Does BPO fulfil the expectation that it will accomplish both efficiency improvements and provide a source of competitive advantage? Taking a firm-level view, we therefore aim to answer the question how firm performance is influenced by BPO. Additionally, to address frequently discussed concerns about lay-offs that come along with outsourcing, we analyse the effect of BPO on the firms' workforce. We selected BPO arrangements in the German banking area as our research object, since the financial services sector is the second largest buyer of outsourcing services with increasing demand (Gartner 2004). We focus our analysis on BPO arrangements of back office processes for the settlement of securities and domestic payments, as these processes are most frequently outsourced.

### Data and Methodology

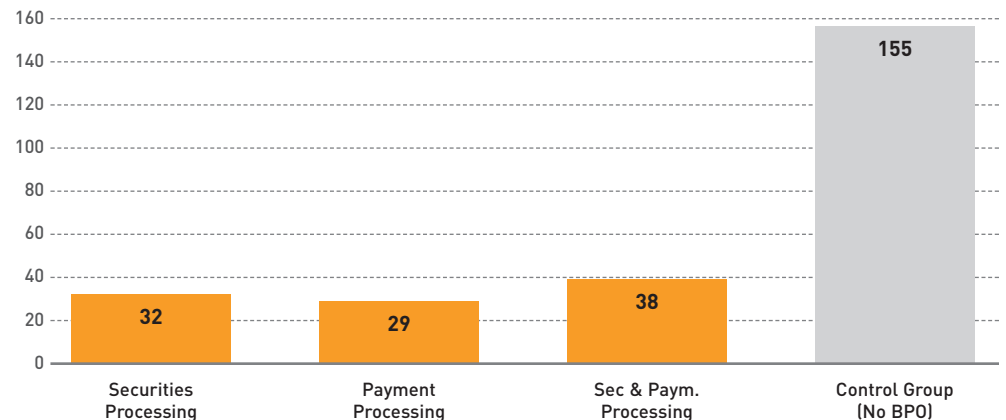
We study the evolution of financial performance and employment of German banks that have outsourced their back office operations between 1992 and 2006. We collected information among the 500 largest banks on whether one or both back office processes had been outsourced and the year the outsourcing took place. In total we obtained information from 254 banks, of which 155 had not outsourced any of these processes. 32 banks report having only outsourced their securities operations, 29 banks report having outsourced only their payments processing, and 38 banks have outsourced both processes. Thus, in total we find 99 banks and 137 BPO events in our

sample in the timeframe between 1992 and 2006 (Figure 1).

To measure the performance of the banks we rely on accounting data taken from the Fitch IBCA Bankscope database. We focus our analysis on the cost efficiency, defined as operating income over total operating costs of the banks (Cost-Income Ratio – CIR) and the profitability, measured by return over total assets (Return on Assets – ROA).

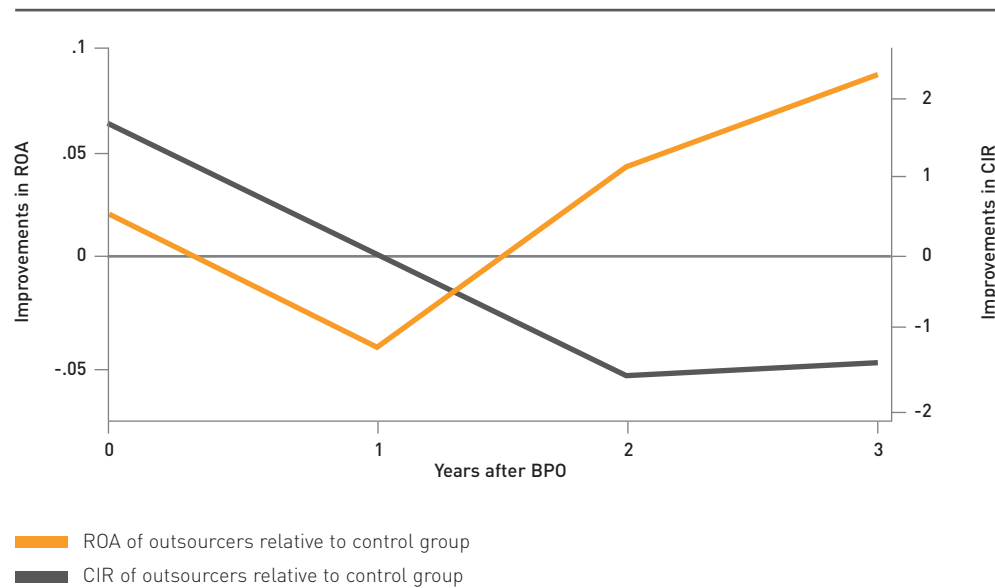
To disentangle the effects of BPO from other economic or industry effects we compare the characteristics of banks after a BPO event to non-outsourcing banks (control group) in the

### Number of Banks



Total number of banks in the sample: 254

Figure 1: Number of banks which have sourced out back office processes



**Figure 2: Development of ROA and CIR after BPO**

same period. In the control group we include all banks from our survey that have not outsourced a business process.

We focus our analysis on a three year period after the BPO. A shorter period would not capture the full effects of BPO as the bank might face transitional costs which will lower the performance in the year after the outsourcing. Looking at a longer period than three years we can be less sure that other effects than the BPO events influence our results.

#### BPO and firm performance

Figure 2 depicts the performance improvement of the banks with BPO arrangements

relative to the control group in a three year window after the BPO. In the year of the outsourcing the profitability (ROA) of the banks was only marginally above industry level. In the first year after the BPO the ROA declined, presumably caused by transition costs of the outsourcing project. In the long run however, BPO leads to an increase of profitability above industry level. Cost efficiency improvements can be observed starting from the first year after the BPO (declining CIR indicate improving cost efficiency).

The statistical analyses of the change in the characteristics over the whole three-year period show an absolute increase in profit-

ability, measured by ROA, of 0.06 percentage points while the ROA of the control group declined in the same time. While an absolute increase of 0.06 does not seem to be a large increase in profitability at first sight one has to keep in mind that the average ROA of the banks at the time of the BPO was 0.19%. Thus the observed change in ROA means a relative improvement in profitability of over 30 percent while the profitability of the control group decreased. Looking at the results of the cost efficiency we can observe similar results. However, the difference between the outsourcing banks and the control group is less significant. The cost-to-income ratio of both the outsourcing banks and the control group decreased after the BPO events, which is equivalent to an improvement in cost efficiency for both groups. The CIR of the banks, which have outsourced business processes decreased by twice the value of the control group, however the relative improvement in cost efficiency based on an average CIR of 65.7% only amounts to about 2.3%.

#### Breakdown of performance improvements

To better understand the effects that lead to the observed performance improvements after BPO we look at three additional metrics: The overall cost reduction, reduction in workforce and the employee productivity (Figure 3). The cost-to-asset ratio, the proxy for overall cost changes, also decreased for both groups. Again the BPO banks were able lower their overall costs to a greater extent, but the difference is not statistically significant.

Most interestingly, we can not observe a workforce reduction at all, measured by personnel expenses over total assets for either of the two groups. Finally, employee productivity, measured by operating return over personnel expense, increased significantly more for the BPO banks than for the control group.

We can evidently observe a significant increase in profitability and cost efficiency caused by BPO. Contrary to what one might have expected BPO does not lead to a reduction in workforce. While the overall costs are slightly lowered compared to the level of the industry average, the main effect of performance improvement stems from increasing revenue. This additional revenue is generated by the same workforce, which is equivalent to an increase in employee productivity.

The increase in workforce productivity might stem from the relocation of back office resources to revenue generating tasks. Especially in the smaller and medium sized banks in our sample, employees are responsible for sales tasks as well as for all related paperwork, entering transactions in IT-systems, etc.. Making use of the more sophisticated processes and IT-systems of the service provider and being freed from non revenue generating administrative tasks, employees can spend more time with customers and thus increase the sales effort of the bank. In larger banks the same effect can be achieved by transferring the back office staff to the vendor and hiring sales staff at the same time. The observed

increase in revenue may also stem from an advanced product portfolio the bank is able to offer utilizing the specialized know-how of the service provider. Banks can now sell more complex products which they could not have processed while the back office tasks were still performed in-house.

**Individual success factors**

In a second step, using the excess performance of outsourcing banks as endogenous variables, we try to determine the influence of several factors on the individual outsourcing success in terms of financial performance. In particular we analyse the effects of the use of individual vs. standard contracts, the perceived capabilities of the service provider, the monitoring effort, and the contract duration.

Individually negotiated outsourcing contracts help to improve the cost efficiency as well as the profitability of the banks. Banks benefit from individual contracts as the services provided by the service provider are tailored to the specific needs of the banks.

We also find that the perceived know-how of the service provider has a positive influence on profitability after BPO. We conclude that the management of the outsourcing banks only make use of the enhanced processing capabilities of the service provider and enrich their product portfolio if they have a high level of confidence in the know-how of the service provider.

The monitoring effort required to control the service provider (FTEs in retained organization over total number of employees) has a different effect on the two metrics of bank performance. High monitoring effort leads to lower profitability as it ties up resources in controlling activities which can not be used in an efficient way to generate more revenue. As we have seen in the breakdown of the effects of BPO on profitability, banks seem to shift resources from back office functions to more customer-related functions. The more resources there are involved in the monitoring process, the less effort can be focused on sales related functions. On the other hand diligent monitoring of the BPO arrangement can

improve the cost efficiency. Tight control mechanisms will force the service provider to meet the targets and service level agreements agreed upon.

Contract duration only has a positive effect on cost efficiency while profitability is not affected. The longer the contract duration, the higher the operational cost savings achieved by BPO. We can conclude that long term contracts do not have the disadvantage of locking in terms and conditions which become unfavourable for the banks over time. Long term contracts seem to encourage both parties to invest more in the relationship and to put more emphasis on ongoing process

improvements, which has positive effects on the cost efficiency of the outsourcer.

**Conclusion**

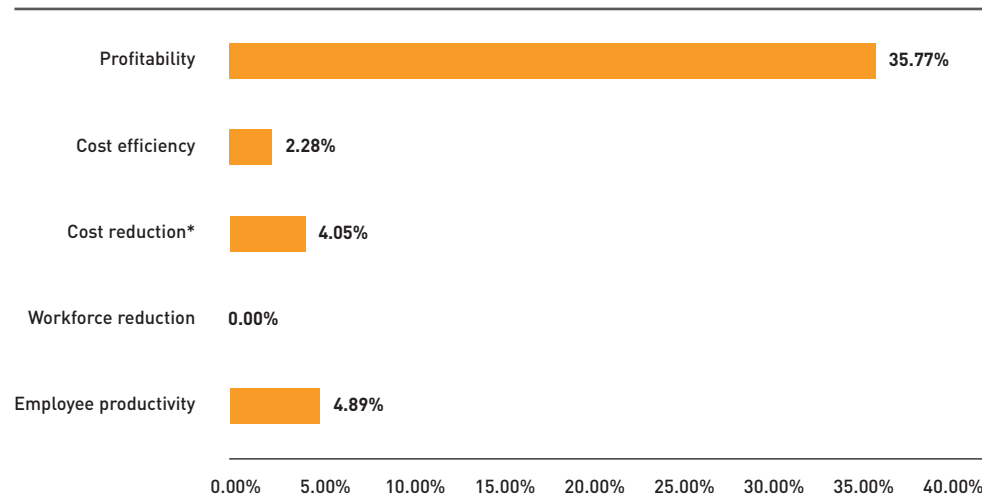
Our analysis shows that banks are able to increase profitability and cost efficiency by BPO. Breaking the impact of BPO further down, we find that the main effects stem from increased revenue which is generated with an unchanged level of resources. Thus, we do not observe a reduction in workforce, but rather increased employee productivity, i.e., the banks are able to generate more revenue per employee.

We can also show that the achievements by BPO are influenced by several success factors. Individually negotiated outsourcing contracts, a high level of trust in the know-how of the service provider, and a long contact duration help to improve the firm performance after BPO. A high monitoring effort leads to improved cost efficiency but has negative impact on profitability.

**References**

Fritsch, M.; Hackethal, A.; Wahrenburg, M.; Wüllenweber, K.: The impact of business process outsourcing on firm performance and the influence of governance. E-Finance Lab Working Paper (2007).

Gartner: Forecast for IT Outsourcing Segments Shows Strong Growth. Gartner Dataquest Alert (2004).



\* statistically not significant

Figure 3: Improvements of key metrics after BPO relative to control group