"Market reaction to business cooperation announcements – evidence from Germany"

AUTHORS	Arnt Wöhrmann Mike Schlaefke
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SECTION 1. Macroeconomic processes and regional economies management

Arnt Wöhrmann (Germany), Mike Schlaefke (Germany)

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Abstract

Joint ventures and other cooperative activities have increased considerably over the last two decades. Yet, there is only limited evidence how investors react when such a business cooperation is announced, whereas there is ample evidence for merger and acquisition announcements. Hence, this paper examines share price response to public announcements of business cooperation in Germany. Unlike previous studies, the present work uses a comprehensive approach and includes a wide variety of business cooperation: strategic alliances, formation of joint ventures, project cooperation, public-private partnerships and value chain cooperation. Using an event study research design, we investigate a sample of 193 announcements of business cooperation issued in the period of 2008-2012 across all industries. We generate evidence that German companies experience significant abnormal returns of 0.61% on the day of announcement. Our results further indicate that stock market reactions are associated with managers providing information about the reasons for the business cooperation. We find that stock market reaction is more positive when a short-term motive for the cooperation is provided.

Keywords: business cooperation, event study, abnormal return, cumulative abnormal return.
JEL Classification: G14, G30, L20.

Introduction

As German car maker, BMW AG, and German carbon specialist, SGL Carbon SE, announced intensification of their joint venture in carbon fiber production in February 2014, SGL's stock price surged by 13% (Bloomberg, 2014). Yet, investors do not always react so positively to business cooperation announcements. For instance, when German software developer SAP AG announced a strategic partnership in cloud computing with China Telecom three months earlier, SAP's stock price barely moved. This study examines potential reasons for differences in stock market reaction upon announcement of business cooperation events.

While joint ventures and other cooperative activities have increased considerably over the last two decades (Amici et al., 2013), mergers and acquisitions remain the focus of empirical research (e.g., Haleblian et al., 2009). The limited number of studies in this field report different capital market reactions for business cooperation announcements, and they examine primarily the US and Asia, while evidence from Europe remains relatively scarce. Results from prior studies cast doubt on whether US findings generalize to other countries. For example, whereas capital markets react positively upon announcement of US firms engaging in business cooperation (Chan et al., 1997), the reaction is negative for Taiwanese firms (Chang and Chen, 2002). Further, when a US firm enters a joint venture with a Chinese firm, the market reaction is positive (Chen et al., 1991), while it is negative for French firms announcing cooperation with Chinese firms (Meschi, 2004).

Our study generates evidence for the German market and analyzes how investors perceive business cooperation announcements in Germany. To investigate what drives investor reaction to these announcements, we focus on communication from management and examine whether providing motives for the cooperation and the expected time horizon of the cooperation motives affects capital market reaction. Using the event study methodology, we investigate a hand-collected sample of 193 press releases announcing business cooperation agreements of German firms over the period of 2008-2012.

We find that, on average, the capital market reacts positively upon announcement of a business cooperation agreement. Further, we find that providing the motives for cooperation has a positive effect that is even stronger when short-term cooperation motives are announced.

Our study has important implications for management theory and practice. From a theoretical perspective, we extend prior research in at least two dimensions. First, we examine recent data (2008-2012) for cooperation among German firms, while prior studies focus mainly on the US and Asia. Second, we analyze business cooperation regardless of its specific form, while prior research is almost exclusively limited to strategic alliances and joint ventures. From a practical perspective, we inform management about the information needs of investors when business cooperation is announced, and how investors perceive management decisions to cooperate. More precisely, management can better communicate value creation through

cooperation when it explicitly states the motives for such cooperation. Further, we show that investors are skeptical about long-term cooperation motives.

The remainder of this paper is organized as follows. Section 1 discusses background and hypothesis development. The sample and research design are described in section 2. Section 3 presents our descriptive statistics and results. The final section concludes the paper.

1. Background and hypothesis development

1.1. Business cooperation. Business cooperation comprises many alternative forms, such as joint ventures, cooperation agreements, licensing, and franchising, among others (Buckley and Casson, 1994). Hence, it is necessary to provide a conceptual basis by defining business cooperation and differentiating between business cooperation and other forms of inter-firm collaboration. Theurl (2010, p. 314) defines business cooperation as an intensive (at least for medium term), usually contractually stipulated (but voluntary), relationship with other legally (and economically) independent companies, which affects single corporate activities, comprizes repeated actions, achieves micro-economic objectives better than the isolated cooperation partner would and can be terminated. Therefore, pure customer and supplier relationships, trusts, and mergers and acquisitions are not covered by this definition of business cooperation.

Applying this definition has important implications for our study. This is because, in contrast to previous studies (e.g., Amici et al., 2013), we do not limit our analysis to strategic alliances and joint ventures. Instead, we use a much broader approach and analyze business cooperation regardless of its specific form. Besides strategic alliances and joint ventures, we investigate project cooperation, public-private partnerships, and value chain cooperation, and subsume all these forms under the term business cooperation (Theurl, 2010).

The best known type of business cooperation is probably the strategic alliance. This is horizontal cooperation between at least two current or potential competitors at the same stage of the value chain (Culpan, 2002). The strategic aspect of this form of business cooperation is reflected by joining the strengths and weaknesses of the partners (Yoshino and Rangan, 2006). Besides strategic alliances, joint ventures are regarded as increasingly important for researchers in international management (Kumar, 2005). Joint ventures are institutionalized as separately founded legal entities and are based on an agreement that promotes the stability of the cooperation (Kogut, 1989). In contrast, the scope of

project cooperation is the joint realization of a specific project with limited project duration (Gerybadze, 2011). This does not imply an exact end date, but rather the achievement of the underlying objective. Typical fields of application include major construction projects as well as natural resource development and exploitation projects (Theurl, 2010). Public-private partnerships combine the resources of private and public institutions. Since partners have heterogeneous core competencies, they have mostly varying goals (McQuaid, 2000). Typical fields of application are infrastructure-based projects (Skelcher, 2007). Value chain cooperation is aligned vertically, where partners cooperate backward or forward along the value chain, for example, two consecutive stages (Theurl, 2010). Frequently, value chain cooperation occurs in the automotive and textile industries. These industries are typically characterized by producer-supplier relations and producer-distributor relations, respectively.

1.2. Empirical evidence. We provide the results of a keyword-based search of English-language journal publications in the field of market reaction to business cooperation. Overall, empirical studies can be grouped broadly into two categories based on time-frame and regional focus. The first category comprises event studies with a clear US focus that analyze different samples in the time period of 1972-2001. McConnell and Nantell (1985) are the first to find significant wealth gains for a sample of 210 US firms that entered into 136 domestic joint ventures during the period of 1972-1979. Further, these authors document greater abnormal returns for the smaller partner. While some studies support these findings, for example, for real estate firms (Ravichandran and Sa-Aadu, 1988) or the information technology sector (Koh and Ven-katraman, 1991), other studies fail to find a significant market reaction (e.g., Finnerty et al., 1986). Subsequent studies extend the scope of research in this field. In this vein, some examine market reaction in the case of international cooperation and provide mixed results. Whereas some find support for a positive market reaction when a US firm announces cooperation with a non-US firm (e.g., Lummer and McConnell, 1990; Chen et al., 1991; Crutchley et al., 1991; Reuer, 2001), others find a negative reaction (e.g., Lee and Wyatt, 1990). Some studies also examine strategic alliances rather than joint ventures. For example, Chan et al. (1997) find positive wealth effects for strategic alliances, and Park et al. (2004) report similar findings for strategic alliances for e-commerce firms.

The second category of research comprises international studies. While the structure and research questions of these studies are similar, they

focus on countries other than the US and examine different samples for the period of 1979-2009. The first international study is Chen et al. (2000). Similar to the US studies, the authors report a positive market reaction. Subsequent studies examine the market reaction in other Asian countries such as Taiwan (Chang and Chen, 2002), China (Meschi and Cheng, 2002), and Korea (Lee et al., 2013). Again, the results are mixed. There is also a limited number of European studies. For example, Suárez (2002) finds a significant, positive market reaction for Spanish firms announcing strategic alliances, while Meschi (2004) finds a reduction in shareholder value when a French firm enters a joint venture with a Chinese partner. Other studies have no country focus but examine a sample drawn from various European countries. Cuéllar-Fernández et al. (2011) find no significant market reaction to announcement of a strategic alliance in the European telecommunications sector. Amici et al. (2013) find a positive market reaction when a European financial firm announces a joint venture, but not when it announces a strategic alliance.

In summary, prior studies show mixed results for the existence of a positive market reaction to cooperation announcements. Further, country-specific effects seem to exist. A major limitation of prior studies is that they use a very narrow definition of cooperation and they examine only joint ventures and strategic alliances. In the next section, we develop our hypotheses for German firms.

1.3. Hypothesis development. The intrinsic value of a firm is the result of all future cash flows generated by (a) current assets, and (b) future investments (Brealey et al., 2011). Therefore, the market value of a firm increases (decreases) if investors receive new positive (negative) information regarding these cash flows (Woolridge and Snow, 1990). This requires the semi-strong form of market efficiency to hold, that is, all publicly available information must be fully reflected in the stock price (Fama, 1970). Hence, announcing business cooperation that is not anticipated by the capital markets leads to a market reaction if the cooperation is expected to affect intrinsic firm value.

The shareholder-value approach presumes that management's primary objective is to maximize firm value. Thus, management should act in a way that increases the market value of equity (Lummer and McConnell, 1990). Business cooperation is therefore undertaken only if the firms involved have a positive net present value. There are various motives for entering into business cooperation that have a positive net present value. The most important are cost advantages, time and flexibility advantages, risk advantages, and access to external resources and new markets (Michel, 1996). Though these advantages may in many cases also materialize when, not business cooperation, but a merger or an acquisition is realized, transaction cost theory maintains that management prefers business cooperation because of lower transaction costs (Koh and Venkatraman, 1991).

Further, there is a more indirect motive for entering into business cooperation, the signaling effect. Signaling theory (Stuart et al., 1999) argues that collaboration can provide a positive signal for external resource holders (Gulati and Higgins, 2003). Third parties usually judge companies based on their experience or on observable quality signals. If investors have no experience and quality cannot be observed directly, other criteria must be evaluated. Such a criterion might be a firm's network and business cooperation partners.

Thus, in line with previous studies, especially in the US, we predict a positive market reaction upon announcement of business cooperation, as formally stated in H1:

H1: Announcements of business cooperation of German firms are associated with positive stock market reaction.

Management not only must decide whether to engage in business cooperation, it also must determine how to communicate the decision. As explained above, there are various motives for cooperation. Therefore, one of the first decisions management faces is whether to communicate the motives behind new cooperation. Signaling theory provides one possible reason for disclosure (Spence, 1973). Assuming information asymmetries between investors and management, management has a strong interest in gaining investor support for the management decision. Hence, management may disclose the motive in a press release. If no motive is provided, investors might assume a non-value-maximizing reason. To avoid negative expectations, there is an incentive for management to provide detailed and credible information about the motive. In particular, management is more inclined to report detailed information if it expects a positive financial development associated with the business cooperation (Skinner, 1994). Thus, we predict a stronger positive reaction from the stock market when the motive for cooperation is provided than when it is not provided:

H2a: Abnormal returns are more positive when the motive for engaging in business cooperation is disclosed than when it is not disclosed.

If management decides to disclose the motives behind business cooperation to reduce information asymmetries and to signal the value creation associated with it, the question arises whether all motives are regarded as equally value-maximizing by investors. The motives can be divided into two categories, based on whether they lead to value creation in the short run or value creation in the long run. Since predictions about the future of a firm are always associated with considerable uncertainty, we expect investors to react more positively if the benefits of cooperation are predicted to affect cash flows in the near future. Hence, we posit the following hypothesis:

H2b: Short-term motives are associated with greater abnormal returns than are longer-term motives.

2. Methodology

2.1. Sample. Our sample consists of hand-collected business cooperation announcements of German companies listed on the Frankfurt Stock Exchange during the period of 2008-2012 and part of one of the major German indices, DAX, MDAX, SDAX, or TecDAX. We conducted a keyword search using the LexisNexis database for these firms. We used keywords such as *strategic alliance*, *joint venture*, *project cooperation*, *public-private partnership*, *value chain cooperation* and variations thereof, combined with each company name.

The press releases retrieved were then evaluated. First, we determined the date and time of the announcement, information vital to conducting an event study. If two or more press releases refer to the same announcement, we included only the first one to ensure the novelty of the information. Second, we gathered the name of the cooperation partner and checked whether the partner is listed on one of the examined stock indices. If this is the case, both events are considered in the sample. Further, we determined the location of the partners' headquarters to distinguish between domestic and international business cooperation. Third, if specified, we determined the motive for the business cooperation.

As shown in Table 1, our LexisNexis search yielded 278 potential announcements of business coope-ration. To be considered in the final sample, further criteria must be satisfied. First, following Brooke and Oliver (2005), we discarded 50 announcements

of subsidiaries. Second, we excluded business cooperation surrounded by confounding events, since they might have an impact on share price during our defined event window (McWilliams and Siegel, 1997). Thus, we again searched the LexisNexis database five trading days on both sides of the announcement date and identified 41 confounding events. Since some announcements were confounded by more than one event, the sum of confounding events exceeds the number of discarded announcements. Finally, daily stock returns must be available for both the year before the announcement and the event period to calculate expected and abnormal returns. Since this criterion is not fulfilled in two cases, the final sample comprises 193 business cooperation events for which sufficient data for the empirical tests are available. Daily stock return data used in the empirical analysis are obtained from Thomson Reuters Datastream.

Table 1. Sample selection

	Total
Announcements identified by LexisNexis search (2008-2012)	278
Less: Announcements of subsidiaries	(50)
Less: Confounding events	(33)
Thereof:	
♦ Mergers and disinvestments	13
♦ Announcement of further business cooperation	8
♦ Personnel changes in the management board	5
♦ Adjustment of revenue/profit forecast	4
♦ Declaration of dividends	4
♦ Signing of a major contract	3
♦ Capital measures	2
♦ Others (market manipulation/delisting)	2
Less: Missing data (share price)	(2)
Final sample	193

Panel A of Table 2 presents a breakdown of our sample of business cooperation announcements by year and by index. Not surprisingly, the smallest percentage of all announcements in a single year is 13.0% in 2008, followed by 14.0% in 2009, which coincides with the financial crisis. Panel B of Table 2 indicates the number of times a sample firm reported business cooperation events. In the underlying sample, 40.3% of firms disclosed only one business cooperation event, while 26.0% reported two business cooperation events and 33.8% reported three or more.

Table 2. Sample distribution

Panel A: Distribution of business cooperation announcements by year and index							
Index \ Year	2008	2009	2010	2011	2012	Total	Percentage
DAX	8	9	11	8	13	49	25.4%
MDAX	5	7	14	13	20	59	30.6%
SDAX	5	6	5	7	8	31	16.1%

Table 2 (cont.). Sample distribution

Index \ Year	2008	2009	2010	2011	2012	Total	Percentage
TecDAX	7	5	12	15	15	54	28.0%
Total	25	27	42	43	56	193	100.0%
Percentage	13.0%	14.0%	21.8%	22.3%	29.0%	100.0%	
Panel B: Number of times a sample firm announced a business cooperation							
Announcements per firm			1	2	≥3		Total
Number of firms			31	20	26		77
Percentage of firms			40.3%	26.0%	33.8%		100.0%

2.2. Research design. To test our hypotheses, we use an event study design (MacKinlay, 1997; McWilliams and Siegel, 1997). The foundation of the event study methodology is set forth in Ball and Brown (1968) as well as Fama et al. (1969). This approach has been used extensively in management research to examine the effect of corporate announcements on stock prices. The aim is to examine whether there is an abnormal (i.e., exceeding the expected) return associated with an unanticipated event. The abnormal return of firm i on day t ($AR_{i,t}$) is assessed by calculating the difference between the actual returns obtained in the market $R_{i,t}$, and the expected returns $E(R_{i,t})$:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}). \tag{1}$$

Following Brown and Warner (1985), we use the market model to estimate expected returns $E(R_{i,t})$, which assumes a linear relationship between the return on stock i and the return on the market portfolio $R_{M,t}$ on day t (Markowitz, 1952; Sharpe, 1963):

$$E(R_{i,t}) = \alpha_i + \beta_i * R_{M,t} + \varepsilon_{i,t}, \tag{2}$$

where α_i denotes the intercept, β_i the systematic risk of stock i, and $\varepsilon_{i,t}$ is the error term with an expected value of zero. The firm-specific parameters from equation (2) are obtained by ordinary least squares regression (OLS) over a 250-day estimation period that ends six trading days before the event date (t_{-255} to t_{-6}). Since our sample consists exclusively of German firms, we use daily returns of the CDAX as a proxy for market return. CDAX comprises all stocks traded at the Frankfurt Stock Exchange that are listed in the Prime or General Standard. This procedure ensures that single events have only relatively small influence on the CDAX. To investigate the announcement effect, we calculate mean abnormal return on day t (AR_t) over the full sample (n):

$$AR_t = \frac{1}{n} * \sum_{i=1}^{n} AR_{i,t}. \tag{3}$$

Although we assume that markets are efficient, it is possible that relevant information is incorporated in stock prices shortly before or after the event. This is due to information leakages, investors anticipating the event, or delays in information proliferation (McWilliams and Siegel, 1997). To take these effects into account, abnormal returns are calculated the day before ($t = -1$) and the day after the event date ($t = +1$), as well as for the announcement date ($t = 0$). Moreover, we calculate cumulative abnormal returns $CAR_{t1,t2}$ as the sum of abnormal returns within event window t_1 to t_2:

$$CAR_{t1,t2} = \sum_{t=t1}^{t2} AR_t. \tag{4}$$

Cumulative abnormal returns are reported for the [-3; +3], [-2; +2], and [-1; +1] event periods.

3. Results

3.1. Descriptive statistics. Descriptive statistics for the full sample of business cooperation announcements are reported in Table 3. We find that 45.1% of the announcements refer to business cooperation between domestic partners, while 54.9% refer to cooperation with international partners. We also find that two out of three announcements (66.8%) are supplemented by a cooperation motive. Further analysis reveals that 20.2% of announcements contain short-term motives, whereas 46.6% include longer-term motives. In one-third of cases (33.2%), managers do not provide a motive for the business cooperation. Moreover, our analysis shows that 91.7% of the relationships are bilateral, that is, cooperation between two partners, whereas only 8.3% are multilateral.

Table 3. Descriptive statistics

	n	Percentage
Business cooperation		
Domestic	87	45.1%
International	106	54.9%
Total	193	100.0%

Table 3 (cont.). Descriptive statistics

	n	Percentage
Motive and time horizon of motive		
Short-term	39	20.2%
Longer-term	90	46.6%
Motive provided	129	66.8%
No motive provided	64	33.2%
Total	193	100.0%
Relationship		
Bilateral	177	91.7%
Multilateral	16	8.3%
Total	193	100.0%

3.2. Hypothesis tests. H1 predicts that announcements of business cooperation by German companies are associated with positive stock market reactions. As shown in Table 4, Panel A, the mean (median) abnormal return for the event day is +0.61% (+0.16%). Further, the proportion of positive abnormal returns is greater (57.51%) than that of negative abnormal returns, indicating that our results are not driven by outliers (Chen et al., 2000). We find that mean abnormal return on the event day is significantly different from zero ($p < 0.01$, one-tailed t-test due to the directional hypothesis). The significant abnormal return on the announcement day implies that the market did not expect the cooperation. With respect to average cumulative abnormal returns, we also find significant results for all event periods. Our findings for German firms are therefore consistent with those for the US firms (e.g., McConnell and Nantell, 1985; Chan et al., 1997) and with H1, which predicts a positive market reaction when a cooperation is confirmed.

H2a predicts that market reaction is more positive when a motive for the cooperation is provided. First, the results in Table 4, Panel B, further support our finding for H1. Irrespective of whether a motive is provided, investors react positively upon announcement of cooperation by a German firm. When a motive is included in the press releases, the mean (median) abnormal return on the announcement day is 0.53% (0.16%), otherwise it is 0.78% (0.37%). Again, there are no significant abnormal returns on the day before or day after the announcement. Interestingly, however, these results show that abnormal returns are greater when no motive for cooperation is communicated. T-test results reveal that the difference

between abnormal returns on the announcement day when a motive is provided versus when it is not provided is insignificant ($p = 0.59$, two-sided). Thus, we conclude that H2a cannot be supported and that providing a motive does not per se lead to a more positive market reaction.

Our results for H2b shed further light on providing cooperation motives when announcing a business cooperation. H2b posits that short-term motives are regarded as more favorable than longer-term motives. Hence, the press releases were coded as having either a short-term motive or a longer-term motive. In fact, we find mean (median) abnormal returns of 1.13% (0.49%) on the announcement day when a short-term motive is provided, but only 0.27% (0.03%) when a longer-term motive is included (Table 4, Panel B). A t-test reveals that the difference in means of abnormal return on the announcement day is statistically significant ($p = 0.04$, one-sided due to directional hypothesis). Hence, H2b is supported. Taken together, our results imply that firms communicating short-term motives for cooperation face the highest abnormal returns, followed by firms providing no motives. Firms that state long-term motives have the lowest abnormal returns.

To test the robustness of our results, we conduct supplementary tests. First, we use daily returns of the HDAX as an alternative proxy for market return, since selection of the proxy (to estimate expected returns) may have an impact on our results. Our findings are robust to this alternative operationalization. Further, we use the market-adjusted model as an alternative return-generating model. Again, our results remain robust.

Table 4. Market reaction to announcement of business cooperation

Panel A: Full sample (one-tailed tests)			AR			CAR		
		[-1]	[0]	[+1]	[-1; +1]	[-2; +2]	[-3; +3]
Full sample	Mean (%)	-0.010	0.614	0.097	0.701	0.582	0.772
	Median (%)	-0.090	0.163	-0.007	0.391	-0.128	-0.061
	St. dev. (%)	1.945	3.044	1.990	4.351	5.069	6.017

Table 4 (cont.). Market reaction to announcement of business cooperation

		AR			CAR		
		[-1]	[0]	[+1]	[-1; +1]	[-2; +2]	[-3; +3]
Full sample	t-test p-value	0.472	0.003***	0.249	0.013**	0.056*	0.038**
	Sign rank p-value	0.598	0.021**	0.837	0.062*	0.611	0.326
	% of AR > 0	46.11	57.51	49.22	56.99	47.15	49.74
	n	193	193	193	193	193	193
Panel B: Market reaction by motive (one-tailed tests)							
		AR			CAR		
		[-1]	[0]	[+1]	[-1; +1]	[-2; +2]	[-3; +3]
Motive communi-cated	Mean (%)	0.058	0.531	-0.000	0.589	0.719	1.027
	Median (%)	-0.092	0.160	-0.007	0.367	-0.008	0.215
	St. dev. (%)	2.069	2.520	1.925	4.093	4.830	5.915
	t-test p-value	0.376	0.001***	0.500	0.052*	0.047**	0.025**
	Sign rank p-value	0.449	0.034**	0.406	0.085*	0.201	0.098*
	% of AR > 0	45.74	58.14	48.06	56.59	48.84	51.16
	n	129	129	129	129	129	129
Motive not communi-cated	Mean (%)	-0.147	0.780	0.294	0.927	0.305	0.259
	Median (%)	-0.073	0.365	0.019	0.474	-0.494	-0.409
	St. dev. (%)	1.673	3.911	2.116	4.855	5.549	6.235
	t-test p-value	0.243	0.058*	0.135	0.066*	0.331	0.371
	Sign rank p-value	0.239	0.076*	0.246	0.095*	0.369	0.468
	% of AR > 0	46.88	56.25	51.56	57.81	43.75	46.88
	n	64	64	64	64	64	64
Panel C: Time horizon of motive (one-tailed tests)							
		AR			CAR		
		[-1]	[0]	[+1]	[-1; +1]	[-2; +2]	[-3; +3]
Short-term motive	Mean (%)	0.547	1.129	0.176	1.851	1.865	2.572
	Median (%)	-0.090	0.487	0.290	0.960	1.068	1.193
	St. dev. (%)	1.970	2.966	2.211	4.937	5.655	7.487
	t-test p-value	0.045**	0.012**	0.312	0.013**	0.023**	0.019**
	Sign rank p-value	0.252	0.010***	0.338	0.012**	0.047**	0.043**
	% of AR > 0	46.15	69.23	56.41	71.79	64.10	61.54
	n	39	39	39	39	39	39
Longer-term motive	Mean (%)	-0.154	0.273	-0.076	0.042	0.223	0.358
	Median (%)	-0.145	0.033	-0.066	0.066	-0.491	-0.333
	St. dev. (%)	2.086	2.269	1.796	3.562	4.367	4.988
	t-test p-value	0.243	0.129	0.344	0.455	0.315	0.249
	Sign rank p-value	0.261	0.256	0.263	0.477	0.404	0.376
	% of AR > 0	45.56	53.33	44.44	50.00	42.22	46.67
	n	90	90	90	90	90	90

Conclusion

Based on a sample of 193 announcements of business cooperation by German firms listed on the Frankfurt Stock Exchange over the period of 2008-2012, this paper examines the announcement effect on stock prices using an event study design.

Overall, we show that announcements of business cooperation are associated with positive abnormal returns. Further, our results indicate that stock market reactions depend on the information released by management about the motives behind the cooperation. Our results reveal that investor reaction is most pronounced when cooperation promises short-term benefits and less when no or a long-term motive is presented. Our results are robust to alternative operationalizations.

Our results augment understanding of investor reactions upon announcement of business coope-ration. First, in light of international differences reported in previous studies, our results are qualitatively in line with prior studies for the US. Second, our results show that informing investors about cooperation motives does not per se lead to a positive market reaction. Short-term motives appear more credible and more attractive to investors than longer-term motives. Hence, managers should be aware of the importance of the expected time horizon of the benefits associated with cooperation.

There remain several opportunities for future research on this topic. First, we used the LexisNexis database to obtain announcements of business cooperation. Since it cannot be ruled out that information intermediaries made mistakes during data collection and thus valuable information might be lost, other studies might use different data sources. Second, relevant press releases might remain undetected because of our search algorithm. Future studies might therefore use other search criteria. In particular, we used search commands to ensure that we found only documents with search words (i.e., company name and cooperation keyword) that appear within the same sentence. Third, data collection is based on content analysis with regard to the motives for business cooperation. Future studies might replicate our content analysis or extract other information about cooperation from press releases.

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