



Survey about the Use of Contingent Payment Methods in German M&A Deals

Part of the Master Thesis Project “Contingent Payment Structures as Risk Mitigation Tools – the Use of Earnouts and Put/Call Options in the German M&A Market”

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March 2011, Berlin

Part II of the Master Thesis Project:

Empirical investigation of the use of earnouts and option-like structures as risk mitigation mechanisms in German M&A deals

The second part of the thesis consists of an empirical study about the use of contingent payment methods and more specifically of earnouts and option-like instruments as part of staged acquisitions. The relevant data were gathered via an online survey among the companies listed in the German Prime Standard. The questions in this survey are based on the literature review from the first part of the thesis as well as on a preparatory round of interviews with a company, frequently negotiating those tools. The rest of the text is structured as follows: at first, the overall research objective and then the theoretical background for the survey design are elaborated; consequently, the results are presented; a summary of the findings and suggestions for further research conclude the thesis.

1. Overall research objective

The aim of the presented study is to look at the frequency of use of contingent payment structures and especially the relevance of earnouts and option-like instruments for the German market. Specifically, it should focus on the motivation for the negotiation of the two mechanisms, their particular contract terms and the extent of their substitutability suggested by both researchers¹ and practitioners². Thereby, the emphasis would be on the particular deal structure, whereas the ownership level choice would be taken as given.

Since most of the existing research is about the Anglo-Saxon market, the following analysis should concentrate on the German market, acknowledging so differences characteristic of Continental Europe. Fine-grained data on the mechanisms' contract structure like performance benchmarks, duration, as well as other supporting clauses are typically not available in the standard databases and therefore should be gathered via a survey of companies frequently engaging in acquisitions. This method was suggested by previous research in the context of earnouts.³ The same approach is applied also for option-like instruments in staged acquisitions, for which, to the best of my knowledge, there is no documentation of the used term structures.

¹ Reuer et al. (2009), p.873

² See Interview 1 in Appendix A.

³ See for example Reuer et al. (2004), p. 30, Datar et al. (2001), p.232 – 233, Piehler (2007), p. 226 – 229

2. Theoretical background of the specific research questions

2.1. Commonly used contingent payment structures

Post-acquisition risks and especially such stemming from information asymmetry between buyer and seller like the risk of overpayment are perceived as the most significant threats to an acquisition's success⁴. Popular tools to address the long-term post-acquisition risks include tradable rights to receive an event-driven contingent payment when a condition is met (e.g. CVRs), warranties and representations, earnouts, and option-like rights as part of staged acquisitions. The first mechanism in the above list relies on the existence of an active capital market, while the rest take normally the form of contracts signed privately between two parties. Since securitization is much less wide-spread in Continental Europe⁵, it is expected that warranties and representations, earnouts, and privately negotiated options in staged acquisitions would be more commonly used in German M&A deals than traded contingent payment structures.

Of those, the study chooses to focus on earnouts and option-like structures, because the wide-spread use of warranties is mostly attributed to their function of compensating the lack of M&A specific legal rules in Germany in analogy to the common law contractual practice⁶. Although, according to Vischer (2002), by choosing suitably the contract terms, earnouts and warranties can both create similar cash flows and incentives for the seller, from the buyer's perspective, earnouts lead to much lower initial cash outlay. With warranties the full price is paid at deal closing and the part subject to the guarantees is normally put aside in a holding account until the warranties expire, i.e. not available for both the seller and the buyer. Therefore, in situations, in which both could be used as substitutes, a rational acquirer would always prefer earnouts to warranties.

The survey among the firms listed on the German Prime Standard should test the expectation that earnouts and option-like rights in staged acquisitions are among the most commonly used contingent payment structures in German M&A deals. Building on that prediction, it will continue with examining the motives for use and the particular contract structure of these two tools.

⁴ DePamphilis (2010), p. 40, Lucks (2008), p. 26, as well as in A.T. Kearney Global PMI Survey and E&Y M&A Studie Deutschland 2006 results

⁵ Siebert (2004), p. 3

⁶ Gottgetreu et al. (?), p. 233-234

2.2. The use of earnouts

2.2.1. Motives for the use of earnouts

The survey should investigate the following, suggested by theory, potential motives for earnouts: (1) Mitigation of asymmetric information, (2) Retention and motivation of manager-owner, (3) Means of partial deal financing, (4) Utilization of financial reporting opportunities, and (5) Minimization of tax liabilities. Thereby, it is expected that, consistently with the extant earnout literature, the first two would be most common⁷. They should not be, however, viewed as mutually exclusive objectives⁸. On the contrary, the bidder might wish to retain the owner-manager exactly to alleviate problems arising from information asymmetry. Furthermore, the disagreement on the target's value is also likely to be higher in cases where that value much depends on the competencies of the manager-owner.

Mitigation of asymmetric information

Information asymmetry generally arises, because one party, as insider, is believed to be better informed than the other. In an M&A framework, the seller is thought to be in a better position to estimate the target's value⁹. The existence of private information can be the reason the bidder and the seller form different expectations about the target value. The potential buyer acknowledges the incentive of the better-informed seller to "present their best face."¹⁰ To limit the risk of overpaying, the bidder would assume a lower value consistent with some amount perceived as the industry-wide average¹¹. Thus, the seller of a really high-quality target faces the problem of not being able to credibly signal its superior value and might not have the chance to receive the eventually expected worth¹². This could result in a situation of "adverse selection" causing some advantageous deals to fall through (analogous to the market for "lemons" in Aklerof (1970)).

Piehler (2007) demonstrates that a two-part contract with an initial up-front payment at deal closing and a deferred payment (earnout) contingent on meeting some predefined goals can be used to resolve disagreement on price between the buyer and the seller.¹³ The initial fixed part would correspond to the more conservative bidder valuation; whereas the contingent

⁷ See among others Kohers et al. (2000), Datar et al. (2001), Cain et al. (2006), Mantecon (2009), Lukas et al. (2010)

⁸ Kohers et al. (2000), p.448

⁹ Balakrishnan et al. (1993), p.102

¹⁰ See Ravenscraft et al. (1987)

¹¹ Piehler (2007) p.25

¹² Kohers et al. (2000) p.447

¹³ Piehler (2007), p.127 - 150

portion would reflect the valuation gap and would be payable only if the target performs up to the seller's superior value expectations. The earnout allows the bidder to shift some of the misvaluation risk to the more informed party. At the same time it acts as a self selection mechanism for high-quality targets, because accepting a contingent payment contract should be prohibitively costly for sellers who do not expect to be able to actually get the earnout¹⁴.

Retention and motivation of manager-owner

In acquisitions, for which the target's value to the buyer strongly depends on the competence of the former owner, the retention of the owner as manager could be a condition for the deal's success. Negotiating an earnout can be intended to serve as a retention bonus for the owner-manager (e.g. by tying the deferred payment to a condition that the manager remains employed for a specified period)¹⁵. In analogy to the fundamentals of the principal-agent problem¹⁶, the contingent nature of the earnout could be also utilized to align the incentives of the manager with those of the acquirer. Finally, the theoretical model by Mertens (2003) demonstrates that an earnout could be also used to facilitate the closing of deals.

Means of partial deal financing

The existence of the pecking order theory (Myers et al. (1984)) indicates that the choice of source of financing is among the factors considered in acquisition structuring decisions. Reum et al. (1970) identify earnouts as a form of financing. Bidders lacking the financial resources to pay the whole amount up-front could take advantage of the deferred cash outflows of an earnout contract structure¹⁷. However, providing a source of financing is conjectured to play only a complimentary role in the decision to negotiate earnouts, because normally there would be easier alternatives available. For instance, for private targets, installment sales would lead to deferred payments without the additional complications of making those payments contingent on performance goals.¹⁸

Utilization of financial reporting opportunities

Whereas Fama's efficient market theory predicts that the advantageous financial reporting alone should not be a motivation, because the market would be able to "see through" and

¹⁴ See Spence (1976) and Ragotzky (2002), p.127-135

¹⁵ Datar et al. (2001), p.202

¹⁶ See for example Grossman et al. (1983), Jansen et al. (1976), Ross (1973)

¹⁷ Reum et al. (1970), p. 83

¹⁸ Labbe (2004), p. 117, Meuli (1996), p.48

factor in this in its prices¹⁹, the earnings management research has proven the perceived importance of reported figures²⁰. Earnouts appear in the balance sheet under IFRS as contingent liabilities with a correspondingly higher value assigned to the acquired company on the active side. This could have various implications for important financial KPIs and related contract covenants (e.g. debt contracts).

Moreover, a manager motivation scheme that is accounted for as an earnout would lead to bigger asset base and larger reported income in subsequent periods as opposed to a standard bonus plan, which would be regularly expensed. This financial reporting advantage of earnouts, however, was by far eliminated with the IFRS change starting July 2009²¹. Currently, earnouts which are recognized as disguised management bonus would not be capitalized, but instead expensed like normal management remuneration. The accounting standard changes are associated with additional expenses, increased volatility, and greater liability related to earnouts, which in turn suggests that companies might be looking for alternative measures to achieve comparable results²². However, due to the change happening relatively recently, it is difficult to predict to what extent it would find expression in the survey results (which normally would base on the longer-term experience of the participants).

Minimization of tax liabilities

Although Gilson et al. (1988) find the theoretical support for tax optimization as a motive for acquisition weak; evidence suggests that managers consider tax effects in such transactions²³. Thus, tax liability minimization is examined as another potential motive for the utilization of earnouts²⁴. The tax implications of an earnout contract would depend on the particular setting, encouraging its use in some cases and discouraging in others. For example, the deferred nature of the contingent payment could create tax advantages for the seller compared to a one-time cash offer by postponing the tax burden. Datar et al (2001) point out the tax benefit, which earnouts could create for acquirers of public targets, which cannot make use of the less complex substitute mechanism of installment sales available for private companies. Further aspects that could be considered include the effect on tax carryforwards and the extent of asset revaluation and its effect on future period depreciation tax shields.

¹⁹ See Fama (1970)

²⁰ Healy (1988), p. 4

²¹ See E&Y (2010), p.2 – 9

²² See E&Y (2010), p. 2

²³ See Auerbach (2002)

²⁴ Datar et al. (2001), p.204

2.2.2. Likely users of earnouts

To gather indirect evidence on the motivation for earnouts, the characteristics of targets, for which the bidders consider applying this contingent payment, would be examined. It is expected that bidders, who would negotiate earnouts to bridge the valuation gap between buyer and seller, would potentially use earnouts in situations more subjected to information asymmetry. This is the case for targets with little previously disclosed information²⁵ (private firms or subsidiaries, for which there is no readily observable market price and rarely any audited financial statements), targets with high growth opportunities or lots of intangible assets like new technology or specific human capital (for which the future value is highly uncertain and difficult to estimate by outsiders²⁶); or firms operating in a different industry²⁷ (in which the buyer lacks enough expertise to judge the target's value). Bidders trying to acquire relatively big companies are exposed respectively to a larger extent to the misvaluation risk and would presumably face a greater need to hedge that risk²⁸. At the same time, for comparatively large deals, the advantage of earnouts as a means of financing also gains significance.

If keeping and motivating the owner-manager is an objective for negotiating an earnout contract, it is expected that bidders would consider using the contingent structure for targets, where the human capital is a critical component of firm value. That is the case for private companies (which are usually managed by owners in possession of unique firm-specific knowledge), companies in know-how intense industries (like high-tech or service), or companies operating in areas in which the acquirer lacks the core expertise. It is noteworthy, that the determinants for this motive and the information asymmetry motive are to a large extent the same, which emphasizes the fact that both objectives are not mutually exclusive²⁹.

2.2.3. Disadvantages for the use of earnouts

Consistently with Williamson's transaction cost theory³⁰, the choice to use earnouts will be based on a comparison of the operational benefits and the transaction disadvantages. Consequently, to observe earnouts in practice, this contractual form should be not only beneficial but also feasible. To study the main factors perceived as obstacles to the

²⁵ Hamilton et al. (2004), p.12

²⁶ See Lev (1996)

²⁷ Reuer et al. (2004), p. 22

²⁸ Kohers et al. (2000), p.449

²⁹ Kohers et al. (2000), p. 449

³⁰ See for example Williamson (1981)

implementation of earnouts, companies who declared not to use the tool would be asked the reasons for that.

Besides cases where there is no substantial difference in the bidder's and seller's valuations or the owner does not possess superior management competences for this enterprise, earnouts would also be avoided when the previous owner no longer wants to bear the target's performance risk or when the costs created by the earnouts are bigger than the gains. Apart from the direct costs of drafting and implementing the complex earnout contracts, integration issues could be among the buyer's biggest problems³¹. Due to the need to objectively observe the prespecified performance measure, the operations of the target should remain for the time of the earnout mostly segregated from those of the buyer, delaying so the utilization of potential synergies³². Finally, the contingent price structure creates on its own a moral hazard problem³³. Both parties would have an incentive to manipulate performance and reporting in order to optimize the amount of the earnout. While the acquirer is prone to trying to influence the performance measure in such a way as to keep the earnout down, the manager-owner would try to inflate it, concentrating on short-term results even at the expense of long-run success (by, for example, cutting R&D or marketing expenses)³⁴. This misalignment in the incentives of buyer and seller could become the source of prolonged legal disputes³⁵.

2.2.4. Earnout contract terms

Cain et al. (2006) suggest that earnouts are not "one-size-fits-all" contracts, but are generally designed to match the particular deal. This section looks at the consideration for drafting the key terms: (1) the earnout period, (2) the performance measure, (3) and the formula which relates the performance measure to the actual earnout payment.

Earnout period

Consistent with the transaction cost theory, the overall contract duration is determined based on a trade-off between benefits and costs. The longer the period, the more relevant information on future performance is gathered (mitigating so the information asymmetry) and the less the incentive and opportunity to manipulate performance in order to optimize the earnout payment³⁶. The shorter the period, the less the additional costs from maintaining

³¹ Craig et al. (2003), p.46

³² See Baums (1993)

³³ Frankel (2005), p.24

³⁴ Ragozzino et al. (2009), p. 857

³⁵ Venema (2010), p.16

³⁶ Piehler (2007), p.202 – 203

complex earnout contracting and postponing the target integration³⁷. The duration chosen for a given deal would depend on the bargaining power of both parties and the relative weight of the factors and is hence expected to differ across transactions.

Performance measure

To be able to resolve information asymmetry problems, an indicator that is informative about the target's intrinsic value, objective, and least susceptible to manipulation should be chosen as performance measure³⁸.

Although non-company related measures (e.g. oil prices) could be applied for targets, whose performance is highly correlated with raw material prices³⁹, company-specific measures commonly better reflect the target's intrinsic value. Company-related non-financial measures could be chosen in the rare circumstance that they are a better target value indicator than the available financial performance measures (e.g. for new-technology or high-growth firms)⁴⁰. However, some financial reporting measure is expected to be most commonly negotiated. Accounting measures have the further advantage of being readily obtainable, as financial reports would be anyway prepared⁴¹.

With respect to information content, Dechow (1994) identifies earnings as providing reliable information about a company's future cash flows. Earnings would also appeal to buyers who are interested in the overall profitability of the acquisition. On the other hand, according to Hamilton et al. (2004), sellers would prefer revenue as performance measure, because it is less susceptible to potential manipulations by the buyer (e.g. excessive overhead allocation). However, the use of revenue exposes the acquirer to the risk that the owner-manager has no longer incentives to watch the costs. Given these conflicting interests, it is expected that companies would most often negotiate a measure somewhere in the middle (like EBITDA or other cash-related variable), because it would be less susceptible to manipulation⁴². "They are additionally desirable because they exclude interest, taxes, depreciation and amortization, which may vary based on the buyer's capital structure or the way in which the acquisition is financed."⁴³

³⁷ See Baums (1993)

³⁸ Cain et al. (2006), p. 14

³⁹ Piehler (2007), p.207

⁴⁰ Piehler (2007), p.206

⁴¹ Meuli (1996), p.88

⁴² Ragotzky (2002), p.177 – 178

⁴³ Hamilton et al. (2004), p. 13

Earnout formula

Research from the area of earnings management has demonstrated that managers are more likely to manipulate accounting figures in case their remuneration depends on financial reporting output⁴⁴. The incentive gets stronger, when the performance measure approaches a fixed milestone⁴⁵. Therefore, if incentive alignment is an objective for using earnouts, the formula for the deferred payment is expected to reflect proportionally the target's development⁴⁶.

2.3. The use of option-like contracts in staged acquisitions

Consistent with the existing corporate finance literature, the following discussion considers the contractual design separately from the ownership level choice. The theory predicts that, analogously to earnouts, mitigating information asymmetry and moral hazard would be primary motives to use option-like structures in staged acquisitions. Apart from hedging against misvaluation of the target and alleviating adverse selection, such contracts could also serve as a screening instrument before the bidder decides to commit to a full acquisition.

A partial acquisition provides the buyer with an implicit option to delay the larger future investment decision until some critical uncertainty is resolved, thus limiting the downside risk (Kogut (1991)). Combining the real option view with the transaction cost approach, Chi (2000) demonstrates in a rigorous theoretical framework that such an option would be more valuable and hence is expected to be observed more often when the two parties value the underlying differently. Such divergence in valuation could occur, because the underlying has different complimentary value to the buyer and seller (as in a divested subsidiary, which is a better strategic fit for the buyer than it was for the seller) or because the buyer experiences greater uncertainty in valuing than the seller⁴⁷. Rausch (1999) finds that the additional value of the implicit call option to the acquirer could amend a situation of adverse selection. The implicit option is likely to be explicitly defined in the contract in case of high potential ex post negotiation costs (i.e. in case of higher degree of uncertainty about the future development or a perceived threat that a party might engage in rent-dissipating actions to improve the own bargaining position)⁴⁸.

⁴⁴ Healy (1988), p.21 - 22

⁴⁵ For example, Guidry et al. (1999) show that managers are likely to shift accruals to other periods if earnings are way below the bonus threshold or way above. Healy (1985) finds similar behavior around the cap of a bonus.

⁴⁶ Baums (1993), p.1274 and Piehler (2007), p.208-209

⁴⁷ Chi (2000), p. 673 - 676

⁴⁸ Chi (2000), p. 685

The theoretic model by Arend (2004) shows that an ex ante defined price for the next stage of the acquisition combined with some commitment by the potential target can alleviate not only uncertainty stemming from a critical future event, but also adverse selection risk and moral hazard from insufficient effort exertion by the target. He demonstrates that the phase of initial partial acquisition could serve as a screening instrument to identify high-quality targets, because it allows the bidder to get insider knowledge before deciding whether to proceed with the acquisition. This function is conjectured to be more likely in knowledge-intensive, progressive industries⁴⁹. The initial commitment by the potential target (e.g. a synergy-enhancing investment) should align their incentives with those of the potential acquirer. Moreover, Chi (2000) shows that the negotiation of the explicit option itself creates perverse performance incentives, whose alignment needs to be addressed by the contract drafting.

Based on the similarities in the motivation, Ragozzino et al. (2004) suggest that both tools would be less likely to be used together. Resting on these theoretically identified common grounds, the survey would investigate potential similarities in the motivation and term structure of earnouts and option-like contracts in staged acquisitions. Since to the best of my knowledge, no previous research has focused on the specific terms of option-like contracts in staged acquisitions, the questions for this tool would be constructed based on the findings about earnouts and information gathered via interview rounds with a company frequently using this mechanism.

3. Design and development of the survey questionnaire

3.1. Sample selection and survey implementation

In accordance with the goal of this thesis to gain some insight about the contract structures applicable in German acquisitions, the data were gathered via a survey of the 160 companies belonging to the German Prime Standard (DAX, MDAX, TecDAX, and SDAX)⁵⁰. As already mentioned, the form of questionnaire is preferred, because it allows access to more fine-grained information about the deal specifics and motivation than generally available in a standard database. To enhance the relevance and understandability of the questions and provided answer choices, several interviews were conducted with companies frequently applying the researched tools (a summary of the interviews is provided in Appendix A).

⁴⁹ Arend (2004), p. 290

⁵⁰ A complete list of the companies approached could be found in Table B1. in Appendix B.

The sample selection focuses on the biggest German companies with stricter disclosure rules since regarding transparency as a priority belongs to the prerequisites for inclusion in the Prime Standard. A policy for transparency is hoped to increase the probability for participation in the survey. Furthermore, it is expected that bigger companies are more likely to have the needs and resources to engage in M&A transactions.

The survey was constructed as an anonymous self-administered online questionnaire implemented with LimeSurvey⁵¹. It could be accessed under the link <http://lehova.limequery.org/64817/lang-de> for a month. In this period the 160 companies from the sample were contacted per phone to request the email address of an employee responsible for the M&A activity in the company to whom the link was forwarded. In the rare circumstance (12 out of the 160 companies) that after repeated calls there was still no contact person, the link was sent directly to Investor Relations or a similar department. 91 of the approached companies gave some feedback about the survey. Besides giving answers like “no M&A activity” (16 companies), “having a general policy of not responding to surveys” (17 companies), “refusal to disclose sensitive information” (5 companies), etc., 41 filled out the questionnaire, of which 34 responses are complete and 7 are partial but still usable⁵².

3.2. Survey structure

To minimize the effort and time for filling out the survey, the questions were defined as multiple-choice with the possibility to add an own answer in most cases. To optimize the user experience of the survey, the order and number of questions are customized to the particular answers of a respondent. That is, which question is shown as next is contingent on previous answer choices. For example, questions regarding earnouts are only displayed in case the respondent did not click “never” to the question “How often do you use the following contingent payment structures: Earnouts?”. For an overview of all questions and the relevant condition rules as well as an overview of the responses given, please refer to Appendix C.

Making the number of asked questions varying conditional on previous answers resulted in different number of companies presented with the various question groups. Therefore, for each question there could be a different number of respondents and the deviation would come not only because the respondent simply skipped the question, but also from the fact that this item was possibly not shown to all. For a more comprehensive interpretation of the results, the

⁵¹ For an overview on survey design see Porst (2009), p. 190

⁵² See Table B2. for an overview of response rates and a complete breakdown of the provided feedback .

analysis of a given question will always be carried out in relation to the total number of responses to that particular item⁵³.

The questionnaire starts with some general questions which should allow differentiating the participants with respect to size and main field of company activity as well as their experience with M&A deals. Then it continues with questions on the frequency of use of contingent payment methods in general and for a breakdown of the mechanisms. In case the respondent indeed negotiates the investigated earnouts and option-like structures in staged acquisitions, the survey continues with two groups of questions about these mechanisms, which should study the motives and deal structure of each.

The earnout section starts with the motivation for the use of this instrument and the share acquired with it. Next come questions regarding the particular earnout structure: the duration, the performance measure and formula definition. The section concludes with inquiry about the frequency of reaching performance goals and about attempts to opportunistically influence the performance measures. The questions themselves and the provided multiple choice answers are based on the literature overview about earnout research provided in the first part of this thesis.

The section for option-like structures in staged acquisitions is structured analog to the one for earnouts: it starts with similar inquiries about motivation and shares acquired and goes on with questions on the particular instrument structure. Thereby it is attempted to gather information on the types of option-like contracts, their duration, exercise periods and exercise price definition. Finally, frequency of exercising and attempts for opportunistic manipulation of performance are questioned. The questions and multiple choice answers are defined similarly to those for earnouts, based on the expectation that both would act as substitutes⁵⁴. This hypothesis is further investigated by questions concerning the possibility of a simultaneous use of option-like structures and earnouts. Since, to the best of my knowledge, there exists hardly any research on the particularities of option-like structures in staged acquisitions; information on deal specifics necessary for the survey creation was gathered via interviews of practitioners frequently implementing such tools⁵⁵. The section follows to a great extent the questions on earnouts, any significant deviations would be explicitly discussed as part of the response interpretation.

⁵³ For example, if out of the 20 respondents to a question, 10 pointed out answer A., then the analysis would show that 50% of the respondents for that question chose A.

⁵⁴ Reuer et al. (2009), p.873

⁵⁵ For an overview of the key findings of the interviews, refer to the summaries provided in Appendix A.

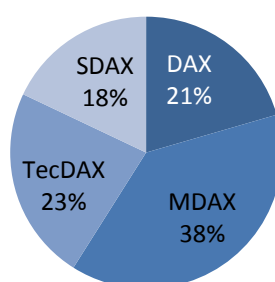
Finally, given that previous studies report rather infrequent use of contingent payment structures, the survey asked respondents, who indicated not to use earnouts, option-like structures in staged acquisitions or both, about their reasons to avoid these mechanisms.

4. Results and interpretation of the empirical investigation

4.1. General information about the sample

Out of the surveyed DAX, MDAX, TecDAX, and SDAX companies, the form was completed by about one third of each size group. Only the smallest companies (belonging to the SDAX) are "underrepresented" with only 14% out of the 50 listed having filled out the questionnaire. Since practically all of the respondents are companies that actually carry out M&A transaction, the smaller proportion of participating SDAX companies is in compliance with the trend that larger entities more often engage in acquisitions and are therefore more likely to participate and does not signal any significant bias in the responses. Figure 1 below demonstrates the spread of companies from each listed group as percentage from all 41 respondents. Similarly, there is no observable clustering of the respondents in a particular industry⁵⁶. The majority of the companies (58%) engage in moderate acquisition activity (i.e. make on average up to 5 acquisitions per year). Most of the companies (4 out of 7) that regularly purchase more than 10 companies per year belong to the biggest German companies listed on DAX, emphasizing the above mentioned relationship between company size and M&A activity⁵⁷.

Figure 1: Survey participation rate conditional on company size



Out of 41 companies shown the question, the 39, who responded, constitute 100% in the graph.

4.2. Frequency of use of contingent payment methods

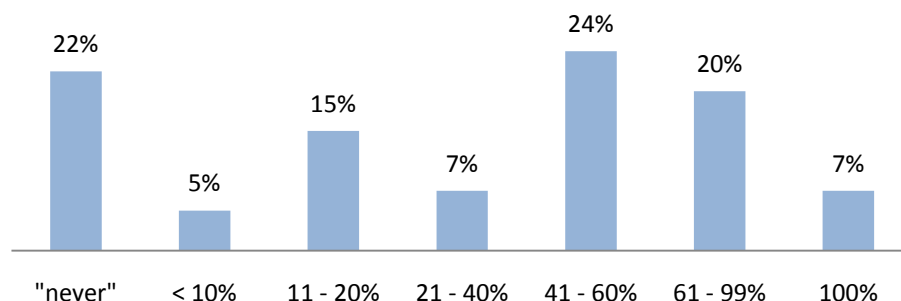
Only 22% of the respondents indicate that they do not use contingent payment structures, whereas 51% of all reply that they use such mechanisms in more than 40% of the acquisitions. This finding should, however, be observed with cautiousness, because companies actually

⁵⁶ See Table C2 for a breakdown of the respondents conditional on their main industry of operations.

⁵⁷ Table C3 provides an overview of the frequency of M&A activity.

using contingent payment structures are more likely to respond and thus possibly bias upward the statistics.

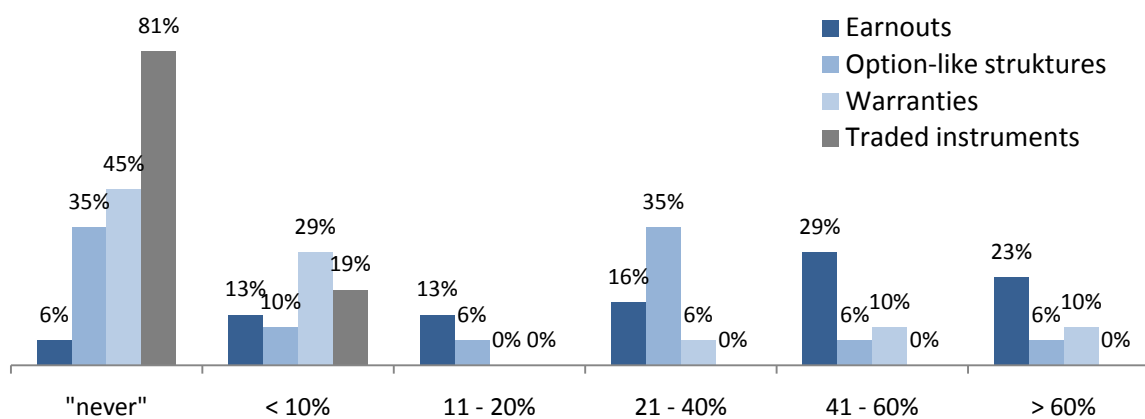
Figure 2: Frequency of use of contingent payment methods



Out of 41 companies shown the question, the 41, who responded, constitute 100% in this graph.

Out of the 78% (32 companies) who claim to use some contingent payment methods and were presented with a question on the frequency of use of particular types of instruments, 31 provided the responses summarized in the following Figure 3. As expected, traded contingent mechanisms (like CVR) are implemented only very seldom, whereas warranties are often negotiated.

Figure 3: Breakdown of the use of particular contingent payment methods



Out of 41 companies shown the question, the 31, who responded, constitute 100% in this graph.

Confirming the predictions, earnouts and option-like structures are relatively frequently used. Only 6% of the respondents signal that they never negotiate earnouts, whereas 52% implement this mechanism in more than 40% of their transactions. This frequency of use lies substantially above not only the 5% typically found in empirical investigation of database information⁵⁸, but also above the 18% suggested by another survey⁵⁹. However, the results

⁵⁸ See Kohers et al. (2000), Beard (2004), Lukas et al. (2010), Mantecon (2009), Datar et al. (2001).

here are expressed as percentage of users of contingent payment structures and not as percentage of completed acquisitions like in the other mentioned studies. Furthermore, here, similarly to the results about the frequency of use of contingent payment methods in general, an upward bias is possibly observed, because companies who actually use the instruments are more likely to participate in a survey on this topic.

The same argument about potential bias should be valid for the results about the frequency of negotiation of option-like structures in staged acquisitions. Yet, fewer respondents claim to negotiate these mechanisms (65%) than for earnouts and those who do use them, tend to do so much less often: as comparison the instrument is applied in more than 40% of the acquisitions by only 12% as opposed to 52% for earnouts.

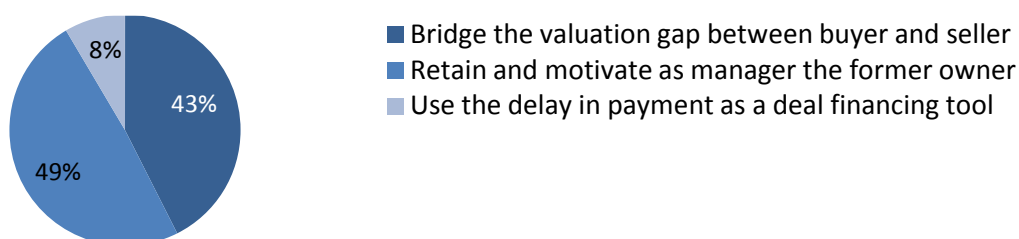
4.3. Earnouts

Since 2 of the 31 respondents to the question on the breakdown of use of particular contingent mechanism indicated that they never negotiate earnouts, the survey section on earnouts was presented to a total of 29 companies. Of them 25 provided responses on which the following evaluations will be based⁶⁰.

Motives for the use of earnouts

The respondents were asked to indicate the two most significant motives driving their choice to implement earnouts; the answers are summarized below in Figure 4.

Figure 4: Motives for the use of earnouts



Out of 29 companies shown the question, the 25, who responded, gave 47 answers, which constitute 100% in this graph (3 respondents indicated only one instead of two motives).

None chose financial accounting or tax motives, which is consistent with the finding of Datar et al. (2001) for the US market. Confirming the expectations, bridging the valuation gap and retaining and motivating the former owner as manager stand out as the most significant

⁵⁹ CMS European M&A Study 2010, p. 8

⁶⁰ In case a particular question had less than 25 respondents, it would be explicitly mentioned in both the analysis and the accompanying graphical representation.

motives. It is also observed that the financing advantages of this mechanism also seem to play a role, although not as prominent as the one of the other two above mentioned motives.

To gain indirect evidence on the motivation for negotiating earnouts, the participants were asked to identify the characteristics of the targets, for which they typically use such mechanisms. The most commonly chosen answers are private companies (37% of the answers), high growth rate (25%), and strong dependence on the management competencies (21%)⁶¹ – characteristics recognized to describe companies prone to more severe information asymmetry and moral hazard problems. It should be noted that none picked “public company” or “the target is relatively large compared to the acquirer”, which, as argued by Datar et al. (2001), might indicate a motivation related to the financing advantages of earnouts (more specifically, earnouts could duplicate for public companies the financing advantages available through installment sale of private companies; on the other hand, the larger is the target compared to the bidder, the more resources such a deal is expected to require and the more significant any financing effect would be). Therefore, these findings provide indirect support for the above discussion that bridging the valuation gap and management retention are the main motives for earnout negotiation.

Ownership share typically acquired

Earnouts tend to be used in acquisitions of majority ownership share – only 6 out of 25 respondents indicate that they negotiated earnouts in share purchases of below 50%. Still only 6 indicated to buy 100% of the target via such mechanisms, while the most answers range in between. Whereas applying earnouts to incentivize the former owner to remain as manager might look at first redundant in case he still participates by retaining some minority share, the interviews indicated several arguments explaining this phenomenon. First of all, by allowing the former owner to actively participate in important decisions, the minority share might mitigate his concerns that the buyer would manipulate the performance⁶². Secondly, by defining the earnout as a multiple of some profit-related measure, the instrument provides a leverage effect for the motivation by increasing the manager profit participation compared to the one derived only from the ownership share⁶³. From utility economics perspective, the extra “reward” from the earnout should duplicate the incentives from a full ownership for the

⁶¹ The 57 answers provided by 23 respondents out of the 29 shown the question form the 100 % base for the given statistics. (Each participant could choose more than one answer.)

⁶² See summary of Interview 2 in Appendix A.

⁶³ See summary of Interview 1 in Appendix A.

former owner remaining as manager and hence better align them with the new majority owner.

The typical earnout contract terms

The below presented terms of the “average earnout contract” are based on the responses of 25 companies. It should be noted that most of the questions are characterized by relatively large variability in the answers, which emphasizes that this “average” contract could not be considered an optimal solution valid in all cases. Consistent with previous findings⁶⁴ and as additionally stressed in the interviews, the survey results suggest that earnouts are designed to respond to the specifics of each particular deal.

The typical earnout contract has moderate duration of between 1 and 3 years (as indicated by 72% of the 25 respondents). The performance measures on which the earnout is most commonly based are EBIT and EBITDA with respectively 26% and 23% of the 53 responses given by 25 companies⁶⁵. Other relatively often used measures are cashflow and revenue (each accounting for 17% of the responses). Furthermore, the earnout is typically defined with a formula proportional to performance (16% of the respondents take always “measure A times factor B”, while 68% include a cap to the earnout -e.g. $\min\{(\text{measure A times factor B}); \text{Cap}\}$) and based on cumulative performance data (72% of the respondents). The interviews further confirm, consistently with the predictions, that these particular contract design choices reflect the goal for minimizing opportunistic behavior incentives. The fact that performance manipulation is an issue also becomes evident from the responses to the question whether management made significant attempts to manipulate performance: besides the 9 respondents out of 25 who chose not to answer this item, all others indicated some degree of significant purposeful manipulation.

Finally, regardless of the exact terms, the survey results suggest that a common trait among most earnouts is that the earnout goal is designed realistically and should be achievable: 12 out of 25 respondents claim that they often come to an earnout payment, 11 – sometimes, while none opted for “never” (the other 2 actively chose the “no answer” option).

4.4. Option-like structures in staged acquisitions

The analysis in the following section is based on responses from 15 companies, unless explicitly stated otherwise for particular items (out of the 41 survey participants 9 indicated

⁶⁴ Cain et al. (2006)

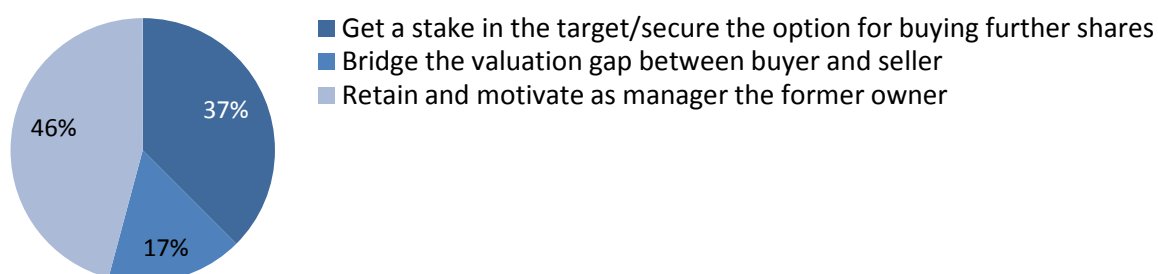
⁶⁵ Each respondent was allowed to choose more than one answer.

that they do not use contingent payment structures at all; from the 32 contingent instrument users 11 do not negotiate staged acquisitions with option-like instruments and 6 did not provide any answers in this section).

Motives for the use of option-like structures in staged acquisitions

Given the suggested substitutability of earnouts and option-like structures⁶⁶, the survey participants were presented here with answer options analog to those for earnouts. The only adjustment, provoked by insights from the initial interviews, was to change the option “use as a deal-financing tool” with “get a stake in the target/secure the option for buying further shares” change. The results are summarized in the following Figure 5.

Figure 5: Motives for the use of option-like instruments in staged acquisitions



Out of 20 companies shown the question, the 15, who responded, gave 28 answers, which constitute 100% in this graph (2 respondents indicated only one instead of two motives).

Similarly to earnouts, the need to mitigate information asymmetry and moral hazard issues stand behind the motivation for negotiating option-like instruments in staged acquisitions. This is also confirmed indirectly by the fact that the targets, for which option-like mechanisms are used, are mostly characterized by being private companies (44% of the answers) with high growth rate (21%) and depending strongly on the management competencies (15%)⁶⁷, i.e. the ones prone to more severe information asymmetry and moral hazard problems.

Analog to earnouts, management retention and motivation and bridging the valuation gap are among the major motives for implementation. While here as well financial accounting and tax effects seem to play a negligible role for the deal design choice, it is notable that getting insider knowledge about the target while securing the option to acquire further shares seems to be a very significant motive – accounting for much more responses than the disagreement-on-valuation motive (37% versus 17%). Although both getting insider knowledge about the

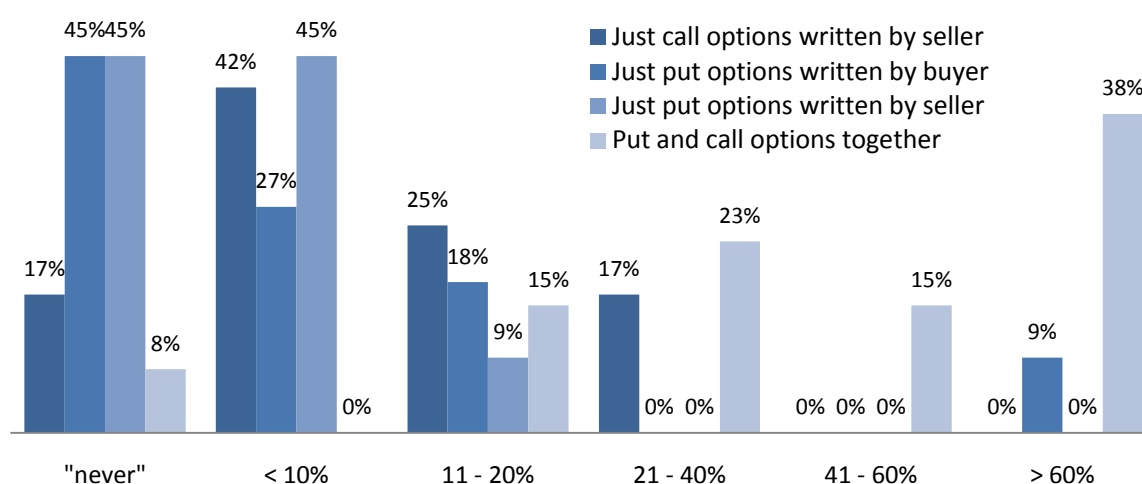
⁶⁶ Ragozinno et al. (2006), p. , Reuer et al. (2009), p. 873

⁶⁷ The 34 answers provided by 15 respondents out of the 20 shown the question form the 100 % base for the given statistics. (Each participant could choose more than one answer.)

target while securing at the same time the option to acquire further shares and bridging the valuation gap are motives related to the goal of mitigating information asymmetry, they do diverge in the used approach. This fact signals that option-like instruments and earnouts could not always be viewed as substitutes. The latter is also confirmed by the results from the questions on the simultaneous use of option-like instruments and earnouts to be discussed later.

The frequency of use of the various reasonable option types is examined next. These include a put option written by the seller, which obliges him to buy back the shares and alleviates the buyer's risk from adverse business development; a call option written by the seller, which might aim at securing the buyer the opportunity to acquire the remaining shares; a put option written by the buyer, which could insure the seller's exit from minority shareholding; and, finally, a combination of the last two, which allows hedging away risk for both the buyer and the seller. The results to this question reveal significant heterogeneity in the used structures, which suggests that the instruments are custom-made to account for each deal's specific circumstances. Nevertheless, only one respondent indicated using an option structure combination, other than the above listed, which speaks for the exhaustiveness of the offered answer choices.

Figure 6: Option-like instruments breakdown conditional on their frequency of use



Out of 20 companies shown the question, those, who constitute 100% in this graph, are as follows: for "Put and call options together" – 13, for "Just call options written by seller" 12, for the other two – in both cases 11.

Although all given option forms seem to be occasionally implemented, a combination of a put and a call stands out as the most commonly used. The notes to the survey responses as well as the conducted interviews suggest that the attractiveness of the put-call combination could be attributed to the balance in the relation between buyer and seller it creates by mitigating risks

for both parties: the acquirer of the majority share explicitly secures the option to buy additional shares, while at the same time the seller is given a sure exit opportunity from the minority shares.

Ownership share typically acquired

Option-like instruments tend to be used in addition to substantial initial share purchases, usually involving the majority (from the 15 respondents, 6 typically negotiate such mechanisms when acquiring 20% to 50% of the target, 6 - when buying between 50,1% and 75%, and 3 when taking more than 75% over). The final goal of the acquirer is normally a full acquisition (87% of the responses) and comparatively rarely a majority stake without complete ownership (the other 13%). Still, given the relatively small number of respondents, this result could not definitely rule out the possibility that companies apply option-like structures when acquiring a smaller initial share with the aim to form a long-term joint venture with the target's owners, which was suggested as a possibility in interviews with practitioners⁶⁸.

The simultaneous use of option-like instrument with earnouts

Although a comparatively rare event, the survey found that some companies do negotiate the option-like instruments and earnouts simultaneously (out of the 14 respondents to this question, 2 companies use the combination in more than 40 % of the cases, 2 – in between 21% and 40% of the cases, 2 – in less than 10%, and the rest – never). Four respondents claim to compliment the put-call combination with earnouts (1 of them “often” while 3 only “sometimes”)⁶⁹. Another option-like contract negotiated together with earnouts seems to be a put option written by the seller⁷⁰, which, however, was already declared as being rather rarely used. Call options written by the seller and put options written by the buyer tend to be extremely rarely or never (for the latter) used together with earnouts.

Together with the already mentioned slight divergence in the disclosed motives for negotiation, these findings cast additional doubt that earnouts and option-like instruments could be viewed as having analogous functions as suggested by Ragozzino et al. (2006). Yet, the number of respondents here is too small to form a definite view on the topic, let alone

⁶⁸ See the summary of Interview 1 in Appendix A.

⁶⁹ Based on responses of 5 out of the 6 companies which indicated to use together option-like instruments and earnouts and were subsequently shown a question on whether they use earnouts with the various option types (calls, puts, put-call combinations)

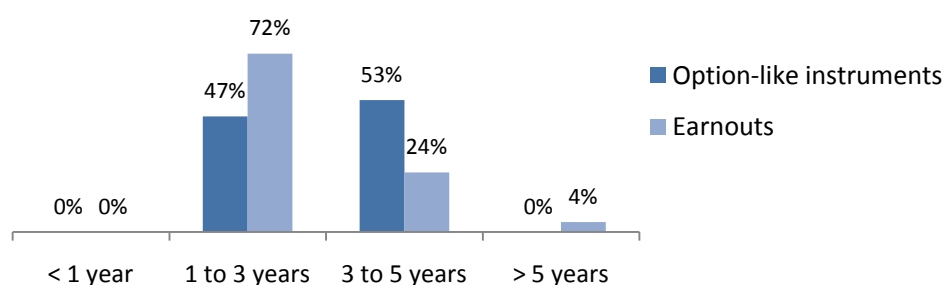
⁷⁰ 3 out of the 5 respondents indicated they “sometimes” use put options written by the seller and earnouts

define a plausible explanation, but still enough to highlight areas of interest for further research.

The typical option-like instrument contract terms

The responses of 15 companies show that the negotiated option-like contracts have an average duration of between 1 and 5 years. Compared to the “typical earnout” duration, option-like contracts seem to be marginally longer lived (see Figure 7 below). There is no clear trend in the definition of the exercise period – 40% of the 15 respondents allow the purchase rights to be exercised in one predetermined period, while 47% designate several exercise periods (the rest 2 respondents use alternative methods).

Figure 7: Average duration of earnouts and option-like instruments



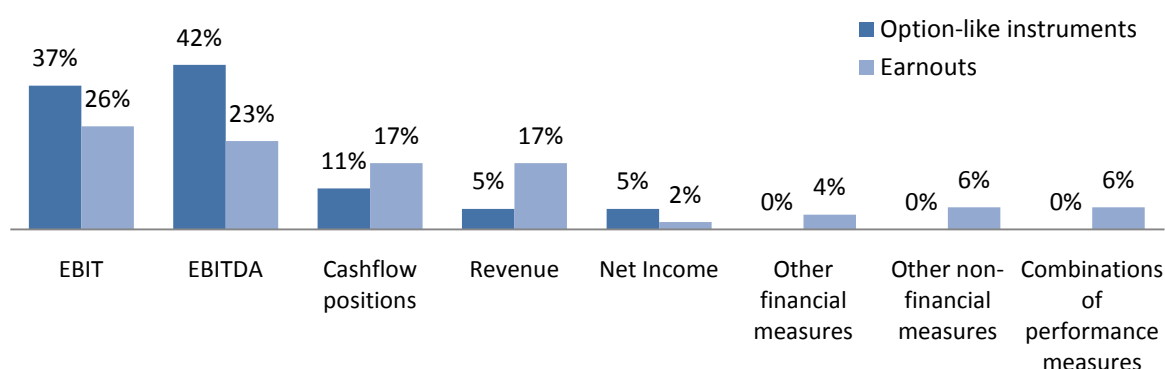
The 100% in this graph correspond to 15 respondents for option-like instruments (out of 20 companies shown the question) and 25 respondents for earnouts (out of 29 shown the question)

Again similarly to earnouts, the “strike price” of the option-like contracts (i.e. the price for which the additional target shares could be transferred) is mostly determined as a flexible mechanism proportional to some performance measure. Thereby, for 7 out of the 15 respondents, this flexible mechanism is fixed (e.g. measure A times factor B), while 4 indicate that they adjust the formula to vary with different performance levels (e.g. when measure $A > X$, $\text{Price} = A * \text{Factor B}$, when measure $A > Y$, $\text{Price} = A * \text{Factor C}$); the remaining 4 define the “strike price” as a fixed amount. The comparison of the relative use of the various performance measures for earnouts and option-like instruments, presented in Figure 8, shows that for both, EBIT and EBITDA are the most commonly applied figures. It should be noted, that in the case of option-like mechanisms, EBIT and EBITDA are even more frequently used than for earnouts. The observed pattern might be stemming from the fact that EBIT and EBITDA are also the figures commonly underlying private company valuation models for the determination of a purchase price⁷¹. A subsequent interview suggested “fair price” as another

⁷¹ Seiler (2004), p. 37

applied “strike price” definition⁷². In this case, only the rights about future share purchases are set in the contract and the price is negotiated to be determined by a pre-specified independent third party via a full-fledged valuation process (usually involving discounted-cash-flow analysis) on the occasion of option exercise. The stated rationale for this price definition approach was to find a method better reflecting the underlying target value, especially when the agreement on particular multiple figures turn out difficult.

Figure 8: Performance measures used by earnouts and option-like instruments



The 100% in this graph correspond to 53 responses from 25 respondents for earnouts (out of 29 shown the question) and 19 responses from the 11 respondents for option-like instruments (out of 11 shown the question); each respondent could give more than 1 answer.

The above discussed terms tend to be designed in a similar manner for all investigated contract structures. Those who use put and call options together also define similarly the two options: 75% from the 12 respondents set the same duration and 58% the same “strike price”.

In a question about the frequency of option exercise for each option type, the respondents indicated that in most cases the options are exercised⁷³. This result coincides with the statement that the final goal of staged acquisitions with explicit option-like contracts is the full ownership of the target.

Finally, the survey reveals that significant purposeful manipulation of the measures determining the “strike price” is a relevant problem area for option-like instruments, as it is for earnouts. The results show a significant variation in the indicated frequency of detected manipulation attempts. It is noteworthy that here 47% of the 15 respondents claim to have observed significant indices of opportunistic behavior by management in less than 20% of their cases, while for earnouts, the same claim only 28% of the respective 25 companies,

⁷² See Interview 2 in Appendix A.

⁷³ For a detailed overview of the distribution for each option type refer to Table C30 in Appendix C.

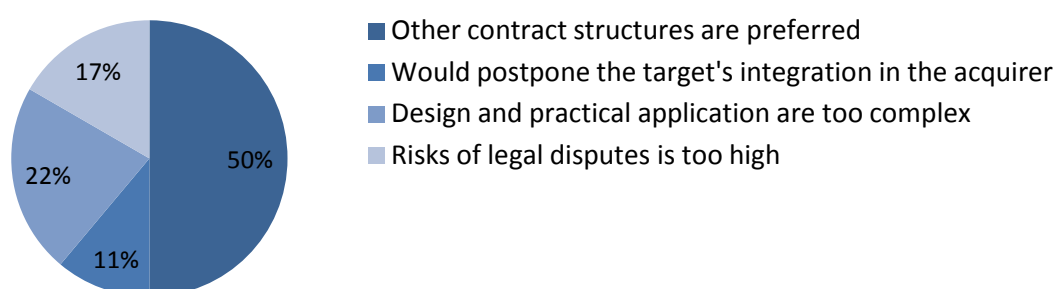
which responded to that question. Despite possible bias due to the small varying samples, this result suggests an interesting phenomenon deserving further research.

4.5. Non-users of contingent payment methods

Those respondents, who declared not to negotiate contingent payment methods, were asked a question about the characteristics of their targets in an attempt to search for a distinguishing profile for companies acquired with and without the use of contingent mechanisms. The “non-users” were presented with the same answer choices for the target companies, shown also to the users of earnouts and option-like instruments in staged acquisitions. Unlike the pattern that became obvious from the responses of the “users”, here no clustering around certain company traits could be observed, besides “being a private company” (26% of the 19 responses given by 10 respondents). The latter is, however, not particularly informative, since it simply confirms the already mentioned trend that most acquisitions in Germany are of private targets.

Additionally, companies, which indicated to use contingent payment methods in general, but not earnouts or option-like instruments in particular were asked to point out the disadvantages of the respective mechanism, which obviously have outweighed the benefits and made its negotiation infeasible. For earnouts, an analysis of the responses is hardly possible, because only 2 companies acknowledged never to use earnouts and were consequently asked this question⁷⁴. The motives for not using option-like tools are summarized below.

Figure 9: Reasons not to use option-like contingent structures



The 100% in this graph correspond to 18 responses given by 11 respondents for earnouts (out of 11 shown the question); each respondent could give more than 1 answer.

⁷⁴ The first gave the answer “The former owner does not want to bear performance risk any more”, while the second marked “There is no divergence in valuation between buyer and seller” and “Other contract forms were preferred”.

5. Conclusion and suggestions

The aim of the conducted survey was to investigate the use of earnouts and option-like instruments in the German M&A market: the frequency and motives for the negotiation of each as well as the extent to which the two mechanisms are viewed as substitutes. In addition to that, it attempted to gain some fine-grained information on the average term structure.

The results confirm that contingent payment methods are indeed relatively frequently negotiated in acquisitions by companies belonging to the German Prime Standard and that both earnouts and option-like instruments are commonly used, with the earnout proving to be the more popular one. What is more, the observed frequency lies even above the usually cited figures of 5 to 15%. However, the results could be potentially biased upward by the fact that companies actually negotiating these mechanisms are more likely to participate in and actually finish the survey.

The findings further indicate that the motivation for negotiating earnouts and option-like instruments is, as expected, related to the aim of mitigation of information asymmetry and moral hazard. Both methods tend to be used for the acquisition of private companies characterized by high growth and strong dependence on management competences, i.e. companies usually facing more information asymmetry and moral hazard problems. Consistently, the users of both pointed out “bridging the valuation gap between buyer and seller” and “retention and motivation of the former owner” as major motives for the negotiation. However, the users of option-like instruments, besides choosing the above two motives (which were the most significant two for earnouts), actually put most emphasis on “entering into the company and securing the right to buy additional shares”. Although this motive also boils down to the mitigation of information asymmetry (like the bridging-of-the-valuation-gap one), the observed divergence in the most commonly given reasons for the implementation of earnouts and option-like mechanisms suggest that they are not perceived as substitutes at least by some companies, as it is found in previous research⁷⁵. This is further confirmed by the fact that some companies acknowledge to apply both instruments simultaneously.

Consistently with research for the US market, the contingent payment methods used in Germany are characterized by heterogeneous contract terms with details specific for each acquisition. A ubiquitous trait of most deals is that the conditions for both mechanisms are set

⁷⁵See Reuer et al. (2009), p. 873

realistic and achievable, emphasized by the fact that most earnouts are actually paid and most option-like instruments exercised. A further aspect contributing to the existence of some “average” for the contingent payment methods is that the purposeful opportunistic manipulation of performance is a commonly recognized issue for most deals and therefore the deal design is typically structured to mitigate the incentives for it.

The most commonly negotiated earnout is used to buy more than 50% of a private target and is with duration of 1 to 3 years. The earnout calculation is most often based on a formula proportional to a performance measure but capped by a maximum. The most applied performance measures are EBIT and EBITDA, but revenue and cash flow are also quite common. The data for the particular measure is usually cumulated over more than one period.

The option-like instrument is usually negotiated in staged acquisitions of private companies with initial purchase of between 20 and 75% and a full acquisition as the final goal. The most common mechanism is a combination of a put written by the buyer and a call written by the seller on the shares that remained with the seller, but the same option-like contracts are also sometimes used separately. The options are usually exercisable with 1 to 5 years for a price determined by a predefined formula based on EBIT and EBITDA as performance measures.

The potential slight differences in the motivation for the use of earnouts and option-like structures as well as the fact that some companies apply both simultaneously highlights an interesting area for further research, which might try to identify distinguishing predictors for the use of each contingent payment structure as well as look closer at the motives for the simultaneous use of the two mechanisms.

Appendix:

Information was gathered in two ways: interviews with members of the M&A teams of two corporations which are particularly active on the acquisition market and often use contingent payment structures and an online survey. Summary of the interviews is provided in Appendix A. The list of companies asked to participate in the survey and a breakdown of the received feedback are given in Appendix B. A transcript of all possible survey questions used to gather data as well as tabled summarizing the provided answers are shown in Appendix C. The number of items presented to each respondent adjusted itself automatically depending on preceding answers.

In order to maximize the probability of participation and truthful information disclosure, the participants, who actually completed the survey, remain anonymous.

Appendix A. Summary Company Interviews**A1. Interview with an MDAX company**General information:

The company is listed in MDAX and works in the area of media and publishing. The following information refers to their experience as acquirers. The company acquires on average more than 10 companies per year, most of which are private firms with high-growth opportunities and start-ups with innovative ideas and/ or technology, for which the owner typically serves as manager. The future performance success of the targets usually depends crucially on the retention of the owner as manager at least in the beginning. In some cases (e.g. when the target's business plan is closely related to the personality of its creator), a long-term bonding of the manager-owner is desired.

Contingent payment methods are used in almost all transactions. Thereby, the most commonly used instruments are option-like contracts as part of staged acquisitions. Earnouts are also negotiated but comparatively much less frequently. The choice of the particular deal structure to be applied depends mostly on the relative bargaining power of buyer and seller, on the existence of competitive bidders, and on whether it is desired to keep the owner as manager in the short run (3 to 5 years) or to retain him as a long-term partner. Another common characteristic of the use of contingent payment methods is that it often includes renegotiation of the deal terms.

Earnouts

Motives: A major motive for the use of earnouts is to achieve agreement on a price and be able to close the deal in case of differences in valuation between the seller and them. Their experience shows that a seller would not agree to an earnout if the management would be carried out by the buyer, due to fear of performance manipulation. Hence, earnouts are only negotiated in case the former owner should be retained as manager and motivated to work in the interest of the new owners for a transitional period of several years. This setting, however, is associated with a high perceived risk of opportunistic behavior by the seller. More specifically, the tying of the payment to a multiple of some performance measure, which is usually the case⁷⁶, creates a leverage effect, which increases the management focus on that measure and strengthens the incentive to manipulate it. Thereby, the buyer bears the full ownership risk, which depends on long-term overall performance. Therefore, earnouts are generally not the preferred deal structure and are mostly implemented when the seller persists on that and the deal could otherwise fall through.

The change in IFRS about the financial accounting of earnouts did not influence the transaction structure decision, because adjustments could be made to eliminate the negative influence on the figures (e.g. by showing EBITDA before special items).

Acquired share: The earnouts are typically used when more than 75% of the target should be acquired.

Structure: Earnouts are usually negotiated for a period between 3 and 5 years and are defined as a formula proportional to some performance measure, but capped by a maximum amount. This measure is most often EBITDA and more rarely revenue. The definition of non-financial company-related measures (like number of subscribers or number of orders) is also implemented. It is further possible to combine the non-financial measures with EBITDA. The chosen figures are then averaged over two years.

Manipulation susceptibility: Although, earnouts are perceived as bearing a high potential for opportunistic performance manipulation, the company representatives indicated that significant purposeful manipulation was actually found in only 11% to 20 % of the cases.

⁷⁶ To be discussed in more detail in the next subsection.

Option-like structures in staged acquisitions:

Motives: Option-like contracts in staged acquisitions, i.e. a partial acquisition with the contractually predefined right to purchase the rest of the shares, is the more often used type of contingent payment structures. It is perceived to be backed generally by the same motives like earnouts (bridging the valuation gap and retention and motivation of the owner-manager) and is aimed at the same type of targets, namely private, high-growth companies strongly relying on the management know-how. The incentivizing of the owner-manager is achieved not only through the participation in performance attributable to his remaining shares, but also to the leverage effect of tying the payoff for the remaining shares to a multiple of performance. This benefit could, however, turn sometimes to a disadvantage because it strengthens the manager's incentive for opportunistic behavior and short-term focus.

Option-like contracts could be also used to bond the previous owner as a long-term partner, while still securing the right to buy the majority via a call option, in case the co-operation turns out as poorly functioning.

Acquired share: The usual setting involves the initial purchase of slightly above 50% of the shares, which allows the full consolidation as subsidiary without the cash outlay of a 100% acquisition. The negotiated options are then normally for all the remaining shares. Another possible constellation, which would be applied in case the bidder is not sure in the target's future profitability, is the initial purchase of below 20% (so that potential losses of the target need not show on the bidder's financial statement) with options for subsequent majority acquisition. The final goal could be either a long-term joint venture or a full acquisition.

Structure: The most often negotiated deal structure involves a call written by the seller and a put written by the buyer on the remaining shares, which would let the buyer to purchase the rest and secure the seller an exit option for the minority shares (because by writing the call option, the seller is obliged not to sell to others than the call option holder). These two option-like structures could be also negotiated separately, but this is done much less frequently.

The average duration of the contracts is 3 to 5 years with several exercise periods during each of which either all or some limited amount of the remaining shares could be transacted. The "strike price" is defined as a formula proportional to EBITDA, with multiples varying with the different performance level (e.g. when measure $A > X$, $\text{Price} = A * \text{Factor B}$, when measure $A > Y$, $\text{Price} = A * \text{Factor C}$). This should reward the manager for performance superior to the expected. Other conceivable definitions include a fixed amount or a fixed formula (e.g. $\text{Price} =$

Measure $A \cdot \text{Factor } B$). Furthermore, it is also possible to base the calculation on other performance measures in analogy to the earnout.

To avoid tax treatment as immediate sale, the exercise prices for the two option contracts are defined slightly differently. The put strike is usually set marginally below, whereas the call strike is marginally above the expectations, so that the party who actually exercises is slightly punished.

The put contract is typically more often exercised than the call. The buyers do not hurry up to complete the acquisition, because this eliminates the incentives for the owner retained as manager. The call is normally exercised only in case of disagreements between the buyer and the seller.

Combining Put/Calls with Earnouts: The two types of mechanisms are not used together, because their simultaneous implementation would result in too much uncertainty.

Manipulation susceptibility: The option-like contracts are also perceived as prone to manipulation by the management in the same magnitude as earnouts.

A2. Interview with DAX company

General information:

The company is listed in DAX and works in the field of electronics. It conducts on average more than 10 M&A transactions per year. Most acquisitions involve private companies. Generally, in Germany there are less publicly traded companies. Moreover, transactions with public companies are perceived as involving too complex regulations, attracting too much publicity, and demanding too high premiums for the target shareholders.

Contingent payment methods are used in about 11 to 20% of the transactions. When contingent instruments are negotiated, the most commonly used mechanisms are option-like structures and earnouts. Traded instruments (like contingent value rights) appear very rarely because apart from the drawbacks mentioned in relation to purchase of public companies, they are also deemed too complex. In addition, the potential for involving more stakeholders by possible sale of the instruments to third parties is seen as increasing too much the risk of legal disputes.

Earnouts:

Motives: The most important motive for the use of earnouts is the existence of a great discrepancy between the valuation of the acquirer and the seller. This structure is used as last resort to persuade the owner to sell and is otherwise avoided due to the high risk of legal disputes (about 80% of the negotiated earnout deals end in court). The typical sources of discord rest in disagreement about definitions of the basis for the earnouts. Therefore extra precaution is taken with respect to the definition of the financial figures underlying the earnout agreement. An independent reviewer is preferably involved in the determination of the payments.

A complimentary motive for the use of earnouts is the retention and motivation of the management, in case the owner is also the current manager at the time of the sale. This, however, is not a primary goal, as there are deals with earnouts, in which the owner did not remain as manager.

Earnouts are usually used to buy private companies with high growth potential, i.e. companies for which a typically high level of information asymmetry is likely to result in different views about the future business performance for acquirer and seller.

Acquired share: Earnouts are used only in acquisitions of majority ownership shares in order to ensure control over the target and the variables relevant for the determination of the earnout. This is perceived as minimizing the risk of manipulation by the former owner. Especially in case the seller does not remain in the company as manager, the acquired share is less than 100% to allow the seller some involvement in the target's operations as a minority shareholder and on its turn protect him from opportunistic behavior by the acquirer.

Structure: The earnout formula is typically a proportional function of only one variable capped by a maximum amount. The combination of several performance-related variables is usually avoided to avoid excessive complexity. The choice of the variable depends on the industry the target operates in – it is usually EBIT or EBITDA, but for capital-intense industries a cash-flow based figure is preferred. Revenue and operational figures like number of subscribers or licenses are perceived as triggering the wrong incentives (for example, to inflate sales without watching the costs and consequently delivering less profit). The earnout calculation is based on the information from one year. The typical duration is between 1 and 3 years.

Manipulation susceptibility: Earnouts are associated with a higher level of manipulation than option-like structures.

Option-like structures in staged acquisitions:

Motives: Option-like structures in staged acquisitions are used when one party has a clear exit strategy, while the other party plans a 100% ownership in the future. The starting point can be either a joint venture with more or less equal partners (either 50:50 or 60:40), or an initial acquisition of 50 to 75%. The minority owner usually gets a put option to provide him with an exit opportunity, while the majority owner gets a call option to secure him a full acquisition in the future.

Acquired share: Option-like structures are applied in case of private companies with large growth potential where a staged acquisition with eventual 100% ownership is desired.

Structure: The typical scenario involves simultaneous granting of a put option written by the acquirer and call option written by the seller. Negotiating only a call or only a put option is also conceivable. The exact structure of the deal is always dependent on the strategic considerations and the bargaining power of the parties involved, which gives rise to heterogeneous contracts. The option value is defined either as multiple of EBIT/EBITDA from the year the option expires limited by a cap or as a “fair market value” in case the parties cannot agree on a multiple. In the latter case the valuation is conducted by an independent expert and is based on a discounted cash flow analysis over several periods. The options are exercisable for some periods starting, for example, 2 to 3 years after the initial acquisition. It is a matter of negotiation whether the call or the put first becomes exercisable; usually it is the put option. The “strike” price for the call and the put are set equal or slightly different (the one for the call being slightly higher).

Combining Put/Call with Earnout: It is conceivable, though rare, that a put/ call structured is complemented by an earnout agreement. This happens when in the long term the buyer has a 100% acquisition strategy and the seller plans complete exit, but the two cannot agree on a price. Then the earnout is included to “save” the deal. The valuation for both the options and the earnout are based on multiples of EBIT/EBITDA with the earnout expiring typically before the options can be exercised.

Manipulation susceptibility: Put/ call agreements are found to be sometimes causing performance manipulation. This, however, happens comparatively less often than with earnout contracts, especially when the option value is defined as a “fair market value”. In this

case the valuation is performed by a third party and is believed to reflect more thoroughly and truthfully the company situation.

Appendix B. Surveyed Companies

Table B1. Companies asked to participate in the survey					
DAX	Adidas AG	MDAX	Axel Springer AG	MDAX	Leoni AG
	Allianz SE		Aareal Bank AG		MTU Aero Engines AG
	BASF SE		Aurubius AG		Praktiker Holding AG
	Bay. Motoren Werke AG		Baywa AG		ProsiebenSAT.1 AG
	Bayer AG		Bilfinger Berger AG		Puma AG
	Beiersdorf AG		Brenntag AG		Rational AG
	Commerzbank AG		Celesio AG		Rheinmetall AG
	Daimler AG		Continental AG		Rhön-Klinikum AG
	Deutsche Bank AG		Demag Cranes AG		Salzgitter AG
	Deutsche Börse AG		Deutsche Euroshop AG		SGL Carbon SE
	Deutsche Post AG		Douglas Holding		SKY Deutschland AG
	Deutsche Telekom AG		Elrinklinger AG		STADA Arzneimittel AG
	E.ON AG		EADS		Südzucker AG
	Fresenius Med. Care KGAA		Fielmann AG		Symrise AG
	Fresenius SE		Fraport AG		Tognum AG
	Heidelbergcement AG		Fuchs Petrolub AG		TUI AG
	Henkel AG		GAGFAH		Vossloh AG
	Infineon AG		GEA Group AG		Wacker Chemie AG
	K+S AG		Gerresheimer AG		Wincor Nixdorf GmbH
	Linde AG		Gildemeister AG		
	Lufthansa AG		Hamburger Hafen u. Log. AG		
	Man SE		Hannover Re AG		
	Merck KGAA		Heidelberger Druckm. AG		
	Metro AG		Hochtief AG		
	Münchener Re AG		Hugo Boss AG		
	RWE AG		IVG Immobilien AG		
	SAP AG		Kabel Deutschland AG		
	Siemens AG		Klöckner & Co SE		
	Thyssen Krupp AG		Krones AG		
	Volkswagen AG		Lanxess AG		

Table B1.Cont'd. Companies asked to participate in the survey					
TecDAX	Adva AG	SDAX	Air Berlin PLC	SDAX	INDUS Holding AG
	Aixtron AG		Alstria Office REIT AG		Jungheinrich AG
	BB Biotech AG		Amadeus Fire AG		König & Bauer AG
	Bechtel AG		Balda AG		Kuka AG
	Carl-Zeiss Mediatec AG		Bauer AG		KWS Saat AG
	Centrotherm		Bertrandt AG		Medion AG
	Photovoltaics AG				
	Conergy AG		Biotest AG		MLP AG
	Dialog Semicond.PLC		C.A.T. Oil AG		MVV Energie AG
	Drägerwerk AG&Co. KGaA		CENTROTEC AG		Patrizia Immobilien AG
	Drillisch AG				
	Evotec AG		CEWE Color Holding		Pfleiderer AG
	Freenet AG		Colonia Real Estate AG		Sixt AG
	Jenoptik AG		COMDIRECT Bank AG		SKW Stahl-Metall. AG
	Kontron AG		Constantin Medien AG		Ströer AG
	Manz Automation AG		CTS Eventim AG		TAG Immobilien AG
	Morphosys AG		Delticom AG		Takkt AG
	Nordex SE		Deutsche Wohnen AG		Teleplan International
	Pfeiffer Vacuum AG		Deutz AG		Tipp24 SE
	Phoenix Solar AG		DIC Asset AG		Tom Tailor Holding AG
	Q-Cells SE		Deutsche Beteiligung AG		VTG AG
	Qiagen NV		Dürr AG		Wacker Neuson SE
	QSC AG		Elexis AG		
	Roth & Rau AG		Gerry Weber Intern. AG		
	Singulus Techn. AG		Gesco AG		
	SMA Solar Techn. AG		GFK SE		
	Smartrac N.V.		Grammer AG		
	Software AG		Grenkeleasing AG		
	Solarworld AG		H+R WASAG AG		
	United Internet AG		Highlight Comm. AG		
	Wirecard AG		HOMAG Group AG		
			Hornbach Holding AG		

Table B2. Survey participation rate		
Response group	Number of companies	% of total
Fully completed survey	34	21%
Partially completed survey	7	4%
Survey responses	41	26%
Refused to participate due to:		
Policy of not responding to surveys	17	11%
Lack of time	11	7%
Unwillingness to disclose sensitive information	5	3%
No M&A activity	16	10%
Not enough information to answer properly	1	1%
	50	31%
Companies with some feedback to the survey	91	57%
Number of companies asked to participate	160	100%

Appendix C. Survey questions and answers

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Umfrage

Einsatz bedingter Zahlungsstrukturen bei Unternehmensakquisitionen deutscher Unternehmen

Ziel dieser Umfrage ist es, den Einsatz von Earnouts und Put/Call Strategien im Zusammenhang mit M&A deutscher Unternehmen zu untersuchen.

Die Umfrageergebnisse schicken wir Ihnen gerne kostenlos zu.

Diese Umfrage wird im Rahmen des Master-Thesis-Projekts “*Contingent Payment Structures as Risk Mitigation Tools – the Use of Earnouts and Put/Call Options in the German M&A Market*” durchgeführt. Sie dient rein wissenschaftlichen Zwecken. Alle von Ihnen gemachten Angaben werden vertraulich behandelt und in anonymisierter Form bearbeitet.

Falls Sie Fragen haben, richten Sie sich an Nadezhda Lehova, Studentin des Masterstudiengangs BWL (eMail Adresse: lehovana@cms.hu-berlin.de)

Vielen Dank für Ihre Bereitschaft, die Projektarbeit mit Ihrer Expertise zu unterstützen!

Hinweis zum Ausfüllen des Fragebogens

Bitte beantworten Sie nach Möglichkeit jede Frage. Fragen, die ggf. Ihr Unternehmen nicht betreffen, werden im Laufe des Ausfüllens automatisch ausgeblendet. Normalerweise ist für jede Frage nur eine Antwort zulässig. Wenn mehrere Antwortmöglichkeiten angekreuzt werden können, finden Sie hinter dem Fragetext einen Hinweis darauf.

Fragen zu Ihrem Unternehmen und dessen M&A-Transaktionen:**1. Ist Ihr Unternehmen einem der folgenden Indizes zugeordnet?**

- ☐ DAX
☐ MDAX
☐ SDAX
☐ TecDAX
☐ Wird in keinem Index erfasst

Table C1. Survey participation rate conditional on company size		
Response group	Number of companies	% of the asked to participate
DAX	8	27%
MDAX	15	30%
TecDAX	9	30%
SDAX	7	14%
Total responses	39	
No input*	2	

*Gives the number of participants of the 41 shown the question that did not respond

2. In welcher Branche ist Ihr Unternehmen hauptsächlich tätig? [Drop-down List]

- Auto- und Maschinenbau
- Bau/ Immobilien
- Chemie/ Pharma
- Computer/ Telekommunikation
- Electronik/ Elektrotechnik
- Energie-/Entsorgungswirtschaft
- Finanzdienstleistungen
- Handel
- Medien
- Stahl/Metallverarb./Umwelttechnik
- Transport/ Verkehr
- Sonstige:

Table C2. Main industry of operations		
Industry branch	Number of companies	as % of all participants
Automobile and mechanical engineering	6	15%
Real estate	3	8%
Chemical and Pharmaceutical	3	8%
Computer and Telecommunications	6	15%
Electronics	2	5%
Energy	1	3%
Financial services	0	0%
Trade	3	8%
Media	2	5%
Steel and metal-processing	3	8%
Transportation	3	8%
Other (Food, Healthcare, Portfolio, Biotechnology)	7	18%
Total responses	39	
No input*	2	

*Gives the number of participants of the 41 shown the question that did not respond

3. Wie viele M&A-Transaktionen werden von Ihnen im Durchschnitt pro Jahr abgewickelt?

- ☐ 0
☐ < 5
☐ => 5 und <= 10
☐ > 10

Table C3. Survey participation rate conditional on M&A experience		
Average number of acquisitions per year	Number of companies	as % of all participants
0	2	5%
< 5	22	58%
between 5 and 10	7	18%
> 10	7	18%
Total responses	38	
No Input*	3	

*Gives the number of participants of the 41 shown the question that did not respond

4. Wie häufig werden dabei bedingte Zahlungsstrukturen genutzt?

Als **bedingte Zahlungsstrukturen** werden im Rahmen dieser Umfrage Finanzinstrumente oder Kontrakte bezeichnet, die bedingte Zahlungsversprechen enthalten. Der Kaufpreis wird zumindest teilweise aufgrund des zukünftigen, effektiven wirtschaftlichen Erfolgs der übernommenen Unternehmung ermittelt.

- ☐ nie
 ☐ <10%
 ☐ 11-20%
 ☐ 21-40%
 ☐ 41-60%
 ☐ 60%-99%
 ☐ 100%

Table C4. Frequency of use of contingent payment structures		
Frequency of use	Number of companies	as % of all participants
"never"	9	22%
< 10%	2	5%
11 - 20%	6	15%
21 - 40%	3	7%
41 - 60%	10	24%
61 - 99%	8	20%
100%	3	7%
Total responses	41	

5. Welche bedingten Zahlungsstrukturen verwendet Ihr Unternehmen in M&A Transaktionen?

Bitte geben Sie den Anteil der jeweiligen Struktur im Verhältnis zu allen von Ihrem Unternehmen verwendeten bedingten Zahlungsstrukturen an.

	nie	<10%	11-20%	21-40%	41-60%	>60%
Earnout-Vereinbarungen*						
Mehrstufige Akquisition mit nicht-handelbaren Options-Vereinbarungen**						
Bedingte Zahlungen gestaltet als handelbare Derivate (Contingent Value Rights, u.ä.)						
Garantien***						

***Earnout-Vereinbarungen:** enthalten eine fixe Basiszahlung und eine variable, nicht-transferierbare Kaufpreiskomponente, die von der künftigen Geschäftsentwicklung des Unternehmens abhängig ist.

****Mehrstufige Akquisitionen mit nicht-handelbaren Options-Vereinbarungen:** es wird zeitgleich ein Anteil am Zielunternehmen erworben und nicht handelbare options-ähnliche Vereinbarungen auf weitere Teile vom Unternehmen oder ggf. auf den gesamten restlichen Unternehmensanteil vereinbart.

*****Garantien:** der Verkäufer verpflichtet sich beim Nichterreichen eines vorbestimmten Ereignisses (z.B. der Eintritt eines bestimmten Erfolges oder das Vorhandensein eines bestimmten Eigenkapital zu einem bestimmten Zeitpunkt) einen Teil des bereits empfangenen Kaufpreises wieder zurückzuzahlen.

Table C5. Breakdown of use of contingent payment structures								
	Earnouts *		Option-like structures **		Traded instruments		Warranties ***	
Frequency of use	Respon-dents	in %	Respo-dents	in %	Respo-dents	in %	Respo-dents	in %
"never"	2	6%	11	35%	25	81%	14	45%
< 10%	4	13%	3	10%	6	19%	9	29%
11 - 20%	4	13%	2	6%	0	0%	0	0%
21 - 40%	5	16%	11	35%	0	0%	2	6%
41 - 60%	9	29%	2	6%	0	0%	3	10%
> 60%	7	23%	2	6%	0	0%	3	10%
Total responses	31		31		31		31	
No input [†]	1		1		1		1	

[†] Gives the number of participants of the 32 shown the question that did not respond

Fragen an Nicht-Nutzer**6. Wieso nutzen Sie keine Earnout-Vereinbarungen?***Hier können Sie mehrere Antworten ankreuzen.***[Show only if Earnouts are never used]**

- ☐ Es gibt keine Divergenz zwischen Kaufpreisvorstellungen von Käufer und Verkäufer
- ☐ Der Verkäufer will nicht länger am Erfolgsrisiko des verkauften Unternehmens beteiligt sein
- ☐ Andere Vertragsstrukturen werden bevorzugt
- ☐ Zu hoher Anreiz für Erfolgsmanipulation zwecks Earnout-Optimierung
- ☐ Verhindert die schnelle Eingliederung des Zielunternehmens in die Käufer-Organisation
- ☐ Die vertragliche Ausgestaltung und deren praktische Umsetzung sind zu komplex
- ☐ Zu hohes Risiko von Rechtsstreitigkeiten
- ☐ Sonstiges, bitte nennen:

Table C6. Reasons not to use earnouts		
Reasons	Number of responses	as % of responses
Bidder and target agree generally on price valuation	1	33%
The seller does not want to bear anymore the target's performance risk	1	33%
Other contract structures are preferred	1	33%
The exposure to performance manipulation is too high	0	0%
Would postpone the target's integration in the acquirer	0	0%
Design and practical application are too complex	0	0%
Risks of legal disputes is too high	0	0%
Other	0	0%
Total responses (given by 2 respondents)*	3	

*Each respondent could give multiple answers to this question

7. Wieso nutzen Sie bei mehrstufigen Akquisitionen keine Options-Vereinbarungen?*Hier können Sie mehrere Antworten ankreuzen.***[Show only if option-like structures are never used]**

- ☐ Es gibt keine Divergenz zwischen Kaufpreisvorstellungen von Käufer und Verkäufer
- ☐ Der Verkäufer will nicht länger am Erfolgsrisiko des verkauften Unternehmens beteiligt sein
- ☐ Andere Vertragsstrukturen werden bevorzugt.
- ☐ Zu hoher Anreiz für Erfolgsmanipulation zwecks Preis -Optimierung
- ☐ Verhindert die schnelle Eingliederung des Zielunternehmens in die Käufer-Organisation
- ☐ Die vertragliche Ausgestaltung und deren praktische Umsetzung sind zu komplex
- ☐ Zu hohes Risiko von Rechtsstreitigkeiten
- ☐ Sonstiges, bitte nennen:

Table C7. Reasons not to use option-like contingent structures		
Reasons	Number of responses	as % of responses
Bidder and target agree generally on price valuation	0	0%
The seller does not want to bear anymore the target's performance risk	0	0%
Other contract structures are preferred	9	50%
The exposure to performance manipulation is too high	0	0%
Would postpone the target's integration in the acquirer	2	11%
Design and practical application are too complex	4	22%
Risks of legal disputes is too high	3	17%
Other	0	0%
Total responses (given by 11 respondents)*	18	

*Each respondent could give multiple answers to this question

8. Welche der folgenden Merkmale charakterisieren am besten die Zielunternehmen, die Sie aufkaufen, bzw. übernehmen?

Hier können Sie mehrere Antworten ankreuzen.

[Show only if both studied contingent payment methods are never used]

- ☐ private Unternehmen
- ☐ börsennotierte Gesellschaften
- ☐ Unternehmensbetriebsteile
- ☐ mit Unternehmenswert bestehend vorwiegend aus immateriellen Vermögensgegenständen
- ☐ mit sehr hoher Wachstumsrate
- ☐ mit stark von den Kompetenzen des Managements abhängigem Unternehmenswert
- ☐ relativ groß im Vergleich zum Käufer
- ☐ in einer anderen Branche als der Käufer tätig
- ☐ Sonstiges, bitte nennen _____

Table C8. Characteristics of companies bought without contingent structures		
Company characteristics	Number of responses	as % of responses
Private company	5	26%
Public company	2	11%
Subsidiary of a public company	2	11%
With value comprised mostly of intangible assets	2	11%
With a high growth rate	1	5%
With value depending strongly on management know-how	3	16%
The target is relatively large compared to the acquirer	0	0%
The target is operating in an industry other than the acquirer's	0	0%
Other**	4	21%
Total responses (given by 10 respondents)*	19	

*Each respondent could give multiple answers to this question

** Companies that best match the acquirer's competencies / Companies whose market share and products are complementary to those of the acquirer / Targets from the public sector / A complete acquisition is aimed at from the first day

Earnout-Vereinbarungen bei M&A-Transaktionen**[For all questions in this section:****Shown only to the 29 respondents who indicated the use of earnouts]****9. Bitte identifizieren Sie die zwei wichtigsten Gründe für den Abschluss von Earnout-Vereinbarungen.**

- ☐ Aufgrund unterschiedlicher Kaufpreis- und Bewertungsvorstellungen von Käufer und Verkäufer
- ☐ Zwecks Motivation und Bindung des ehemaligen Eigentümers als Manager
- ☐ Wegen des Kaufpreisstundungseffekts als Finanzierungsmöglichkeit
- ☐ Wegen der Auswirkungen auf die externe Rechnungslegung
- ☐ Aufgrund steuerlicher Überlegungen
- ☐ Sonstige Gründe, bitte nennen: _____

Table C9. Motives for the use of earnouts		
Motives	Number of responses	as % of responses
Bridge the valuation gap between buyer and seller	20	43%
Retain and motivate as manager the former owner	23	49%
Use the delay in payment as a deal financing tool	4	9%
Optimize the effects on the financial reporting	0	0%
Minimize the tax liability	0	0%
Other	0	0%
Total responses (given by 25 respondents)*	47	

* No input from 4 out of 29 shown the question; each respondent was asked to identify the two most significant motives. 3 gave, however, only one answer.

10. Welche der folgenden Merkmale charakterisieren am besten die Zielunternehmen, für deren Akquisition Sie Earnout-Vereinbarungen einsetzen?*Hier können Sie mehrere Antworten ankreuzen.*

- ☐ private Unternehmen
- ☐ börsennotierte Gesellschaften
- ☐ Unternehmensbetriebsteile
- ☐ mit Unternehmenswert bestehend vorwiegend aus immateriellen Vermögensgegenständen
- ☐ mit sehr hoher Wachstumsrate
- ☐ mit stark von den Kompetenzen des Managements abhängigem Unternehmenswert
- ☐ relativ groß im Vergleich zum Käufer
- ☐ in einer anderen Branche als der Käufer tätig
- ☐ Sonstiges, bitte nennen: _____

Table C10. Characteristics of the companies bought with the use of earnouts		
Company characteristics	Number of responses	as % of responses
Private company	21	37%
Public company	0	0%
Subsidiary of a public company	2	4%
With value comprised mostly of intangible assets	5	9%
With a high growth rate	14	25%
With value depending strongly on management know-how	12	21%
The target is relatively large compared to the acquirer	0	0%
The target is operating in an industry other than the acquirer's	1	2%
Other**	2	4%
Total responses (given by 23 respondents)*	57	

* No input from 6 out of 29 shown the question; each respondent was asked to identify the two most significant motives.

** Start-up companies / In case of significant divergence of the business plan expectations of bidder and target

11. Wenn Akquisitionen mit Earnout-Vereinbarungen zustande kommen, wie hoch ist i.d.R. der erworbene Anteil am Zielunternehmen?

Bitte machen Sie pro Spalte jeweils ein Kreuz.

	Das Zielunternehmen ist privat	Das Zielunternehmen ist eine börsennotierte Gesellschaft
Wird nie mit Earnout gekauft		
< 4,9%		
5% - 19,9%		
20% - 50%		
50,1% - 75%		
75,1% - 99%		
100%		

Table C11. Share of the target bought with the use of earnouts				
	Target is a private company		Target is a public company	
Acquired share	Number of responses	as % of responses	Number of responses	as % of responses
< 5%	0	0%	0	0%
5% - 19,9%	3	12%	1	6%
20% - 50%	3	12%	0	0%
50,1% - 75%	7	28%	0	0%
75,1% - 99%	6	24%	0	0%
100%	6	24%	1	6%
Never buy with earnouts	0	0%	14	88%
Total responses	25		16	
No input	4		9	

12. Wie lang ist i.d.R. die gesamte Earnout-Laufzeit?

- ☐ < 1 Jahr
☐ > 1 Jahr und < 3 Jahre
☐ > 3 Jahre und < 5 Jahre
☐ > 5 Jahre

Table C12. Average duration of the earnout		
Duration	Number of responses	as % of responses
< 1 year	0	0%
1 to 3 years	18	72%
3 to 5 years	6	24%
> 5 years	1	4%
Total responses	25	
No input	4	

13. Anhand welcher Kenngrößen wird i.d.R. die Earnout-Bemessungsgrundlage definiert?

Hier können Sie mehrere Antworten ankreuzen und ggf. erläutern.

- | | |
|--|----------------------|
| <input type="checkbox"/> EBIT | <input type="text"/> |
| <input type="checkbox"/> EBITDA | <input type="text"/> |
| <input type="checkbox"/> Cashflow-Größen | <input type="text"/> |
| <input type="checkbox"/> Umsatz | <input type="text"/> |
| <input type="checkbox"/> Jahresüberschuss | <input type="text"/> |
| <input type="checkbox"/> Sonstige finanzielle Kenngrößen | <input type="text"/> |
| <input type="checkbox"/> Sonstige nicht finanzielle Kenngrößen | <input type="text"/> |
| <input type="checkbox"/> Kombination von Kenngrößen | <input type="text"/> |

Table C13. Performance measure for the earnout definition		
Performance measure	Number of responses	as % of responses
EBIT	14	26%
EBITDA	12	23%
Cashflow positions	9	17%
Revenue	9	17%
Net Income	1	2%
Other financial measures	2	4%
Other non-financial measures	3	6%
Combinations of performance measures	3	6%
Total responses (given by 25 respondents)*	53	

* No input from 6 out of 29 shown the question; each respondent was asked to identify the two most significant motives.

** Other measures the respondents described include: productivity per m² of the subsidiary/ combinations between EBITDA and non-financial performance measures

14. Auf wie viele vergangene Geschäftsjahre bezieht sich i.d.R. die Earnout-Bemessungsgrundlage?

- ☐ auf Daten eines Geschäftsjahres
☐ auf den Durchschnitt aus 2 Jahren
☐ auf den Durchschnitt aus 3 oder mehr Jahren
☐ Sonstiges, bitte nennen _____

Table C14. Information for the calculation of the performance measure		
Information for performance measurement	Number of responses	as % of responses
Based on data from one fiscal year	5	20%
Based on the average from two fiscal year	12	48%
Based on the average from three or more fiscal year	6	24%
Other*	2	8%
Total responses (given by 25 respondents)	25	
No input	4	

* Other possibilities mentioned include data from the budget plan

15. Wie wird die Earnout-Formel i.d.R. definiert?

- ☐ als fixe Stufe(n) (z.B. Summe X wenn Ziel Y erreicht wird)
☐ Earnout variiert mit der Zielerreichung (z.B. Kenngröße A mal Faktor B)
☐ Earnout variiert mit der Zielerreichung bis zu einer Obergrenze (z.B. $\min\{(\text{Kenngröße A mal Faktor B}); \text{Cap}\}$)
☐ Sonstiges, bitte nennen _____

Table C15. Formula for the earnout calculation typically used		
Earnout formula	Number of responses	as % of responses
Stepwise (e.g. fixed amount X when goal Y is achieved)	4	16%
Proportional to performance (e.g. measure A * factor B)	4	16%
Proportional to performance but capped by a maximum (e.g. $\min\{(\text{measure A * factor B}); \text{Cap}\}$)	17	68%
Other	0	0%
Total responses (given by 25 respondents)	25	
No input	4	

16. In wie vielen Fällen kam es zur Zielerreichung und Earnout-Zahlung?

- ☐ nie ☐ manchmal ☐ häufig ☐ keine Antwort

Table C16. Frequency of meeting the performance goals		
Frequency	Number of responses	as % of responses
Never	0	0%
Sometimes	11	44%
Often	12	48%
No answer*	2	8%
Total responses (given by 25 respondents)	25	
No input	4	

*Each respondent could actively choose the no answer option

17. In wie vielen Fällen kam es vor, dass das Management die Kenngrößen zur Earnout-Maximierung gezielt und SIGNIFIKANT beeinflusst hat?

☐ nie ☐ <10% ☐ 11-20% ☐ 21-40% ☐ 41-60% ☐ >60% ☐ keine Antwort

Table C17. Frequency of significant purposeful performance manipulation by management		
Frequency	Number of responses	<i>as % of responses</i>
never	0	0%
< 10%	4	16%
11 - 20%	3	12%
21 - 40%	3	12%
41 - 60%	2	8%
> 60%	4	16%
No answer*	9	36%
Total responses	25	
No input	4	

*Each respondent could actively choose the no answer option

Mehrstufige Akquisition mit Options-Vereinbarungen

**[For all questions in this section, unless explicitly stated otherwise:
Shown only to the 19 respondents who indicated the use of option-like structures]**

18. Bitte identifizieren Sie die zwei wichtigsten Gründe für den Abschluss von Options-Vereinbarungen.

- ☐ Um sich einen Einstieg ins Unternehmen zu verschaffen und das Vorkaufsrecht zu sichern
- ☐ Aufgrund unterschiedlicher Kaufpreis- und Bewertungsvorstellungen von Käufer und Verkäufer
- ☐ Zwecks Motivation und Bindung des ehemaligen Eigentümers als Manager
- ☐ Wegen der Auswirkungen auf die externe Rechnungslegung
- ☐ Aufgrund steuerlicher Überlegungen
- ☐ Sonstige Gründe, bitte nennen _____

Table C18. Motives for the use of option-like instruments in staged acquisitions		
Motives	Number of responses	as % of responses
Get a stake in the target/secure the option for buying further shares	9	32%
Bridge the valuation gap between buyer and seller	4	14%
Retain and motivate as manager the former owner	11	39%
Optimize the effects on the financial reporting	1	4%
Minimize the tax liability	1	4%
Other**	2	7%
Total responses (given by 15 respondents)*	28	

* No input from 4 out of 19 shown the question; each respondent was asked to identify the two most significant motives. 2 gave, however, only one answer.

** Put options secure the option to exit for a minority shareholder, call options allow majority shareholders to complete the acquisition / Provide an option to get acquainted with new markets/ industries

19. Welche der folgenden Merkmale charakterisieren am besten die Zielunternehmen, für deren Akquisition Sie Options-Vereinbarungen einsetzen?

Hier können Sie mehrere Antworten ankreuzen.

- ☐ private Unternehmen
- ☐ börsennotierte Gesellschaften
- ☐ Unternehmensbetriebsteile
- ☐ mit Unternehmenswert bestehend vorwiegend aus immateriellen Vermögensgegenständen
- ☐ mit sehr hoher Wachstumsrate
- ☐ mit stark von den Kompetenzen des Managements abhängigem Unternehmenswert
- ☐ relativ groß im Vergleich zum Käufer
- ☐ in einer anderen Branche als der Käufer tätig
- ☐ Sonstiges, bitte nennen _____

Table C19. Characteristics of the companies bought in staged acquisition with option-like instruments		
Company characteristics	Number of responses	as % of responses
Private company	15	44%
Public company	1	3%
Subsidiary of a public company	0	0%
With value comprised mostly of intangible assets	3	9%
With a high growth rate	7	21%
With value depending strongly on management know-how	5	15%
The target is relatively large compared to the acquirer	0	0%
The target is operating in an industry other than the acquirer's	2	6%
Other**	1	3%
Total responses (given by 15 respondents)*	34	

* No input from 4 out of 19 shown the question; each respondent was asked to identify the two most significant motives.

** When initially less than 75% of the target are acquired

20. Wie hoch ist i.d.R. der ursprünglich erworbene Anteil am Zielunternehmen?

Bitte machen Sie pro Spalte jeweils ein Kreuz.

	Das Zielunternehmen ist privat	Das Zielunternehmen ist eine börsennotierte Gesellschaft
Wird nie mit Options-Vereinbarung gekauft		
< 4,9%		
5% - 19,9%		
20% - 50%		
50,1% - 75%		
>75%		

Table C20. Initial target share bought in staged acquisition with option-like instruments				
	Target is a private company		Target is a public company	
Acquired share	Number of responses	as % of responses	Number of responses	as % of responses
< 5%	0	0%	0	0%
5% - 19,9%	0	0%	0	0%
20% - 50%	6	40%	0	0%
50,1% - 75%	6	40%	0	0%
> 75%	3	20%	0	0%
Never buy with this instrument	0	0%	12	100%
Total responses	15		12	
No input	4		7	

21. Wie hoch ist i.d.R. der endgültig angestrebte Anteil am Zielunternehmen?*Bitte machen Sie pro Spalte jeweils ein Kreuz.*

	Das Zielunternehmen ist privat	Das Zielunternehmen ist eine börsennotierte Gesellschaft
Wird nie mit Options-Vereinbarung gekauft		
< 4,9%		
5% - 19,9%		
20% - 50%		
50,1% - 75%		
75,1% - 99%		
100%		

Table C21. Share in the target aspired in the final stage of the acquisition with option-like instruments

	Target is a private company		Target is a public company	
Acquired share	Number of responses	as % of responses	Number of responses	as % of responses
< 5%	0	0%	0	0%
5% - 19,9%	0	0%	0	0%
20% - 50%	0	0%	0	0%
50,1% - 75%	0	0%	0	0%
75,1% - 99%	2	13%	0	0%
100%	13	87%	0	0%
Never buy with this instrument	0	0%	12	100%
Total responses	15		12	
No input	4		7	

22. Wie häufig verwenden Sie bei mehrstufigen Akquisitionen folgende Optionsarten in den Options- Vereinbarungen?

	nie	<10%	11-20%	21-40%	41-60%	>60%
Nur Call-Vereinbarung						
Nur Put-Vereinbarung (Käufer als Stillhalter)						
Nur Put-Vereinbarung (Verkäufer als Stillhalter)						
Call- und Put-Option zusammen in einer Vereinbarung						
Sonstige: _____						

Table C22. Breakdown of use of option-like instruments in staged acquisitions						
	Just call options written by seller		Just put options written by buyer		Just put options written by seller	
Frequency of use	Number of companies	<i>as % of responses</i>	Number of companies	<i>as % of responses</i>	Number of companies	<i>as % of responses</i>
"never"	2	17%	5	45%	5	45%
< 10%	5	42%	3	27%	5	45%
11 - 20%	3	25%	2	18%	1	9%
21 - 40%	2	17%	0	0%	0	0%
41 - 60%	0	0%	0	0%	0	0%
> 60%	0	0%	1	9%	0	0%
Total responses	12		11		11	
No input	7		8		8	

Table C22. Cont'd. Breakdown of use of option-like instruments in staged acquisitions				
	Put and call options together		Other structures	
Frequency of use	Number of companies	<i>as % of responses</i>	Number of companies	<i>as % of responses</i>
"never"	1	8%	4	80%
< 10%	0	0%	0	0%
11 - 20%	2	15%	0	0%
21 - 40%	3	23%	0	0%
41 - 60%	2	15%	1	20%
> 60%	5	38%	0	0%
Total responses	13		5	
No input	6		14	

23. Vorausgesetzt Call- und Put-Optionen treten in einer Vereinbarung auf: Wie werden deren Laufzeit und Ausübungspreis i.d.R. berechnet?

[Shown to the 12 respondents who indicated to use Put and Call Options together]

	gleich	unterschiedlich	keine Antwort
Laufzeit			
Ausübungspreis			

Table C23. Definition of duration and "strike price" of put and call options in case both are negotiated simultaneously				
	Duration		"Strike" price	
Comparison of the terms between Call and Put	Number of responses	<i>as % of responses</i>	Number of responses	<i>as % of responses</i>
Same	9	75%	7	58%
Different	2	17%	3	25%
No answer*	1	8%	2	17%
Total responses	12		12	
No input	0		0	

*Each respondent could actively choose the no answer option

24. Wie häufig setzen Sie neben Options-Vereinbarungen gleichzeitig auch Earnout-Vereinbarungen ein?

[Shown to the 19 respondents for option structures, because all use also earnouts]

☐ nie ☐ <10% ☐ 11-20% ☐ 21-40% ☐ 41-60% ☐ >60%

Table C24. Frequency of staged acquisition using both option-like instruments and earnouts		
Frequency of combined use	Number of responses	as % of responses
Never	8	57%
< 10%	2	14%
11 - 20%	0	0%
21 - 40%	2	14%
41 - 60%	1	7%
> 60%	1	7%
Total responses	14	
No input	5	

25. Setzen Sie bei mehrstufigen Akquisitionen folgende Kombinationen ein?

[Shown to the 6 respondents who indicated to use both tools simultaneously]

	nie	manchmal	häufig
Nur Call-Vereinbarung + Earnout			
Nur Put-Vereinbarung (Käufer als Stillhalter) + Earnout			
Nur Put-Vereinbarung (Verkäufer als Stillhalter) + Earnout			
Call- und Put-Optionen zusammen in einer Vereinbarung + Earnout			

Table C25. Breakdown of use of option-like instruments in staged acquisitions in case applied together with an earnout

Number of companies using the instruments	Just put options written by buyer + earnouts	Just put options written by seller + earnouts	Put and call options together + earnouts	Put and call options together + earnouts
never	4	5	2	1
sometimes	1	0	3	3
often	0	0	0	1
Total responses	5	5	5	5
No input	1	1	1	1

26. Wie lang ist i.d.R. die gesamte Laufzeit der Options-Vereinbarung?

- ☐ < 1 Jahr
☐ > 1 Jahr und < 3 Jahre
☐ > 3 Jahre und < 5 Jahre
☐ > 5 Jahre

Table C26. Average duration of the option-like instruments		
Duration	Number of responses	as % of responses
< 1 year	0	0%
1 to 3 years	7	47%
3 to 5 years	8	53%
> 5 years	0	0%
Total responses	15	
No input	4	

27. Wie definieren Sie i.d.R. den Ausübungspreis der Option?

- ☐ als fixen Betrag
☐ als flexiblen Mechanismus mit vorbestimmten Rechenregeln (z.B. Kenngröße A mal Faktor B)
☐ als flexiblen Mechanismus mit Rechenregeln, die abhängig vom Zielerreichensgrad variieren (z.B., wenn Kenngröße A>X, Preis=A*Faktor B, wenn Kenngröße A>Y, Preis=A*Faktor C)
☐ Sonstiges, bitte nennen _____

Table C27. Formula for the option exercise price calculation typically used		
Option exercise price formula	Number of responses	as % of responses
Fixed amount	4	27%
Flexible mechanism with a predefined formula (e.g. measure A times factor B)	7	47%
Flexible mechanism with a formula varying with performance (e.g. when measure A>X, Price=A*Faktor B, when measure A>Y, Price=A*Faktor C)	4	27%
Other	0	0%
Total responses	15	
No input	4	

28. Anhand welcher Kenngrößen definieren Sie die Options-Bemessungsgrundlage, wenn Sie flexible Mechanismen zur Bestimmung des Options-Ausübungspreises nutzen?

[Shown to the 11 respondents who indicated above other than “fixed amount”]

Hier können Sie mehrere Antworten ankreuzen und ggf. erläutern.

- | | |
|--|----------------------|
| <input type="checkbox"/> EBIT | <input type="text"/> |
| <input type="checkbox"/> EBITDA | <input type="text"/> |
| <input type="checkbox"/> Cashflow-Größen | <input type="text"/> |
| <input type="checkbox"/> Umsatz | <input type="text"/> |
| <input type="checkbox"/> Jahresüberschuss | <input type="text"/> |
| <input type="checkbox"/> Sonstige finanzielle Kenngrößen | <input type="text"/> |
| <input type="checkbox"/> Sonstige nicht finanzielle Kenngrößen | <input type="text"/> |
| <input type="checkbox"/> Kombination von Kenngrößen | <input type="text"/> |

Table C28. Performance measure for the option exercise price definition in case a flexible mechanism is used

Performance measure	Number of responses	as % of responses
EBIT	7	37%
EBITDA	8	42%
Cashflow positions	2	11%
Revenue	1	5%
Net Income	1	5%
Other financial measures	0	0%
Other non-financial measures	0	0%
Combinations of performance measures	0	0%
Total responses (given by 11 respondents)*	19	

*Each respondent could give multiple answers to this question

29. Wie viele Ausübungszeitpunkte werden i.d.R. bei den Options-Vereinbarungen vorgesehen?

- ☐ ein Ausübungszeitpunkt
☐ mehrere Ausübungszeitpunkte
☐ Sonstiges, bitte nennen _____

Table 28. Definition of the option exercise period

Number of exercise periods	Number of responses	as % of responses
Exercisable within one period	6	40%
Exercisable in several periods	7	47%
Other*	2	13%
Total responses	15	
No input	4	

* Other refers to the possibility to exercise in a time frame of several periods (e.g. 3 years)

30. Wie häufig kommt es zur Ausübung des von Ihnen vertraglich vereinbarten Optionsrechtes?

	Vereinbarung wird nicht genutzt	nie	manchmal	häufig
Nur Call-Vereinbarung				
Nur Put-Vereinbarung (Käufer als Stillhalter)				
Nur Put-Vereinbarung (Verkäufer als Stillhalter)				

Table C30. Frequency of option exercise						
	Call options written by seller		Put options written by buyer		Put options written by seller	
Frequency	Number of responses	<i>as % of responses</i>	Number of responses	<i>as % of responses</i>	Number of responses	<i>as % of responses</i>
never	1	8%	2	14%	1	8%
sometimes	7	54%	5	36%	7	54%
often	4	31%	3	21%	1	8%
This instrument is never used	1	8%	4	29%	4	31%
Total responses	13		14		13	
No input	6		5		6	

31. In wie vielen Fällen kam es vor, dass das Management die Kenngrößen zur Ausübungspreis-Maximierung gezielt und SIGNIFIKANT beeinflusst hat?

☐ nie ☐ <10% ☐ 11-20% ☐ 21-40% ☐ 41-60% ☐ >60% ☐ keine Antwort

Table C31. Frequency of significant purposeful performance manipulation by management		
Frequency	Number of responses	<i>as % of responses</i>
never	2	13%
< 10%	1	7%
11 - 20%	4	27%
21 - 40%	2	13%
41 - 60%	0	0%
> 60%	2	13%
No answer*	4	27%
Total responses	15	
No input	4	

*Each respondent could actively choose the no answer option

Sie sind am Ende des Fragebogens angekommen.

Herzlichen Dank für Ihre Mitwirkung!

Haben Sie vielleicht noch Vorschläge oder weitere Anmerkungen zum Thema Einsatz bedingter Zahlungsstrukturen bei deutschen Akquisitionen oder zu diesem Fragebogen?

Bitte teilen Sie mir diese an folgender Stelle mit:

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The following list contains only references explicitly cited in this text. The survey is based also on additional resources discussed in the first part of the thesis.

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