

Acquirers Gains from Earnouts in High vs. Low Periods of EMVCs*

Leonidas G. Barbopoulos[†]

Maria-Chiara Iannino[‡]

Abstract

We examine the wealth effects of earnouts (i.e., contingent payments) on a comprehensive sample of US deals, comparing booming versus depressed market periods. Previous literature has accommodated the impact of earnouts in foreign deals and yet, the impact of Equity Market valuation Condition (EMVCs) within the same context has been overlooked. Our results convey that the payment method chosen to finance foreign deals matters, and earnouts create value for the acquirer only in deals announced during periods of high-EMVCs. We argue that earnouts offer a great alternative in the financing process of foreign deals during high-EMVCs by reducing the extent of high valuation risk in foreign deals and also by diminishing the home-bias in foreign assets. Our results offer an important contribution to the workings and valuation effects of earnouts in foreign deals, the participation of which has been tripled since 1990s.

Keywords: Earnout financing; Information asymmetry; Equity Market Valuation Conditions; Propensity Score Matching.

JEL Classification Numbers: G34, G52.

This draft:
January 2016

*The authors are grateful to comments and suggestions received by Malcolm P. Baker, Thomas Gehrig, Sergey Zhuk and other participants of the University of Vienna, Department of Finance, seminar series. Any remaining errors remain our own.

[†]University of St Andrews, School of Economics & Finance, The Scores, Castlecliffe, St Andrews, KY16 9AL. Tet: +44 (0) 133 446 1955; Fax: +44 (0) 133 446 2444; E-mail: leonidas.barbopoulos@st-andrews.ac.uk. Corresponding author.

[‡]University of Vienna, Department of Finance, Oskar-Morgenstern-Platz, 1090 Vienna, Austria. Tet: +43-1-4277-38073; Fax: +43-1-4277-838073; E-mail: maria.chiara.iannino@univie.ac.at.

1. Introduction

The volume of Cross-Border Acquisitions (CBAs) involving US acquirers has grown rapidly over the last three decades reaching 26% of total merger volume in 2011 from nearly 2% in 1988.¹ CBAs occur for similar reasons as domestic deals (i.e., mainly to maximise value or utility from the perspective of the acquiring firm's managers), yet they present significant valuation challenges for the acquirers, relative to domestic deals. In particular, CBAs offer greater investment opportunities by offering access to new markets, lower production costs, and perhaps more favourable tax schemes. However, they also present greater challenges for acquirers, because the institutional and cultural values are unfamiliar to a foreign corporation, leading to higher merger valuation risk. To reduce such merger valuation risk, the participating firms often structure the payment method of the deal to accommodate the performance of the acquired assets in the post-merger period. Two alternative contingent payments are available that serve this purpose: (a) acquirers can pay with stock, hence sharing the valuation risk of the acquisition with the target as they will retain an equity position in the merged entity or, (b) they can use earnout payments, which are contingent on the performance of the assets being acquired (Kohers and Ang (2000), Barbopoulos and Sudarsanam (2012)).²

The valuation challenges of CBAs, and hence the short-run gains to foreign acquirers, are also likely to be perceived differently across periods featured by diverse Equity Market Valuation Conditions (EMVCs) at merging firms' countries. Therefore, the imperfect integration of capital markets is likely to motivate a higher-valued acquirer to purchase a relatively inexpensive target across its national borders (Erel, Liao, and Weisbach (2012)). Along these lines, a sizeable literature reveals that the level of EMVCs in the acquiring firm's country affects (i) the total merger activity and, (b) the choice of the payment method (Shleifer and Vishny (2003), Richard (2006), Bouwman, Fuller, and Nain (2009)). These studies reveal that during high- rather than low-EMVCs: (a) M&A activity is higher, (b) acquirers' shareholders enjoy higher gains in the short-run and, (c) stock financing appears to be the most preferred payment devise. This positive relation between EMVCs and acquirers' short-run abnormal returns may also imply that foreign targets are anticipating a higher price from acquirers based in countries whose stock market has increased in value. Similarly, such

¹Similarly, in 2007 the value of CBAs worldwide reached \$1,197bn compared to only \$39bn in 1987 with the US representing one of the most active CBAs markets worldwide (UNCTAD (2009)).

²The earnout financing involves a two-stage payments structure: an up-front payment in the form of cash, stock, or a mixture of cash and stock, and one or more than one future payments, the delivery of which is conditional upon the target firm achieving pre-specified and pre-agreed performance related goals. These goals often include cash flows, sales, pre-tax income, gross profits and net income, with their measurement being carried out annually, followed by semi-annual and quarter updates.

acquirers would prefer stock payments in these circumstances if they view it to be cheap currency, while the target firms either do not realize it (in the sense of Rhodes-Kropf and Viswanathan (2004) model) or are biased by short-horizons and view this as a way to cash out - provided they can sell their own considerations. Of course, these effects would be expected to be present in deals involving listed targets in which stock financing is more likely to be used, while in private target deals the use of overvalued equity is less likely (Chang (1998)). A likely outcome of this is perhaps the participation of earnout financing³ which is expected to accommodate (a) the valuation risk in CBAs and (b) the different perception of such valuation risk across different periods of EMVCs. As a result, the first aim of this paper is to examine whether it is possible for managers to time the announcement of corporate takeovers of foreign targets by analysing the simultaneous effects of EMVCs, earnouts, and other value determinants on the acquirers' announcement period returns.

The impact of additional complexities involved in CBAs rather domestic deals is reflected on acquirers abnormal returns at the time of the M&A announcement, and they are accountable for the lower performance of foreign compared to domestic acquirers' gains (Moeller and Schlingemann (2005)). We can interpret such dynamics in CBAs in the light of a home-bias against foreign assets ((French and Poterba (1991)). US investors seem to have a preference for holding domestic assets regardless of the advantage of international diversification, and this phenomenon is observed in Foreign Direct Investments (FDIs) and the lack of global diversification of US firms (Levis, Muradolu, and Vasileva (2015)). A comprehensive explanation for this phenomenon can also be found in the higher asymmetric information that managers (and investors) are facing in the acquisitions of foreign assets, compared to that of domestic assets (Ahearne, Grier, and Warnock (2004)). Van-Nieuwerburgh and Veldkamp (2009), with a rational expectations general equilibrium model, show how investors choose to acquire more home than foreign information. Maintaining the asymmetric information on foreign assets magnifies the benefits from the comparative advantage they hold in home assets. Information on the foreign target value tends to be more imprecise ex-ante, or more costly, and monitoring costs tend to be higher ex-post (Berrill and Kearney (2010), di Giovanni (2005), Chan, Covrig, and Ng (2005)). Moreover, there is very recent evidence that home bias also varies according to market conditions. The bias could be more pronounced at times of market uncertainty (Giannetti and Laeven (2013)), as well as it can have weaker effects at the worsening of market sentiment. Therefore, the home bias seems to be an additional determinant on the choice of payment mechanism in CBAs announced across periods

³Koehers and Ang (2000) argue that earnout offers a solution when the merger negotiations stall. Specifically, earnouts allow the merging firms to continue to disagree about their valuations and still continue with the deal.

characterised by different EMVCs.

In this paper we employ a sample of US acquirers involved in foreign acquisitions from 1986 to 2013. After controlling for several determinants⁴ of acquirers' gains, we find that US acquirers enjoy higher announcement period abnormal returns from earnout financed foreign M&As announced during periods of high-EMVCs at home. This result remains highly robust after we apply the Propensity Score Matching (PSM) method (Heckman and Robb (1985)) (accompanied with the Rosenbaum-bounds (RB) method; Rosenbaum (2002)) to address self-selection bias concerns.

We can explain these results considering the presence of home bias towards foreign deals and the relative EMVCs between domestic and foreign equity market. If the US equity market is on a high valuation period, foreign firms might anticipate a high price/premium in being acquired by a US firm, consistently with the positive relation between EMVCs and announcement returns. As the same time, US investors are likely to perceive M&As as high value deals and to agree on the high premium, i.e., overestimating the synergies between companies (Shleifer and Vishny (2003)). However, the merging firms will have different views on the payment method they prefer. We show that the foreign seller would prefer cash (i.e., the stock is likely to be perceived as overvalued due to High-EMVCs in the US), but the buyer would prefer stock (because of the higher asymmetric information between the merging firms, and the ex-ante informational advantage on home information (Van-Nieuwerburgh and Veldkamp (2009))). Therefore, there seems to be an asymmetry in the choice of the payment method between the merging firms, that can be solved with the use of earnout. It would allow the merging firms to continue to disagree, but still proceed with the merger.

The earnout is therefore likely to be offering a solution in CBAs during high-EMVCs where the home bias is also likely to be an issue. It guarantees a bigger share for the synergies between the bidder and the target, removes the home bias issue, and eliminates the impact of the overvaluation of the acquirer equity.

⁴These determinants include: (i) the US EMVCs as in Bouwman et al. (2009), (ii) the payment method of the deal that also includes earnout financing, (iii) target firm's domicile (domestic vs. foreign), (iv) deal's industrial diversification, (v) the relative size of the deal, (vi) acquirer book-to-market value, (vii) listing status of the target (i.e., private, public and subsidiary), (viii) foreign exchange risk, (ix) economic growth of the merging firms' countries, and (x) the legal system of the target firm's country.

References

- Ahearne, A. G., Grier, W. L., Warnock, F. E., 2004. Information costs and home bias: an analysis of us holdings of foreign equities. *Journal of International Economics* 62, 313–336.
- Barbopoulos, L. G., Sudarsanam, S., 2012. Determinants of earnout as acquisition payment currency and bidder's value gains. *Journal of Banking & Finance* 36, 678–694.
- Berrill, J., Kearney, C., 2010. Firm-level internationalisation and the home bias puzzle. *Journal of Economics and Business* 62, 235–256.
- Bouwman, C. H., Fuller, K., Nain, A. S., 2009. Market valuation and acquisition quality: Empirical evidence. *Review of Financial Studies* 22, 633–679.
- Chan, K., Covrig, V., Ng, L., 2005. What determines the domestic bias and foreign bias? evidence from mutual fund equity allocations worldwide. *The Journal of Finance* 60, 1495–1534.
- Chang, S., 1998. Takeovers of privately held targets, methods of payment, and bidder returns. *Journal of Finance* 53, 773–784.
- di Giovanni, J., 2005. What drives capital flows? the case of cross-border m&a activity and financial deepening. *Journal of International Economics* 65, 127–149.
- Erel, I., Liao, R. C., Weisbach, S. M., 2012. Determinants of cross-border mergers and acquisitions. *Journal of Finance* 67, 1045–1082.
- French, K. R., Poterba, J. M., 1991. Investor diversification and international equity markets. *American Economic Review* 81, 222–226.
- Giannetti, M., Laeven, L., 2013. Local bias, stock prices, and market conditions: Evidence from u.s. mutual funds. Working Paper pp. 1–43.
- Heckman, J. J., Robb, R. J., 1985. Alternative methods for evaluating the impact of interventions - an overview. *Journal of Econometrics* 30, 239–267.
- Kohers, N., Ang, J., 2000. Earnouts in mergers: Agreeing to disagree and agreeing to stay. *Journal of Business* 73, 445–476.
- Levis, M., Muradolu, Y. G., Vasileva, K., 2015. Home bias persistence in foreign direct investments. *European Journal of Finance* 4364, 1–21.

- Moeller, B. S., Schlingemann, F. P., 2005. Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. *Journal of Banking & Finance* 29, 533–564.
- Rhodes-Kropf, M., Viswanathan, S., 2004. Market valuation and merger waves. *Journal of Finance* 59, 2685–2718.
- Richard, R. J., 2006. Merger momentum and investor sentiment: The stock market reaction to merger announcements. *Journal of Business* 79, 987–1017.
- Rosenbaum, P. R., 2002. *Observational Studies*. Springer.
- Shleifer, A., Vishny, R. W., 2003. Stock market driven acquisitions. *Journal of Financial Economics* 70, 295–311.
- UNCTAD, 2009. *World Investment Report: Transnational Corporations, Agricultural Production and Development*. United Nations.
- Van-Nieuwerburgh, S., Veldkamp, L., 2009. Information immobility and the home bias puzzle. *Journal of Finance* 64, 1187–1215.