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Venture capital exits in domestic and cross-border investments

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ABSTRACT

We compare and contrast the performance of cross-border and domestic venture capital (VC) investments in terms of the time it takes VC backers to exit portfolio companies through initial public offering (IPO), trade sale (M&A), or other routes. Initial analysis suggests that cross-border investments are exited more quickly than domestic investments, and this difference is driven by the cross-border investments in North America. We explore whether the difference between domestic and cross-border exits can be explained by regional variations in economic/market activity and legal systems. We find it is important to allow for the impact of these macro variables on the time to VC exit to vary across regions. This is crucial not just to capture the full impact of the macro factors, but also to explain the differences in time to exit between domestic and cross-border investments.

1. Introduction

In this paper we study domestic and cross-border venture capital (VC) exits against the background of the growing internationalization of the VC industry and the substantial expansion of VC investments by domestic providers in foreign portfolio companies. Recent studies document the growth of cross-border VC flows. Aizenman and Kendall (2012) describe the continual rise in the internationalization of the VC industry, particularly over the past two decades. They document a rise in cross-border participation in VC and private equity deals from 15 percent in the early 1990s to over 40 percent in 2007. Schertler and Tykvová (2011) report that one third of worldwide VC deals are cross-border in the sense that they involve a VC firm or fund that is based outside the region of origin of the portfolio company.

Despite the growing importance of cross-border VC investments, there is little research to date on the performance of cross-border investments at the level of the individual VC investment or the individual portfolio company. This study aims to contribute to this limited body of literature by examining the performance of cross-border VC investments as compared to domestic investments. Specifically, we focus on exit performance in terms of the time VC backers take to exit their investments (i.e., the VC investment duration). Our analysis explores whether cross-border exits are quicker or slower than exits from domestic VC investments after controlling for a range of known determinants of exit behaviour.

Gompers and Lerner (2001) point out that VC exit is an important aspect of the survival and growth of the VC industry. The exit prospect is critical to the VC firm: VC investment decisions are partly determined by the possibility of a timely exit because it allows VC firms to realize their returns (Pearce and Barnes, 2006; Cumming, 2008). Exit is an important source of funds for VC providers because it enables VC backers to re-cycle their funds into new investments, and (expected) successful exit determines the willingness of investors in VC funds to provide capital for the initial and follow-on funds (Black and Gilson, 1998). The time to exit is crucial. On the one hand, longer involvement with portfolio companies results in higher costs to VC backers of carrying (maintaining) the investment due to ongoing monitoring and illiquidity. On the other hand, longer investment duration allows VC backers more time to add value to the portfolio company. An understanding of the exit performance of cross-border investments relative to domestic investments is of great importance to VC firms and funds and to their investors in deciding whether and where to invest. It is

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also of interest to policy makers who may seek to influence cross-border VC flows. Note for instance the efforts by the European Union to encourage cross-border VC flows within Europe (The European Commission, 2013).

There are several studies that examine the time it takes VC firms to exit their portfolio companies. Giot and Schwienbacher (2007) provide evidence on the exit routes chosen by VC and private equity backers and the speed of exit from investments in domestic portfolio companies located in the US. Cumming and MacIntosh (2003), Cumming and Johan (2010) investigate the time to VC exit and its determinants in North America. Wang and Wang (2012) examine the impact of economic freedom in a country (controlling for a range of other factors) on the exit performance of foreign VC investors. Other studies examine exits by UK private equity backers (e.g., Jelic and Wright, 2011). To our knowledge, this paper is the first to compare and contrast exit (time) performance of cross-border VC investments with that of domestic investments.

In the US, most VC deals are domestically funded but in the UK and the rest of the world cross-border investments are prominent (Aizenman and Kendall, 2012). UK VC firms invest on average half of their funds in portfolio companies outside the UK (see Fig. 1 in the appendix). This study focuses on VC firms that are based in the UK and invest both domestically and abroad. We examine time to exit at the level of the individual VC investment (as opposed to the aggregate VC fund or country level), and this allows us to capture exit performance as experienced by individual VC firms and funds. We focus on exits by VC firms incorporated in a single country (UK) from portfolio companies in numerous countries, in order to investigate the comparative exit performance of domestic and cross-border investments and the impact on exit performance of regional effects and conditions in the country of origin of the portfolio company. VC investors may incur higher ongoing (marginal) transaction costs of maintaining cross-border investments as compared to domestic investments. All else equal, the higher marginal cost of holding cross-border investments may cause VC backers to exit cross-border investments more quickly than domestic investments.

For a sample of 4502 VC investments exited during 1990–2010, we study the time to exit through alternative routes (initial public offering – IPO, merger and acquisition – M&A, management buyout – MBO and liquidation).

In our initial multivariate analysis, we find that cross-border investments appear to be exited more quickly after controlling for a range of known determinants of exit such as deal, company and VC firm characteristics. On closer inspection, we find that this result is largely driven by the significantly speedier exits in North America.

Previous studies suggest that the speed of exit may be linked to macro factors such as stock market and economic activity and the quality of the legal system (Black and Gilson, 1998; Cumming et al., 2006; Schwienbacher, 2008; Wang and Wang, 2012). Survey research by Schwienbacher (2008) finds that VC firms exit earlier from portfolio firms based in the US than from those based in Europe, and this may be due to more liquid markets in the US.

We explore the impact of macro factors controlling for the impact of North American investments, and find that market liquidity and legality speed up the time to IPO exit. M&A exits are speeded up by higher stock market valuations and gross domestic product (*GDP per capita*) slows down the time to exit for both M&A and IPO. Our analysis indicates the importance of controlling for the impact of North American observations to accurately assess the full impact of macro variables on exit times worldwide. For instance, failure to control for the differential impact of liquidity on time to exit in North America results in a significant underestimate of the accelerating effect of *Market Liquidity* on IPO exit across all the other regions outside North America. The dominance and distinctiveness of North American observations in cross-country samples is noted in other cross-country venture-capital studies (e.g., Cumming et al., 2010; Wang and Wang, 2012).

The rest of this paper is organized as follows: Section 2 discusses the research design including the research questions, data and methodology. Empirical findings are discussed in Section 3, while the conclusion is presented in Section 4.

2. Conceptual framework and research questions

There has been strong growth in the internationalization of the VC industry (particularly outside the US), partly due to large increases in the availability of VC funds worldwide and the greater attractiveness of foreign investments relative to those available domestically (e.g., Schertler and Tykvová, 2011). We find that UK VC firms invest just over half their funds in portfolio companies located outside the UK (see Fig. 1 in the appendix, and BVCA, 2010). In the light of the great and growing importance of cross-border investments, it is important

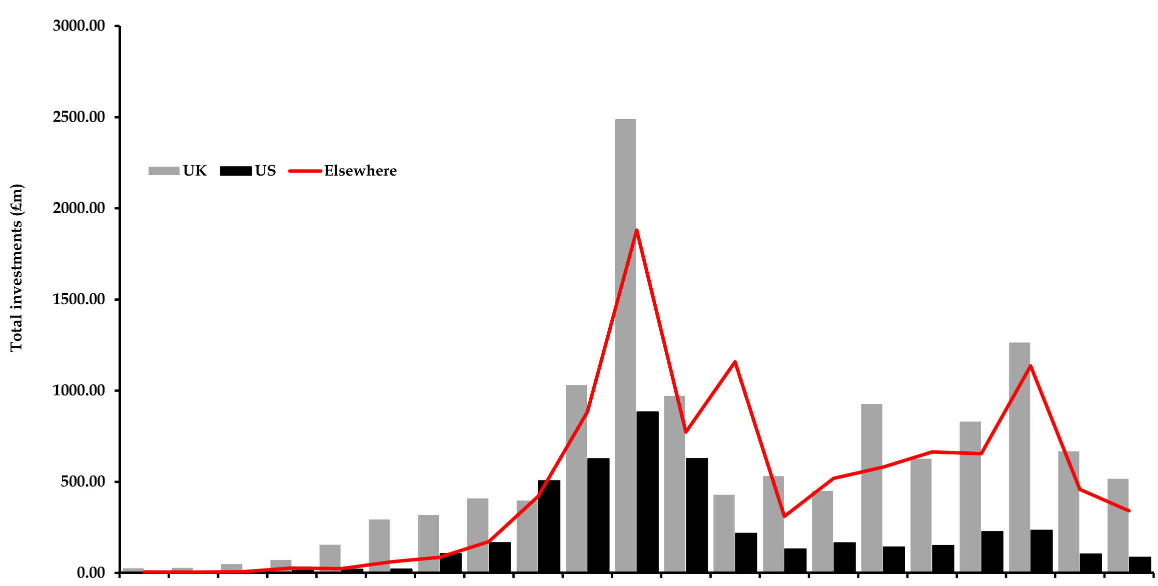

Fig. 1. Annual investments (£) by UK VC firms in the UK, US and the rest of the world during 1990–2010.