The strategic role of Private Equity in the internationalisation of Italian SMEs

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Highlights

- Internationalization is a key strategy of value-creation adopted by Private Equity funds in the Italian market.
- The mix of the four types of contribution to the internationalization process (strategic, financial, relational network, management of operations abroad) is modulated by the Private Equity investor on the basis of the Portfolio Company internationalization strategy.
- The contribution found to have the most relevant effect on the Portfolio Company performance is the support to the relational network in the case of a company strategy involving a foreign direct investment.

Abstract

The internationalisation of the Portfolio Company is a key strategy used by Private Equity investors to create value and produce returns. In recent years, the focus on the strategies for value-creation through operational improvement has become essential to achieve the exponential growth required to the Portfolio Company, given the low multiples and the market risk of leverage. In this paper, we define the key types of contribution that a Private Equity investor can provide in order to support the internationalisation process and their effects on the Portfolio Company performance. The research is based on a survey administered to 47 Private Equity fund managers, which covers 156 deals involving Italian companies. The results offer insight into the contribution to the corporate governance, strategy and management that Private Equity provides in addition to the monetary support. The findings show that the non-financial support given to Portfolio Companies has a positive impact on the performance and that the most impactful contribution the Private Equity can give is the support to the relational network when the company strategy involves a Foreign Direct Investment.

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Introduction

In this paper we empirically examine the role Private Equity (PE) investors play in the internationalisation of the portfolio companies (PC) receiving their financial backing. This research is mainly driven by the fact that extant literature lacks an analysis of the specific contribution to internationalisation of Private Equity investors and the impact it has on the PCs. Whereas some research has analysed the contribution of Venture Capitalists (VC) in the early-stage investments' performance of backed startups (Hellman & Puri, 2002; Smolarski & Kut, 2011; Bigos, 2019), there are very few non-comprehensive studies on the dynamics of internationalisation for PCs in the later stages. Our main goal is thus to frame the various types of contributions PE investors can make to PCs, as well as to assess the impact of these contributions on the PC's internationalisation performance.

We use a unique dataset, based on a survey administered to Private Equity funds managers, on the deals related to the period spanning from 2006 to 2015. The deals were detected by the AIFI (Italian Private Equity, Venture Capital and Private Debt Association) through the PEM® - Private Equity Monitor[4] report. The report monitors all private equity deals involving Italian companies, gathering information from public sources. The survey data for 156 deals were filled out manually by the PE fund managers involved in the deal. We enhanced the survey data using the information provided in the companies' financial statements. The resulting sample's information covers 156 Private Equity deals involving 149 Italian companies. After an initial assessment of the resulting dataset through descriptive statistics, we report the results of the content analysis applied to cluster the textual data produced by PE fund managers, describing their contribution to the internationalisation process and verifying the main areas of PE contribution. We then proceed to analyse the effects of each type of PE contribution on the PC internationalisation performance, using one way and two-way ANOVA models.

[4] Avaiable at: www.privateequitymonitor.it/

The overall results classify the PE intervention under four main thematic clusters related to their contribution and then show how each contribution affects the performance of the company, also considering the interaction with the internationalisation strategy adopted by the PC. This research makes two major contributions to the literature. First, it goes beyond extant research by addressing the contribution to the company internationalisation process for investments in later stages of the companies' life cycle. This topic is especially relevant for the Italian market, which is characterised by many small and medium-sized enterprises (SMEs) which, given the small size of the national market, strongly need to capitalise on international demand to grow their business. Secondly, our work clearly defines the key contribution areas and evaluates their impact on the PCs' internationalisation performance. This analysis shed lights on the inner mechanics of value-creation strategies performed by PE investors. Our findings and conceptual framework are thus offered to foster future academic works and debate on this under researched topic and inform PE practitioners' decision-making processes.

The rest of the paper is structured as follows. Section I sets the theoretical framework, based on the literature review, and the consequent research questions. Section II describes the research methodology and data analysis framework. Section III discusses the results and their implications. Section IV concludes.

I. Theoretical framework

As pointed out by Hellman & Puri (2002) the traditional stream of research on financial intermediation focuses on *"information-based roles of the financial intermediaries"* (p. 169), to frame the moral hazard and/or adverse selection in the investment processes (i.e.: the research strains from Diamond, 1984; Stiglitz, 1985; Fama,1985). Only a fraction of the overall research focuses on the impact alternative investments have on the financed companies and on the broader role that Private Equity fund managers and Venture Capitalists play beyond the one of traditional financial intermediaries, by leveraging their expertise in strategic and financial decision-making in both the short and long-term. In these terms, PE and VC would perform additional roles of support and control, besides the monitoring one. Consistently with this view, the research suggests that this type of investor adds value to the financed companies beyond the mere provision of financial resources, due to the direct involvement as board members (Gerasymenko et al., 2015; Gervasoni & Sattin, 2020; Gerasymenko & Arthurs, 2014; Chahine & Goergen, 2011; Sapienza, 1992). Thus, the PE investors are shown to have a supporting role whenever they choose a privately costly action that yet benefits the company. Otherwise, they assume a controlling role whenever they take actions aimed at increasing the company value despite the conflict of interest between themselves and the entrepreneur (Hellman & Puri, 2002).

This stream of research identified early on several types of contributions that funds managers routinely use to create value and provide the PCs with a competitive advantage. To summarize the types of contribution most cited by the literature, we can list: financial services and consultancy; monitoring operating performance; serving as a sounding board for the entrepreneur team; support to the frame and implementation of governance practices; support in strategic decision-making; networking and interfacing activities with high profile professionals, other investor groups and key market players (for more see: Gervasoni & Sattin, 2020; Kortum & Lerner, 2000; Gorman & Sahlman, 1989; Macmillan et al. 1988). Yet, the study of the relation between these mechanisms and the influence on the internationalisation of the firm is still underdeveloped, as already highlighted by George, Wiklund and Zahra in 2005 (p.216).

At a later stage, the academic research shifted toward analysing the professionalisation of the PC and human capital development, as core value-creation mechanisms (e.g.: Bygrave and Timmons, 1992; Sapienza et al., 1996; Zingales, 2000). Subsequent research delved further into this view by assessing the changes in company structure and the business model taking place with the involvement of the PE investor in areas such as strategy, marketing, human resources management and networking activities with external parties (Gerasymenko & Arthurs, 2014; Manigart & Wright, 2013).

The most developed framework to assess the influence of PE investors over the backed companies' internationalisation process stems from the studies focusing on the above-cited PE value-creation mechanisms of professionalisation and development of human capital. These studies build on the early observations highlighting that one of the firms' main problems when approaching the internationalisation process, aside from the lack of financial resources, is the scarcity of specialised human capital, knowledge and expertise (e.g.: Bonaccorsi, 1992; McDougall & Oviatt, 1996; Oviatt & McDougall, 1994; Westhead et al., 2001). Following these findings, the study of George, Wiklund and Zahra (2005) reports that Venture Capitalists' equity ownership positively influences the management attitude toward the risks of internationalisation and the internationalisation process itself in both scale and scope. Then Zahra, Neubaum and Naldi (2007) add to this view by examining the relationship between the share of Venture Capital ownership in the firm and the activity of the firm aimed at building international knowledge and improving export-oriented technological assets, finding a positive impact of the former on the latter. In addition, Lockett et al. (2008), in one of the most cited studies on the topic, analyse the export intensity of companies depending on their development stage (early seed and startup, as well as late-stage), arguing that the export intensity of the financed firms results from a strategic decision of the management, influenced by both the intellectual and financial capital of the firm. In this, the Venture Capitalists support the managerial choices with their internationalisation experience to select an appropriate strategy, which in turn influences the intensity of export and allocation of resources toward the internationalisation process.

In this context, the resource dependency theory (Pfeffer & Salancik 1978) was first introduced as a possible reference theoretical framework during the nineties (Bygrave and Timmons 1992; Sapienza & al., 1996). According to this theoretical framework, whereas the board of directors plays a key role in finding and exploiting relevant external resources, VC and PE investors enhance its performance through the provision of advice and networking contacts, reducing critical uncertainties (Hillman and Dalziel, 2003). Following the research of Barney and colleagues (1989; 1994) framing the structural adjustments of governance mechanisms routinely performed by VC investors to cope with agency and business risks, the research of Sapienza, Manigart & Vermeir (1996) confirmed the consistency of the framework by showing that VC's value-added is strongly related to the amount of face-to-face interaction with the firm's CEO and how VC enhance the performance of most firms already performing well and relatively more so when business uncertainty is high (Sapienza & al., 1996). At the time the framework was corroborated by several other studies on the specific instance of the PC internationalisation process (i.e.: Coviello & Munro,1995; Sapienza et al. 1996; Coviello & McAuley, 1999), finding that firms rely on and gain an advantage from the funds' network relationships and international knowledge, which address resource constraints and reduce the cost of internationalisation.

The resource dependency theory framework fits well in the aforementioned stream of research focused on the professionalisation and development of human capital. It also proves to be consistent with the perspective of Gerasymenko and colleagues (2014; 2015), which assessed the impact of VC involvement on young ventures changing their business model, by analysing the determinants of VC involvement under two variables: founder replacement and overall amount of VC advice (in matters related to finance, strategy, marketing, business planning, business models, networking, internationalisation). Their studies strongly underline how venture capitalists can counter the organisation inertia caused by managers’ attachment to established practices emerging from cognitive constraints or political considerations (Amit & Zott, 2012; Chesbrough, 2010). In one of the few studies on Private Equity deals, Sun and Liang (2014) describe this interaction between the PC and the fund as a “morphing process”, which eventually creates an outward linkage, fuelling the research of new opportunities and the reconfiguration of human resources in the organisation, thus speeding up the internationalisation process (Sun & Liang, 2014).

Additional research also studies the relationship between the funds’ specific characteristics and the PC performance. An example of such research is the study by Devigne, Vanacker, Manigart, and Paeleman (2013), which examines the differences in PCs’ performances between cross-border versus domestic venture capital investors, finding slight differences in the timing of the performance growth (companies backed by domestic funding perform better in the short term). Overall, they find that companies backed by a syndicate composed of both domestic and cross-border investors exhibit the highest growth (Devigne et al., 2013, p. 567). Smolarski and Kut (2011) instead focus on the characteristics of the deal structure, dividing VC financing by the timing of the financing (lump-sum and incremental financing) and the number of investors (syndication or non-syndicated), finding that staged financing and financing through a syndicate have a positive effect on performance and internationalisation when used separately, while they have a negative effect when used in combination. Finally, it must be noted that some pieces of prior research, such as Carpenter and colleagues (2003) and Lipuma(2006), diverge in their findings from the mainstream results highlighted above. In a study involving a control group of start-ups not financed by VC, they find that the absence of venture capital is positively associated with increased internationalisation. Hence, creating an additional gap in the literature.

Theoretical Framework and Research Hypothesis

The literature presented has two major gaps the first one involves the lack of studies which focus specifically on the support of internationalisation by investors, analysing the process dynamics and its impact. This gap is best remarked by the words of Bigos (2019, p. 6): *"Unfortunately, there only is a handful of studies available that concentrate on the internationalisation of venture capital backed companies"*. Moreover, to date most of the studies focus only on Venture Capital early-stage investments. The findings of the research on early-stage investments provide a valid guiding framework for our research, given the same context of institutional investors investing in equity of privately held companies, but can lead to different results for our sample of Private Equity investments in mature companies.

The second gap involves the study of the types of contribution given by the PE investor in the internationalisation process and how it impacts the performance of the PC. In this regard, it has to be noted that some studies highlight the existence of a filtering process applied by the investor, which is based on the propensity of a target company to internationalise before the investment. Therefore, the propensity to internationalise acts as a signalling effect of the company itself to the fund. For example, Gleason and colleagues (2006) find that born-global companies are able to attract more VC financing. So, knowing that investors tend to select companies with characteristics that favour an international expansion, our aim was to assess how they support such a process and what the consequences on performance are. On this basis our research aims to further the understanding of the PC's internationalisation process by answering the research question formalised as follows:

What is the impact of the different types of contribution that PE investors make to support the internalisation process of PCs?

As a further addition to take into consideration we highlight that some research has speculated that the VC and PE European markets followed a pattern of evolution that has structural differences from the U.S. ones, even though the latter initially acted as reference for their development (Ooghe et al., 1991; Sapienza et al., 1994). Thus, the findings of our sample comprising only deals on Italian target companies, whilst limited in their generalisability, can frame better the specificities of the support to internationalisation process of PE and VC investors in the European market. This is especially true in relation to the Italian market, which is composed of SMEs with a strong need to foster growth though external markets and internationalisation to compensate for the limited internal market[5].

On the basis of this framework, we develop the research hypothesis. In developing the hypothesis we lean on the research reported in the Gervasoni and Sattin (2020) book to describe the PE intervention and contribution to PCs and on the resource dependency theory (Pfeffer & Salancik 1978).

The Gervasoni and Sattin (2020) framework defines the PE contribution through a set of strategic actions in specific areas of the company. This general pattern of intervention is then customised by the investor to the PC financial performance, organisational structure and strategic position (from now on: "PC context"). The customisation is achieved by adjusting the mix of action intensity for each type of contribution. On this basis, we then narrow the focus on the specific topic of the support to internationalisation and the types of contribution involved. Thereafter, we focus on the assessment of the impact such contributions have on the PC's international performance. We draw from the literature concerned with the measurement of impact of PE on PC companies (Bigos, 2019; Devigne et al. 2013; Hillman and Dalziel, 2003; Hellman & Puri, 2002). From this, we expect PE to adapt the contribution mix (intensity for each type of contribution) to the specific PC context, that is in order to be able to provide the best support in each context. For these reasons, we state that:

H1. There are no significant differences in the PC international performance arising from different types of PE contribution.

[5] For more information: European Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (2019).

II. Methodology

II.1 Data collection and measures

The present study is built on a unique dataset provided by a survey administered to both national and international Private Equity funds, which inquired the PE deals involving Italian companies in the decade from 2006 to 2015. Even though the PEM database covers the last twenty years of PE deals in the country, we chose this period span in order to exclude deals that were too old to be fully monitored and to filter out most of the distortion effects due to the multiples' inflation that occurred before the financial crisis. Additionally, because the aim of the study is to frame and assess the PE contribution to the internationalisation growth of mature PCs under ordinary circumstances, we consider only expansion capital, replacement and buyout deals, and we exclude turnaround deals, which by definition are subject to peculiar characteristics of the PCs' growth stage.

Thus, the initial pool of contacts for the survey was based on the 833 deals monitored by AIFI (Italian Private Equity, Venture Capital and Private Debt Association) through the annual report PEM - Private Equity Monitor[6], the most comprehensive database on Italian PE deals. Given the amount of time between the deal and the survey, the fund managers involved in roughly only 658 deals could be reached at the present time (others quit or changed professional activity). The survey data were obtained in two separate collection efforts. For 96 deals, the data were filled out manually by fund managers on the occasion of the annual event organized by AIFI, called Premio Dematté Private Equity of the Year. An additional 60 forms were instead sent and filled out following a direct request by email from AIFI. We enhanced the survey data using the information provided in the companies' financial statements retrieved from Orbis-Bureau van Dijk[7]. The resulting sample information consist of 156 Private Equity deals involving 149 Italian companies, covering 23,4% of the reachable sample and 18,5% of the overall sample of deals in the reference time period.

[6] www.privateequitymonitor.it/
[7] www.orbis.bvdinfo.com

The data gathered by the survey concern both qualitative and quantitative information. Specifically, the questionnaire was composed of seven items in the form of six multiple choice questions and one open ended question. The constructs and items were developed following the literature (Sapienza, 1996; Hellmann & Puri 2002; Smolarski & Kut, 2011) and verified through a two-step approach (Creswell, 2017; Agarwal, 2011). First, we sorted and structured the items internally following consultation with academics from both the corporate governance and international economics fields. Secondly, we performed a preliminary testing and validation of the survey with a panel of PE professionals gathered by AIFI.

The survey items verified the PC's internationalisation processes in terms of strategies adopted by the company and contribution of the PE managers. The survey inquired about the internationalisation process features both at the investment and at the PE exit, hence allowing us to assess the organic growth of the company in relative terms. To describe the internationalisation process we considered both quantitative and qualitative aspects, including the type of internationalisation adopted, the key drivers, the internationalisation strategy and approach, the target countries and the geographic areas addressed[8]. The export ratio is used as a proxy for internationalisation performance (as in Smolarski & Kut, 2011). Given the research question, the evaluation of the fund contribution was performed in qualitative terms, asking the fund to describe it through an open-ended question. The open-ended question allows for an exploratory and comprehensive approach to build the framework for the types of contribution. The related answers were analysed by means of a content analysis and more specifically by referring to the qualitative analysis of the Constant Comparative Method (Charmaz, 2006) which was then triangulated (Jick, 1979; Gray & Densten, 1998; Oleinik, 2011) with the Structural Topic Model (STM) of Latent Dirichlet Allocation (LDA; Roberts et al., 2014).

[8] The internationalisation measurement is based on the framework set by the literature of the research field, e.g.: Johanson and Vahlne, 1990; Ramaswamy et al. 1996; Attig et al., 2016.

II.2 Descriptive statistics of the sample

As shown in Table 1, our final sample covers the analysis period from 2006 to 2015 evenly (Table 1.1). Roughly 60% of the sample is composed of SMEs, both in terms of Revenues (below 50 million, Table 1.2) and number of Employees (below 250, Table 1.3). The distribution of observations across the industrial sectors (Table 1.4) and regions (Table 1.5) reflect the trends observed in the market reports of PEM[9]. In fact, the sample shows a concentration of the deals in the Lombardy region and on industrial products and consumer goods, which is consistent with what is observed in the overall market over the period.

Table 1: Sample PC characteristics

1.1 Distribution by Year

Year	%
2006	13
2007	7
2008	13
2009	6
2010	7
2011	12
2012	13
2013	13
2014	8
2015	8

1.2 Distribution by Revenue

Revenue (mln, €)	%
0-2	3
2-10	8
10-30	31
30-50	18
50-100	18
100-250	16
>250	6

1.3 Distribution by Employees

Employees	%
0-19	3
20-99	38
100-199	17
200-249	8
250-499	12
500-999	11
>1.000	11

1.4 Distribution by Industry

Industry	%
Industrial products	39
Consumer goods	17
Other professional and social services	10
ICT	10
Food & beverage	8
Health care and social services	5
Pharmaceutical and biopharmaceutical industry	4
Retail and wholesale trade	3
Transportation	3
Financial services	2

1.5 Distribution by Region

Region	%
Lombardia	44
Emilia-Romagna	13
Veneto	12
Piemonte	7
Toscana	7
Lazio	4
Liguria	3
Abruzzo	2
Marche	2
Campania	1
Friuli-Venezia Giulia	1
Trentino-Alto Adige	1
Sicilia	1
Umbria	1

[9] For more information: http://www.privateequitymonitor.it/pubblicazioni.php

The sample is mostly composed of Buyouts, 61.5%, and expansion deals account for the rest, 38.5%. Table 2 shows that most of the sample is composed of buyouts or expansion deals related to national investors, while only 18% represents deals made by foreign funds (2.1). This percentage is not consistent with what we observe on the Italian market and is skewed by the survey answer rate of national funds compared to the foreign ones. While the practices for pan-European funds may not differ from the national ones, an argument can be made when these results are generalised to funds of other regions, such as the U.S., as mentioned before. Thus, while this point does not impair the validity of the results as far as the Italian market is concern, it poses a limit on the generalisability to markets outside the European Union.

Table 2: Sample deals characteristics

2.1 Distribution by deal type and investor origin

	Deal Type	
Investor type	*Expansion*	*Buyout*
National	36%	45%
Foreign	1%	18%

2.2 Distribution by international presence at t_0 of the PC* and investor origin or deal type

	International presence at t_0		
	no	*yes*	*Total*
National	22%	78%	100%
Foreign	28%	72%	100%
Buyout	12,5%	87,5%	100%
Expansion	40%	60%	100%

**Dummy variable describing weather the PC had any % of revenues generated in foreign markets at the time of the deal.*

Finally, our data confirm the notion that PE has a strong preference for PC that already have some presence in foreign markets. Indeed, as reported (2.2), more than 70% of the deals performed by both national and foreign PE targets companies which already have an international presence. In line with the theory, Expansion deals (growth capital) involve more companies with no international presence at the time of the deal (40%). In this case, it is possible to assume that one of the main leverages of value creation is the internationalisation process of the PC.

III Results discussion

The analysis is divided into three parts. The first part reports an analysis of the economic impact on the PC internationalisation process over the investment duration. The aim of this part is to assess the drivers, strategies, internationalisation tools implemented and the overall performance in terms of internationalisation of the PC on the entire sample. The second part applies content analysis (Latent Dirichlet Allocation) to the description of the PE intervention, in order to cluster the intervention in specific types of contribution to the internationalisation process. These two initial parts are aimed at fully framing and contextualising the PE activity to support internationalisation, in order to pave the way for the analysis of the effects of such intervention. Finally, the third part reports the results of the ANOVA test conducted to compare the main effects on the export revenue of the PE contribution and PC internationalisation type, as well as their interaction.

III.1 Performance indicators and economic impact

In order to define the types of contribution given by PE funds to PCs, we first start by assessing the changes on the PCs' internationalisation process over the investment duration and the observed differences in drivers and strategies for internationalising for the entire sample. From the analysis of the PC characteristics before the investment, we can highlight that 77% of the overall sample already had some sort of internationalisation at the moment of the investment. This information suggests the tendency of PE to invest in target companies with a strong focus on foreign markets, which signals a growth strategy and endeavour to perform over competitors that PE can build upon. Thus, this information, even if not conclusive, seems to support Lipuma's (2006) causality relation between PC internationalisation and investments. Of the sample, 74% saw an increase in the international presence during the investment period, confirming the overall tendency of PE to successfully support the PC internationalisation process. Table 3 shows the entity of such increase in terms of foreign revenues percentage before and after the investment, underlining no significant differences between national and foreign PE.

Table 3: Foreign revenues percentage before and after the investment			
Foreign revenue (%)	entry	exit	change
mean	51%	53%	7%
median	44%	50%	3%
standard dev.	34%	34%	12%
Only - Foreign PE			
mean	35%	42%	7%
Only - National PE			
mean	41%	47%	5%

On the other hand, Table 4 assesses the strategic choices adopted by the PC with the support of PE regarding the type of internationalisation adopted during the holding period. The internationalisation process during the holding period was achieved by means of a greenfield investment for 31% of the PCs, highlighting the strong change in the pace and risk-taking approach of the PCs once financed by PE. It is also worth noting the increase in the holding period for the PCs which choose a longer internationalisation process involving: an acquisition, the formation of a network of sales agents or a greenfield investment. The increase in the holding period when these three approaches are involved shows how PE provides patient capital, being ready to commit to investments with longer term growth processes (Gooderham & Nordhaug, 2003, p. 7-22; Dominguez, 2018).

Table 4: Analysis of internationalisation strategy type* by holding period and driver of internationalisation*

Int. strategy type	%	Av. Holding period	Market research	Sales results	Suppliers relations	Product/ service mix innovation
Greenfield	31%	4,4	38,46%	38,46%	11,54%	11,54%
Contracting sales agents	18%	4,7	38,46%	38,46%	11,54%	11,54%
Acquisition	17%	4,6	44,44%	29,63%	3,70%	22,22%
Industrial partnership	15%	4,4	41,18%	35,29%	5,88%	17,65%
New direct clients	10%	3,4	38,46%	38,46%	11,54%	11,54%
Digital marketing and sales	9%	4,0	38,46%	38,46%	11,54%	11,54%
Total	**100%**	**4,1**	**40,79%**	**34,21%**	**10,53%**	**14,47%**

**Both the internationalisation strategy type and drivers were inquired about in the survey conducted through multiple choice questions. Each choice is represented by a dummy variable. A single company may adopt multiple strategies and have multiple drivers.*

Table 4 also reports the key drivers for each chosen strategy, underlining how PE-backed companies are pushed to adopt an entrepreneurial and opportunity seeker approach, alongside the factual data related to the international markets they already operate in. Thus, PE supports them in scouring new potential international markets and showing international entrepreneurship (Reuber et al., 2018). This approach is then reflected in the degree of spread of target geographic areas (reported in Table 5), which involves extra-EU regions for nearly the 70% of the deals.

Table 5: PCs' new target geographic areas for the internationalisation process during the holding period*

	Investor origin		
	Overall	*Only foreign PE*	*Only national PE*
Americas	32%	40%	30%
Africa	10%	0%	12%
Asia	26%	33%	25%
Europe	31%	20%	33%
Oceania	1%	7%	0%

**Series of dummy variables, formed via direct question in the survey, tracking the new areas in which PCs developed their business during the holding period.*

III.2 Funds' contribution

After defining the impact of PE on the PCs internationalisation strategies, we perform the content analysis on the answers to the survey's open-ended question, which required PE fund managers to describe the contribution made. By deploying both a qualitative content analysis, using the Constant Comparative Method (Charmaz, 2006), and the quantitative Latent Dirichlet Allocation (LDA) analysis on the survey answers. These two processes were performed in parallel, in order to triangulate the results (Jick, 1979; Oleinik, 2011). The aim is to cluster the content of the PE description of their contribution into a finite number of strategies by recognising patterns of actions undertaken by the PE funds in response to specific PC needs.

III.2.1 Content analysis

We analysed the 156 text documents related to the answers given by PE funds to the open ended question of the survey requiring funds to describe their contribution specifically to the companies' internationalisation process, if there was any, during the holding period. The survey was conducted in the Italian language. Out of the 156, 42 did not provide a sufficient answer, while the remaining 114 provided an extensive answer which could be used for the LDA analysis. Due to this limitation, this part of the analysis refers to the cited sub-sample. The Constant Comparative Method (Charmaz, 2006) was performed at the AIFI offices on three separate occasions. The data were reviewed, coded and categorised by the authors and the AIFI personnel involved, specifically two AIFI researchers. The estimation of the Structural Topic Model using the Latent Dirichlet Allocation (LDA) method was performed using the R software package “stm” (Roberts et al., 2014; Roberts et al., 2016) on all available text documents. The four thematic clusters resulting from the triangulation of the two methods are reported in Table 6.

Table 6: Clusters resulting from the LDA analysis and validated through the Constant Comparative analysis

Cluster	Obs. Number (LDA results)	Topic	Key terms* (in Italian language, stemmed)
1	54	*Strategic analysis and strategy implementation*	"apertur"; “commercial”; ”joint-venture”
2	13	*Networking and negotiation*	“negoziazion”; “network”; “accord”
3	11	*Management support*	“manag”; “societ”; “support”
4	36	*Financial support*	“svilupp”; “acquisizion”; “amministrator”

**Three most relevant stemmed terms resulting from the LDA, excluding non-significative terms. The words are in Italian as the survey was conducted in this language.*

The four clusters resulting from the analysis point to four broad classes of intervention a PE fund can perform to support the internationalisation process of the PC. The first type of intervention is related to the strategic analysis of the opportunities for growth the company has in new foreign markets. In this case the PE investor pushes the company to pursue an opportunity seeking approach and assists the company in making entrepreneurial decisions, using the experience matured facing the different situations of each previous PC. This type of assistance, along with the financial one (cluster 4), are at the basis of the PE intervention and, as such, is shown to be the predominant type of contribution for most of the deals. In this case, Cluster 1 comprises 54 of the overall deals. The second cluster instead refers to the type of contribution PE investors make when they use their connections and overall business network to support the companies in finding new opportunities and key deals. In this case, the fund acts as a scouting agent in foreign markets, capable of procuring resources and insights through its relational connections otherwise not obtainable by the PC. The third type of contribution refers to the support given to the management team in structuring the operative side of the investments. As such, this type of contribution refers to a more hands-on approach adopted by the PE investor only when the team lacks certain specific competencies needed in an international environment. When compared to the other types of contribution, this one is used with less intensity, being the dominant type of contribution in only 11 deals. This may be due to the PE investors' preference to focus on contributions that are less operative and more strategic in nature and which can be better leveraged to achieve explosive company growth. Finally, the last type of contribution (cluster 4) refers to the most traditional PE role of providing financial support, which is part and parcel of any investor activity.

Following the definition of the four clusters, each deal was allocated to one of them, on the basis of the θ value of document-topic probabilities resulting from the LDA analysis and then the results were compared with the ones from the Constant Comparative Method to check the consistency of the results. The two methods results matched for most cases and the LDA classification was thus applied in the following step.

III.2.2 ANOVA model

Following the definition of the four clusters which frame the main types of contributions given by the PE investors to support the internationalisation process of the PC, we address the hypothesis regarding the differences in the PC international performance arising from different types of PE contribution. We use the clusters obtained to classify the main type of contribution applied in each deal and proceed to assess any statistically significant difference in the performance, using as proxy the Export Revenue percentual change in the holding period. The calculations were performed using the STATA 13 software. Prior to the ANOVA test, we conducted the Levene's Test for Equality of

Variances. For all three versions of the test (Table 7) the p-value is less than 0.05, indicating that there is a statistically significant difference in the variance of export revenues between clusters.

Table 7: Descriptive statistics of the Clusters' means and Levene's Test for Equality of Variances in the four clusters over the export revenue percentual change

	Mean	Std. Dev.	Freq.
Cluster 1	.05889074	.07919315	54
Cluster 2	.18561538	.12755361	13
Cluster 3	.05854545	.03670521	11
Cluster 4	.05754722	.08334286	36
Total	**.07288421**	**.09268498**	**114**
W0 = 3.8371465	*df(3, 110)*	*Pr > F* = 0.01174076	
W50 = 3.5564516	*df(3, 110)*	*Pr > F* = 0.01671751	
W10 = 3.9061697	*df(3, 110)*	*Pr > F* = 0.01076457	

W_0 *test statistic for Levene's Test centered at the mean*
W_0 *test statistic for Levene's Test centered at the median.*
W_0 *test statistic for Levene's Test centered using the 10% trimmed mean*

Table 8 reports the results of the one-way ANOVA test conducted to determine if the export revenue percentual change during the holding period was statistically different for groups with different PE contribution. We found a statistically significant difference between groups (as determined by the F(3,110)=8.72 with significant p-value).

Table 8: One-way ANOVA test for Export Revenue % change by clusters

Source	*SS*	*df*	*MS*	*F*	*Prob > F*
Between groups	.186511892	3	.062170631	8.72	0.0000***
Within groups	.784215319	110	.00712923		
Total	**.970727212**	**113**	**.008590506**		

.*** $p < .001$
$R^2 = 0.1921$ (adjusted $R^2 = 0.1701$)

Following these results, a Tukey post-hoc test was run (Table 9) which revealed that the export revenue percentual change was significantly higher for the comparison between: Cluster 2 and Cluster 1; Cluster 3 and Cluster 2; Cluster 4 and Cluster 2; Cluster 4 and Cluster 3. From this comparison, it is possible to see how Cluster 2, which related to a type of PE contribution focused on using the investor's network of relations to find opportunities in new markets, is on average the one performing the best.

Table 9: Pairwise comparisons of means with equal variances

Export Revenue %	Contrast	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Cluster 2 vs Cluster 1	.1267246	.026085	4.86	0.000	.0586757	.1947735
Cluster 3 vs Cluster 1	-.0003453	.0279309	-0.01	1.000	-.0732097	.0725192
Cluster 4 vs Cluster 1	-.0013435	.0181675	-0.07	1.000	-.0487377	.0460507
Cluster 3 vs Cluster 2	-.1270699	.0345907	-3.67	0.002	-.217308	-.0368318
Cluster 4 vs Cluster 2	-.1280682	.027321	-4.69	0.000	-.1993415	-.0567948
Cluster 4 vs Cluster 3	-.0009982	.0290886	-0.03	1.000	-.0768828	.0748864

Finally, we delved deeper into the interaction between the PE investors' contribution and the PCs' internationalisation process by introducing the internationalisation strategy adopted by the PC and studying the interaction between the type of contribution, the internationalisation strategy and their joint effect on the export revenue increase. To examine this relation, we employed a Two-way ANOVA test. As shown in Table 10, the Two-Way ANOVA test indicates the already known significant main effect of the PE contribution type but also a significant interaction effect with the internationalisation strategy. For the purpose of the analysis, a new variable was derived from the International Strategy Type, which categorises the PC into 3 groups based on the intensity of their new international operations established during the holding period: the first one includes PCs that only sell products abroad through digital marketing and sales; the second one includes all PCs which additionally either formed industrial partnerships, contracting sales agents or acquired new direct clients; finally the third group includes all companies that either acquired a foreign company or made a greenfield investment abroad.

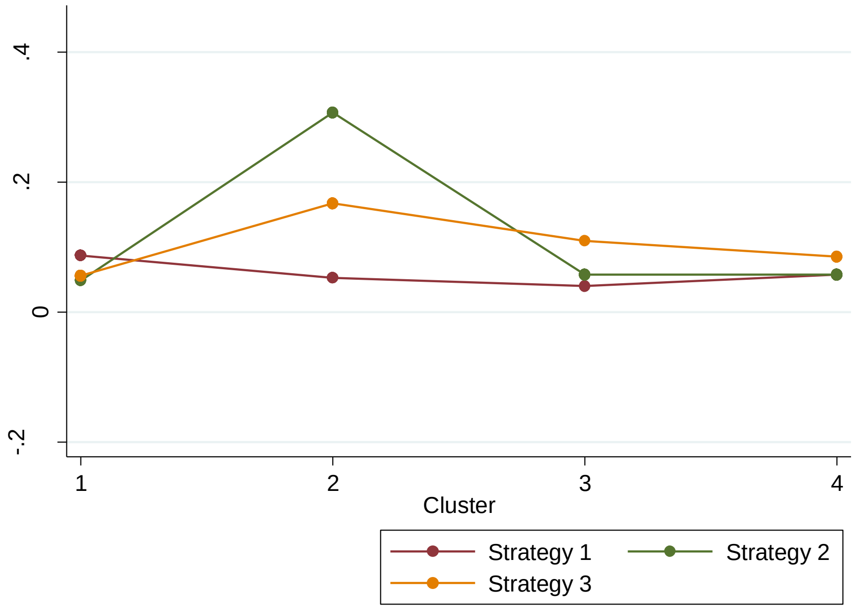
Table 10: Two-way ANOVA test for Export Revenue % change by clusters and internationalisation strategy

Source	*Partial SS*	*df*	*MS*	*F*	*Prob > F*
Model	.281525723	11	.025593248	3.93	0.0001***
Clusters	.120451404	3	.040150468	6.16	0.0007***
Int. Strategy	.026864946	2	.013432473	2.06	0.1332
Interaction effect (C x I)	.137081401	6	.0228469	3.51	0.0037**
Residual	.586297991	90	.006514422		
Total	**.867823714**	**101**	**.008592314**		

.** $p < .01$
.*** $p < .001$
$R^2 = 0.3244$ (adjusted $R^2 = 0.2418$)

Thus, we find that there is a significant interaction between the effects of PE contribution type and internationalisation strategy on the export revenue increase, with F(6,90)=3.51 and p=.0037. Additionally, only the main effect of the PE contribution type is statistically significant at p<0.005, whereas the one for the internationalisation strategy is not. In order to further explain the effects of the interaction, in Appendix 1 we report the pairwise comparisons of marginal linear predictions and Figure 1 shows the interaction effects between PE contribution type and PC internationalisation strategy on export revenue change. From these two sources, it is possible to see how the difference in performance is especially relevant concerning the interaction between the PE contribution of Cluster 1 and Internationalization strategy 2, as well as the PE contribution of Cluster 2 with Strategy 2. Most of the differences in performance seems thus to be related to the PC's strategies applied to translate from only selling the product abroad to actually setting foot in a foreign market. In this context, the relational assets and expertise provided by the PE investor can boost the PC performance above the already high average growth of these deals.

Figure 1: Interaction Effects between PE Contribution type and PC Internationalisation Strategy on Export Revenue change (%)



IV. Discussion and conclusions

The Italian economic context is characterised by a high intensity of entrepreneurial activity which results in a thriving environment for SMEs formation and growth. One of the most critical aspects for the successful growth of SMEs and Italian companies in general, in this market scenario, is the ability to quickly achieve a position in foreign markets. In fact, the strategic choice of internationalisation can guarantee a competitive advantage based on the larger number of potential clients, scalability of operations and lowering of the business market risk through diversification. As such, this process can help the Italian market overall in solving the long-standing competitive drawbacks that an environment composed mostly of SMEs faces when confronting large multi-national companies.

In light of the above, our study provides insights both for academics and practitioners assessing the types of contribution to and effects of PE investors on Italian companies, with regard to such an essential aspect. Indeed, extant literature analysing the strategies of value creation and effects of VC and PE investments, shows that PE and VC investors play a key role in the process by providing financial resources and competences. Undoubtedly, for these types of investor fast PC internationalisation is key to boost investment performance. Our study further delves into the way in which this strategy has become crucial for most of the PE operations targeting Italian companies. The focus on this strategy is such that, not only does the PE investor support the PC in the process during the investment period, but also, we find a high percentage of companies being selected having already shown a strong attitude to internationalise.

Additionally, our research further contributes to the extant literature by specifically assessing the types of contribution PE investors can make to support the internationalisation process and their effects on PC performance in later stages, an aspect that has been neglected in favour of the focus on early-stage investments. In this regard, we highlight the capabilities of both national and foreign PE funds to boost the PCs' internationalisation process and induce strong performances. In our analysis, the PE contribution is clustered into four distinct types: strategic, financial, relational network, management of operations abroad. Of these, each one is found to provide value to the company and among them the one having the most impact is the contribution concerning the relational network. This contribution is especially relevant in the case of PCs applying a strategy involving an actual international presence abroad via foreign direct investments (an acquisition or a greenfield). In this case, the PE investor expertise helps the company in tapping all its potential by providing opportunities for growth through its network of international contacts.

Our findings provide a useful framework of reference also to professionals, both company managers and investors. On one hand, this framework helps clarify the kind of support PCs can expect from PE investors and their effects. On the other hand, it further stresses the importance of this strategy of value-creation to investors, especially in the Italian economic environment, showing which type of contribution is most useful in relation to the needs for each PC's main type of internationalisation strategy. Overall, from a PE investor perspective it is clear that this strategy proves essential in boosting returns, while mitigating the portfolio country-specific exposure, by lowering the risk at the company level; an essential argument to understand in the fundraising negotiations of national PE investors.

The study presents limitations in terms of generalisability of results to other countries, for which further studies are needed. We urge the reader to take into consideration the self-reported nature of the data referring to the PE contribution. In fact, due to resources limitation and in most cases the time gap, it was not possible to administer a survey also to the PC's management teams. Additionally, the sample size is relatively small, despite the long period taken into consideration, due to the overall small size of the Italian PE market compared to other countries, coupled with the survey answer rate. We also already addressed the argument of the skewed answer rate in favour of national funds. The small sample size limited our capability to include all variables of possible consequence. With a larger data sample more control variables could be included without sacrificing the model degrees of freedom.

Future research could take into consideration the possible moderating effects of the PE funds' size and investment strategy characteristics, previous investment rounds in the PC, entrepreneurship ratio or availability of other external financing forms. Another important analysis may be performed on time effects by using longitudinal data on the PE investors' support activity, in order to further assess the role of PE as patient capital. Finally, it may prove extremely insightful to compare the effects of different types of contribution across different countries in order to assess the difference due to country-specific economic environments.

References

Agarwal, N. K. (2011). Verifying survey items for construct validity: A two-stage sorting procedure for questionnaire design in information behavior research, *Proceedings of the American Society for Information Science and Technology*, vol. 48, no. 1, pp. 1-8.

Amit, R. and Zott, C. (2012). Creating value through business model innovation, *MIT Sloan Management Review*, vol. 53, no. 3, pp. 41–49.

Attig, N., Boubakri, N., El Ghoul, S., and Guedhami, O. (2016). Firm internationalization and corporate social responsibility. *Journal of Business Ethics*, vol. 134, no. 2, pp. 171-197.

Barney, J.B. Busenitz, L., Fiet, J.O. and Moesel, D. (1989). The structure of venture capital governance: An organizational economic analysis of relations between venture capital firms and new ventures, *Academy of Management Best Paper Proceedings*, pp. 64-68.

Barney, J.B., Busenitz. L., Fiet, J. and Moesel, D. (1994). The relationship between venture capitalists and managers in new firms: Determinants of contractual covenants. Managerial Finance vol. 20, no. 1, pp. 19-30.

Bigos, K. (2019). Venture Capital and Exporting–Some Evidence from EU Countries, *Journal of Management and Business Administration*, Central Europe, vol. 27, no. 1, pp. 2-16.

Blei, David M., Andrew Ng, and Michael Jordan (2003). Latent Dirichlet Allocation, *Journal of Machine Learning Research*, vol. 3, Jan, p. 993–1022.

Bonaccorsi, A. (1992). On the Relationship Between Firm Size and Export Intensity, *Journal of International Business Studies*, vol. 23, no. 4, pp. 605–635.

Bygrave, W. and Timmons, J. (1992). *Venture Capital at the Crossroads*, Cambridge, MA: Harvard Business School Press.

Bygrave, W.D. and Timmons, J.A. (1992). *Venture and Risk Capital: Practice and Performance, Promises and Polio*, Boston, MA: Harvard Business School.

Carpenter,M. A., Pollock, T. G. and Leary,M.M. (2003). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms, *Strategic Management Journal*, vol. 24, pp. 803–820.

Chahine, S. and Goergen, M. (2011). VC board representation and performance of U.S. IPOs, *Journal of Business Finance & Accounting*, vol. 38, no. 3/4, pp. 413–445.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*, London: Sage Publications Limited.

Chesbrough H. (2010). Business model innovation: opportunities and barriers, *Long Range Planning*, vol. 43, no. 2/3, pp. 354–363.

Coviello, N. E. and McAuley, A. (1999). Internationalisation and the smaller firm: A review of contemporary empirical research. *Management International Review*, vol. 39, pp. 223–256.

Coviello, N. E. and Munro, H. J. (1995). Growing the entrepreneurial firm: Networking for international market development, *European Journal of Marketing*, vol. 29, no. 7, pp. 49-61.

Creswell, J. W. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*, Thousand Oaks: Sage publications.

Devigne, D., Vanacker, T., Manigart, S. and Paeleman, I. (2013). The role of domestic and cross-border venture capital investors in the growth of portfolio companies, *Small Business Economics*, Vol. 40, no. 3, pp. 553–573.

Devigne, D., Vanacker, T., Manigart, S. and Paeleman, I. (2013). The role of domestic and cross-border venture capital investors in the growth of portfolio companies, *Small Business Economics*, vol. 40, no. 3, pp. 553–573.

Diamond D. (1984). Financial intermediation and delegated monitoring, *Review of Economic Studies*, vol. 51, no. 3, pp. 393–414.

Dominguez, N. (2018). *SME internationalization strategies: Innovation to conquer new markets*, Hoboken: John Wiley & Sons.

European Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs - GROW (2019). *2019 SBA fact sheet – Italy*. Brussel: European Commission. Available at: https://ec.europa.eu/docsroom/documents/38662/attachments/16/translations/en/renditions/native.

Fama, E. F. (1985). What's different about banks?, *Journal of monetary economics*, vol. 15, no. 1, pp. 29-39.

Fernhaber, S.A. and McDougall-Covin, P.P. (2009). Venture Capitalists as Catalysts to New Venture Internationalization: The Impact of Their Knowledge and Reputation Resources, *Entrepreneurship Theory and Practice*, vol. 33, no. 1, pp. 277–295.

George, G., Wiklund, J. and Zahra S.A. (2005). Ownership and the Internationalization of Small Firms, *Journal of Management*, vol. 31, no. 2, pp. 210–233.

Gerasymenko, V. and Arthurs, J.D. (2014). New insights into venture capitalists' activity IPO and time-to-exit forecast as antecedents of their post-investment involvement, *Journal of Business Venturing*, vol. 29, pp. 405–420.

Gerasymenko, V., De Clercq, D. and Sapienza, H.J. (2015). *Changing the business model: effects of venture capital firms and outside ceos on portfolio company performance*, Strategic Entrepreneurship Journal, vol. 9, pp. 79–98.

Gervasoni, A. and Sattin, F.L. (2020). *Private Equity e venture capital, manuale di investimento nel capitale di rischio*, Milano: Guerini e Associati, ed. 6.

Gleason, K. C., Madura, J. and Wiggenhorn, J. (2006). Operating characteristics, risk, and performance of born-global firms, *International Journal of Managerial Finance*, vol. 2, no. 2, pp. 96–120.

Gleason, K. C., Madura, J., and Wiggenhorn, J. (2006). Operating characteristics, risk, and performance of born-global firms, *International Journal of Managerial Finance*, vol. 2, no. 2, pp. 96-120.

Gooderham, P.N., and Nordhaug, O. (2003). *International management: cross-boundary challenges*, Oxford: Blackwell.

Gorman, M. and Sahlman, W. A. (1989). What do venture capitalists do?, *Journal of business venturing*, ovl. 4, no. 4, pp. 231-248.

Gray, J.H., and Densten, I.L. (1998). Integrating quantitative and qualitative analysis using latent and manifest variables, *Quality and Quantity*, vol. 32, no. 4, pp. 419-431.

Hellmann, T. and Puri, M. (2002). Venture capital and the professionalization of start-up firms: Empirical evidence, *The journal of finance*, vol. 57, no. 1, pp. 169-197.

Hillman A.J. and Dalziel T. (2003). Board of directors and firm performance: integrating agency and resource dependence perspectives, *Academy of Management Review*, vol. 28, no. 3, pp. 383–396.

Jick, T.D. (1979). Mixing qualitative and quantitative methods: Triangulation in action, *Administrative science quarterly*, vol. 24, no. 4, pp. 602-611.

Johanson, J., and Vahlne, J. E. (1990). The mechanism of internationalisation, *International marketing review*, vol. 7, no. 4., pp.11-24.

Kortum, S. and Lerner, J. (2000). Assessing the contribution of venture capital to innovation, *Rand Journal of Economics*, vol. 31, no. 4, pp. 674–692.

Landstrom, H. (1991). The value-adding effect of cooperation between venture capitalists and small firms, *Proceedings of the 36th 1CSB World Conference*, vol. 1, pp. 30-38.

LiPuma, J. A. (2006). Independent venture capital, corporate venture capital, and the internationalisation intensity of technology-based portfolio firms, *International Entrepreneurship and Management Journal*, vol. 2, no. 2, pp. 245-260.

Lockett, A., Wright, M., Burrows, A., Scholes, L. and Paton, D. (2008). The export intensity of venture capital backed companies, *Small Business Economics*, vol. 31, no. 1, pp. 39–58.

Macmillan, I. C., Kulow, D. M. and Khoylian, R. (1988). Venture Capitalists' Involvement in their Investments: Extent and Performance, *Journal of Business Venturing*, vol. 4, pp. 27-47.

Manigart ,S. and Wright, M. (2013). Reassessing the relationships between private equity investors and their portfolio companies, *Small Business Economics*, vol. 40, no. 3, pp. 479–492.

McDougall, P.P. and Oviatt, B.M. (1996). New venture internationalization, strategic change, and performance: A follow-up study, *Journal of Business Venturing*, vol. 11, no. 1, pp. 23–40.

Oleinik, A. (2011). Mixing quantitative and qualitative content analysis: Triangulation at work, *Quality & Quantity*, vol. 45, no. 4, pp. 859-873.

Ooghe, H., Manigart, S., and Fassin, Y. (1991). Growth patterns of the European venture capital industry, *Journal of Business Venturing*, vol. 6, no. 6, pp. 381-404.

Oviatt, B.M. and McDougall, P.P. (1994). Toward a Theory of International New ventures, *Journal of International Business Studies*, vol. 25, no. 1, pp. 45–64.

Pfeffer, J. and Salancik, G.R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*, New York: Harper & Row.

Ramaswamy, K., Kroeck, K. G., and Renforth, W. (1996). Measuring the degree of internationalization of a firm: A comment, *Journal of International Business Studies*, vol. 27, no. 1, pp. 167-177.

Reuber, A.R., Knight, G.A., Liesch, P.W., and Zhou, L. (2018). International entrepreneurship: The pursuit of entrepreneurial opportunities across national borders, *Journal of International Business Studies*, vol. 49, pp. 395–406.

Roberts M., Stewart, B. and Airoldi, E. (2016). A model of text for experimentation in the social sciences, *Journal of the American Statistical Association*, vol. 111, no. 515, pp. 988-1003.

Roberts, M.E., Stewart, B.M., Tingley, D., Lucas, C., Leder-Luis, J., Gadarian, S.K., Albertson, B., and Rand, D.G. (2014). Structural topic models for open-ended survey responses, *American Journal of Political Science*, vol. 58, no. 4, pp. 1064-1082.

Sapienza, H. J., Manigart, S. and Vermeir, W. (1996). Venture capitalist governance and value added in four countries, *Journal of Business Venturing*, vol. 11, no. 6, pp. 439-469.

Sapienza, H.J. (1992). When do venture capitalists add value?, *Journal of Business Venturing*, vol. 7, no. 1, pp. 9–27.

Sapienza, H.J., Amason, A., and Manigart, S. (1994). The level and nature of venture capitalist involvement in their portfolio companies: A study of three European countries, *Managerial Finance*, vol. 20, no. 1, pp. 3-18.

Smolarski, J. and Kut, C. (2011). The impact of venture capital financing method on SME performance and internationalization. *International Entrepreneurship and Management Journal*, vol. 7, no. 1, pp. 39-55.

Stiglitz, J. E. (1985). Credit markets and the control of capital, *Journal of Money, credit and Banking*, vol. 17, no. 2, pp. 133-152.

Sun, S. L. and Liang, H. (2014). Morphing: The linkage of inward private equity and outward ventures. *Thunderbird International Business Review*, vol. 56, no. 5, pp. 421-438.

Westhead, P., Wright, M. and Ucbasaran, D. (2001). The internationalization of new and small firms, *Journal of Business Venturing*, vol. 16, no. 4, p. 333–358.

Wright, M., Pruthi, S. and Lockett, A. (2005). International venture capital research: From cross-country comparisons to crossing borders, *International Journal of Management Reviews*, vol. 7, no. 3, pp. 1–31.

Zingales, L. (2000). In search of new foundations, *Journal of Finance*, vol. 55, pp. 1623–1653.

Appendix 1

Table reporting the pairwise comparisons of marginal linear predictions for clusters of PE contribution and PC internationalisation strategies, reporting both the unadjusted groups and the results of the Scheffé Test. The table was calculated using STATA 13.

Appendix 1 - Table 1: pairwise comparisons of marginal linear predictions

	Margin	*Std. Err.*	*Unadjusted Groups*	*Schaffé Groups*
Cluster 1#Strategy 1	.0873077	.0223855	AB	AB
Cluster 1#Strategy 2	.049	.0360955	A	A
Cluster 1#Strategy 3	.05597	.0147359	A	AB
Cluster 2#Strategy 1	.05325	.040356	A	AB
Cluster 2#Strategy 2	.3075	.040356		B
Cluster 2#Strategy 3	.1675	.040356	B	AB
Cluster 3#Strategy 1	.04	.080712	AB	AB
Cluster 3#Strategy 2	.058	.028536	A	AB
Cluster 3#Strategy 3	.11	.080712	AB	AB
Cluster 4#Strategy 1	.0583083	.0232995	A	AB
Cluster 4#Strategy 2	.058125	.020178	A	AB
Cluster 4#Strategy 3	.08525	.040356	AB	AB

Note: Margins sharing a letter in the group label are not significantly different at the 0.05 threshold.