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DRUSILLA MARY ALICE TASZAREK

**THE DEVELOPMENT OF THE PRIVATE EQUITY INDUSTRY SINCE THE 2008
FINANCIAL CRISIS**

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DRUSILLA MARY ALICE TASZAREK

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Advisor: Prof. Dr. Servio Tulio Prado
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Committee members:

Prof. Dr. Servio Tulio Prado Junior

Prof. Dr. Antonio Gelis Filho

Prof. Dr. Ricardo Rochman

ABSTRACT

The private equity industry was experiencing a phenomenal boom at the turn of the century but collapsed abruptly in 2008 with the onset of the financial crisis. Considered one of the worst crises since the Great Depression of the 1930s, it had sent ripples around the world threatening the collapse of financial institutions and provoking a liquidity crunch followed by a huge downturn in economic activity and recession. Furthermore, the physiognomy of the financial landscape had considerably altered with banks retracting from the lending space, accompanied by a hardening of financial regulation that sought to better contain systemic risk. Given the new set of changes and challenges that had arisen from this period of financial turmoil, private equity found itself having to question current practices and methods of operation in order to adjust to the harsh realities of a new post-apocalyptic world. Consequently, this paper goes on to explore how the private equity business, management and operation model has evolved since the credit crunch with a specific focus on mature markets such as the United States and Europe. More specifically, this paper will aim to gather insights on the development of the industry since the crisis in Western Europe through a case study approach using as a base interviews with professionals working in the industry and those external to the sector but who have/have had considerable interaction with PE players from 2007 to the present.

Keywords: Private equity, financial crisis, regulation, Europe

RESUMO

A indústria de *private equity* experimentava um boom fenomenal na virada do século, mas entrou bruscamente em colapso em 2008 com o início da crise financeira. Considerada uma das piores crises desde a Grande Depressão dos anos 30, a crise financeira havia reverberado ao redor do mundo ameaçando o colapso de instituições financeiras e provocando uma crise de liquidez seguida por um enorme declínio da atividade econômica e recessão. Além disso, a fisionomia do cenário financeiro se havia alterado consideravelmente com bancos que retiravam-se do espaço de concessão de empréstimos, acompanhados por um endurecimento das regulações financeiras que buscavam melhor conter um risco sistêmico. Dado o novo conjunto de mudanças e desafios que surgiram deste período de turbulência financeira, a indústria do *private equity* encontrou-se tendo que colocar em questionamento práticas e métodos correntes de operação a fim de ajustar-se às duras realidades de um novo mundo pós-apocalíptico. Conseqüentemente, este estudo busca explorar como o negócio, gestão e modelo operacional de *private equity* evoluíram desde a crise do crédito com um foco específico em mercados maduros como os Estados Unidos e a Europa. Mais especificamente, este estudo visa reunir percepções acerca do desenvolvimento da indústria desde a crise na Europa Ocidental, através de uma abordagem de estudo de caso usando como base entrevistas com profissionais que trabalham na indústria e aqueles externos ao setor, mas que têm/tinham interações consideráveis com atores do PE de 2007 ao dias atuais.

Palavras-chave: Private equity, crise financeira, regulação, Europa

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LIST OF ACRONYMS

AIFMD	Alternative Investment Fund Managers Directive
AuM	Assets under management
BEPS	Base erosion and profit shifting
EVCA	European Private Equity and Venture Capital Association
FACTA	Foreign Account Tax Compliance Act
GP	General Partner
IPO	Initial Public Offering
LBO	Leverage Buy Out
LP	Limited Partner
PIPE	Private investment in public equity
PE	Private Equity
SEC	Securities and Exchange Commission
UK	United Kingdom
US	United States
VC	Venture Capital

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1 INTRODUCTION

Private Equity, while a recently modern phenomenon, has become a visible component of the modern finance landscape. Originating initially in the United States, these funds quickly expanded across the globe with Europe, in particular the United Kingdom becoming the second most mature base of operation. Throughout its relatively short and recent history as an organised and alternative asset class, it has undergone a variety of fluctuations and metamorphosis as a response to a changing external environment be it the whim of investors or the general economic situation. Until the 2008 financial crisis, PE had been operating mainly in the shadows of the economy but had been gaining notoriety for its cutthroat yet hugely profitable techniques that caught the interest of endowments and pensions funds (Spangler, 2013). Consequently, 2003-2007 became known as PE's second 'Golden Age' where funds raised during this period exceeded the total commitments to the entire industry since it began in the early 1980s (Rizzi, 2009). The buyout industry was in particular experiencing a renaissance never seen before with investments spiking at \$80 billion in the United States (Wadecki & Cendrowski, 2012). According to one of the founders of Carlyle, 'by the time the bubble had burst in 2007, the industry had over \$1 trillion under management and became the face of capitalism to some extent' (Spangler, 2013, p. 175). This euphoria however came to an abrupt end when credit markets crashed in 2008. High profile transactions from the mid 2000s boom underwent bankruptcies, PE firms were forced to lay off staff and immediately scaled back activities and a number of investors who had popularised PE investing experienced very negative returns where the very survival of PE was put in doubt (Lerner, 2011). PE became subject to a host of challenges that made it question its very *modus operandi*. Not only was it confronted with a harsher operating environment and an inability to do deals that would permit funds to realize profit on current holdings, there were no opportunities to put new money to work by buying companies at enviable valuations (Spangler, 2013). Additionally, with a general loss of trust in finance, PE like many other financial institutions entered the mainstream public consciousness, and became a target for closer scrutiny by governments and regulators alike (*ibid*). Consequently, a whole host of debates among experts has arisen as to how and if the industry is adapting its business model and management practices to cope with the realities of the new post-crisis environment. The aim of this study therefore will be to identify to what extent and how the PE industry in mature markets has evolved since the 2008 financial crisis.

1.1 Research objective and method

The purpose of this study will be to answer the following research question: *How has the private equity business model evolved since the 2008 financial crisis?*

This study will attempt to outline the main developments that have taken place in the PE industry focused on late stage and buyout investments in developed markets such as Europe and the United States since the onset of the 2008 financial meltdown. More specifically, the paper will try to identify main trends in the operating, business and management model of PE firms through primary research in the form of several mini interviews based on the author's current location that is Europe, in particularly France and the UK. The objective would be to narrow in on the activities of a PE operator(s) and where possible to juxtapose this with the points of view of other industry professionals who interact/have interacted with PE players to see if any agreement exists on the evolution that has taken place within the PE ecosystem since the crisis as well as the drivers responsible for this change.

1.2 Justification

This research can shed light on literature regarding the evolution of the PE ecosystem in particular in post crises situations by focusing on the implication of the viability of the PE model in the light of new economic and regulatory realities following on from the 2008 financial crisis. The 2008 crisis was considered unprecedented in its impact and lingering ramifications on not only the world economy but also on the operation of financial actors to the extent that the survival of certain actors such as PE was questioned. Given the context, it was considered a particularly interesting period to see how/if PE players evolved and what the extent of these changes were to see if the claim of a birth of a new model is indeed justified. Furthermore, to date there have been few academic studies focusing in particular on the development of PE business models as a result of the credit crunch and in particular on Europe. They have been by nature sporadic where this topic has normally fallen into the remit of third party provider consultancies offering advice on how PE firms need to position themselves to thrive and survive in a shifting landscape. This paper also attempts to contribute something novel by offering several personalised accounts of participants internal to the industry as well as external in order to unearth some unexplored points of view from a European perspective regarding the behaviour of PE firms in the aftermath of the credit crunch up to the present.

1.3 Chapter outline

The structure of the research is the following. In the first stage, a literature review will be carried out defining the industry, its ecosystem and how the business model functions taking into account determinants that influence PE activity. The second half of the literature review is dedicated to activity trends in the PE industry pre and post financial crisis with a specific focus on Europe and the US looking also at how the operating, business and management model has responded to new economic and regulatory realities. After presenting the methodology in the third part, the fourth section will present and detail the interviews conducted. Finally, the fifth part will be dedicated to the discussion of results and conclude the study.

2 LITERATURE REVIEW

2.1 What is private equity

2.1.1 Origins of private equity and definition

While no commonly held definition of private equity exists, it can be defined as ‘a medium or long-term equity investment that is not publically traded on a stock exchange’ (Wadecki & Cendrowski, 2012, p. 4). Businesses invested in range from early stage ventures through to mature companies that have needs for capital that cannot be met from public markets. Private equity industry’s assets under management (AuM) including uncalled capital commitments (dry powder) plus the unrealized value of portfolio assets have steadily increased since 2000 and reached in 2013 a figure of just under \$3.5 trillion (Preqin, 2014).

The history of private equity as an asset class dates from just after the Second World War in the United States with the founding of American Research and Development Corporation (ARD), a publicly traded, closed-end investment company. With the growing realisation that wealth was becoming increasingly concentrated in the hands of financial institutions as opposed to high net worth individuals, the ARD helped finance more than a hundred companies and was credited with the first major venture capital success story with its investment in a company named Digital Equipment Corporation (Elli & Florin, 2011). Since then, various tax and regulatory developments such as reduction of capital gains tax, the creation of the limited partnership and the appearance of lucrative exits such as initial public offering (IPO) have assisted the industry’s transformation into an organised and popular alternative asset class (Wadecki & Cendrowski, 2012). Consequently the late 1960s and early 1970s saw the formation of the first of today’s big private equity firms such as KKR, Warburg Pincus and Thomas Lee Partners.

Within the alternative asset class, private equity sits among hedge funds, real estate and commodities. The characteristics of this asset class is that it allows for enhanced returns, diversification and lower levels of liquidity. Other characteristics may include risk reduction against inflation, interest rates or foreign exchange rates, higher fees, less efficient markets and wide dispersion of manager returns (Mercer, 2012). The objective of private equity in particular is to improve returns to public equity markets and access new sources of performance (ibid). It is an investment with a long horizon and has a risk profile that varies over time.

In addition to the illiquidity of capital that is an intrinsic component of private equity investing (Demaria, 2012), another key defining characteristic according to Metrick and Yasuda (2009) is information asymmetry between insiders and outsiders. Private equity funds consist of portfolios of private companies on which little information exists however the PE firm has the upper hand in comparison to the uninformed investor. The authors go on to give a more comprehensive definition of the asset class that is distinguished principally by four main features. Firstly, it acts as a financial intermediary, taking investor's capital and investing it directly into portfolio companies, unlike angel investors that use their own capital. PE funds are thus organised as limited partnerships where the PE firm acts as the general partner (GP) and investors act as the limited partners (LPs).

Secondly, investments are made in private companies. There are various subcategories dependant on the investment strategy of the firm but venture capital and buyouts are the most important two (Wadecki & Cendrowski, 2012). Venture capital refers to investments made in start-up companies/companies in early stage growth whereas buyouts and late stage investments tend to refer to investments made in established companies, to which the term private equity is now more frequently associated. Furthermore, the relationship between asset classes within private equity and the relationship between private equity and other asset classes is not always clearly drawn and overlaps however key distinctions do remain. For a brief example, take private equity funds and hedge funds¹ to which PE is often compared.

¹ Hedge funds mainly invest in public listed securities and engage in highly leveraged trading strategies that use short selling or complex derivatives. Superior returns are made through making a series of trades in these derivatives and underlying assets.

Private Equity Funds	Hedge Funds
Investment strategy	
Use of transactions and active management to generate profits	Profits are made from a series of related trading positions rather than single investment decision
Control and influence	
Substantial and controlling stake in the business	Small or large minority stakes but limited control and no special rights
Financial structure of individual investments	
Borrowings within investment company	Borrowings within the fund
Information prior to investment	
Substantial financial, commercial and legal due diligence undertaken by PE funds prior to making an investment	Access to publicly available information only
Information and monitoring while invested	
Regular detailed reporting to PE fund managers and investors in PE funds	No detailed information to fund managers. Reliance on public information only.
Liquidity in underlying investments	
Investments are illiquid by nature	Shares are freely tradable
Rewards to fund managers	
Management fees plus carried interest (share of capital profits)	Fee income
Fund structure	
Long term illiquid commitments for a finite period – i.e. 10 years Close ended fund No borrowing within the fund and low bankruptcy risk	No limited duration Investors can sell their units of investment at any point in time Open ended fund Carry a risk of bankruptcy and can suffer a ‘run’ on the fund

Table 1 - Key differences between hedge funds and private equity (Wright & Gilligan, 2008; CACEIS, 2009)

The third main feature listed by Yasuda and Metrick (2009), which is claimed to be the *raison d'être* of PE and a key determinant in a fund's performance, is the active role in monitoring companies in a given portfolio. GPs seek to control the businesses they invest in and influence the actions of management through either board seats, veto rights and various other control rights enacting thus rapid organisational change, improving operations and revising business plans where necessary. Lastly, the fourth main characteristic listed relates to how money is returned to investors at the end of the investment period. With the primary goal being to maximise financial return, this is achieved through exiting investments in either a sale of the PE stake to another investor or company or an initial public offering (IPO).

To conclude, PE funds differ from other funds in that they are illiquid long-term commitments in private companies and historically do not use debt within the fund structure itself to generate returns. They are required to return money to investors within a set time period highlighting

thus the importance of paths to exit. In order to better appreciate the way funds are organised taking into account the above-mentioned characteristics, an overview of structure and operations of the private equity market shall now follow on.

2.1.2 The private equity ecosystem: players and organisation

The private equity business model involves different players where the major ones can be categorised as private equity issuers (portfolio companies), intermediaries (the PE firm (GPs) and the fund) and investors (LPs).

2.1.2.1 Issuers

According to Fenn, Liang and Prowse (1995) in their overview of the PE market, the issuers are the companies that are seeking capital and cannot raise financing from the debt or public equity markets. These can be young firms that are developing innovative technologies that show high growth rates in the future, early stage firms that are in the early stages of commercialisation or later stage companies that have several years of sales behind them. The latter category seek private equity input to finance expansion through new capital expenditures or acquisitions or to finance changes in capital structure or ownership. Public companies can also be issuers when they go private and seek a combination of debt and private equity to fund a buyout by either current management, employees or outsiders such as private equity. Companies can also seek private equity to help them through periods of financial distress but this can be thought of as a specialised segment of buyouts that target mature companies.

Given the needs of different types of businesses in terms of financing, the PE market thus has a variety of investment strategies where funds can be specialist by deal size such as venture capital or mid-size companies or by sub-sections of deal size such as distress adding to the heterogeneity of the industry. According to the European Private Equity Venture Capital Association (EVCA), the different deal types by business stage of development can be categorised as the following: small - companies with enterprise value of under €50 million; mid – market - €50-500 million; large - €500-1,000 million; mega; larger than €1,000 million. Furthermore, the European market does not necessarily make a distinction in the private equity industry when talking about venture capital or late stage investments unlike the US. PE as used by the EVCA denotes investments in any stage of the company lifecycle, which is not the case in the US, where the term generally refers to buyouts and late stage investments. Consequently, given the focus of this paper the term private equity going forward will not be consistent with

EVCA definition unless otherwise stated and will refer to the buyouts of established business and late stage investments.

2.1.2.2 Intermediaries

Here a partnership agreement known in the majority of cases as a limited partnership sets up the framework for the fund and the interaction between it, the fund manager/PE firm and the investor. The fund is a pooled investment vehicle invested in by investors and also senior members of the PE firm for investment in portfolio companies and is managed by the fund manager or GPs on behalf of the investors.

The role of the GP is thus to provide investment advice to the fund and identify and screen opportunities. It is legally responsible for overseeing the funds' investments and also executes investment decisions and as a result receives fees for these services. The GP is also obliged to supply regular reports on all its activities and investments to investors while continuously analysing, advising and monitoring portfolio companies, so actively managing its investments. In parallel to this, the fund manager needs to regularly raise additional funds as well as have an eye on sourcing and prospecting for new transactions.

The limited partnership agreement (LPA) while allowing for favourable tax treatment regarding capital flows back to the partners, has the important function of aligning interests between the GP and the LP and provides a good basis for corporate governance according to Demaria (2012). It specifies the lifetime of a fund, how capital commitments are to be drawn, allocations and distributions, covenants and restrictions, carried interests and management fees. It also clarifies investment restrictions placed on GPs, provisions for extending the fund's lifetime, commitments made by LPs and actions to be taken should investors default on their commitment (Wadecki & Cendrowski, 2012).

2.1.2.3 Investors

A variety of groups invest in the private equity market: endowments, public and private pension funds, wealthy families and individuals, insurance companies, investment banks, funds of funds², sovereign wealth funds etc. Here a distinction can be seen between the US and Europe

² Funds that invest in other private equity funds, provide investors who are new to the asset class or do not have the facilities or resources to invest into PE, access to shared expertise and the opportunity to diversify investments. They also commit money into the products they manage hence differentiating themselves from pure asset managers (Demaria, 2012).

where institutional investors such as pension funds have a more important weight as a source of finance in the US than in Europe (Elli & Florin, 2011). Financial institutions dominate in the European landscape (ibid). They are passive investors with no influence on the investment strategy of a fund once it is established. They are informed by the progress of their investments through regular annual reporting provided by the fund manager.

Most LPs invest for strictly financial reasons (Fenn, Liang, & Prowse, 1995). Risk-adjusted returns on private equity are expected to be higher than the risk-adjusted returns on other investments; it provides for diversification away from public markets and presents lower correlation to the returns of other asset classes. As Spangler (2013) states, performance will always be one of the main factors when selecting a private fund to invest in. In addition, the decision to invest into a particular vehicle is the result of an assessment of the manager's track record and past experience, the investment strategy to be followed by the fund alongside the organisational infrastructure that supports it (ibid).

2.1.2.4 Agents and advisors

Alongside these main players exist another important group of actors that can be known as information players as named by Fenn, Liang and Prowse (1995). These advisors can work on behalf of either the GP or the LP and can place private equity, raise funds for PE partnerships or evaluate partnerships for potential investors. For the LP, they can help facilitate the search for equity capital, partnerships that fit the sought risk-return profile as well as assist in timing, structure and pricing of PE issues. For the GP, known as gatekeepers, they help introduce PE funds to potential LPs and can assist at every stage of the fundraising process such as marketing materials and due diligence preparation. As Fenn, Liang and Prowse (1995) state: 'They exist because they reduce the costs associated with the information problems that arise in private equity investing' (p.8).

Among other significant actors involved are auditors, legal and tax advisors. Auditors, appointed by the GP, are required to analyse and to submit an opinion on the financial statements of the investment vehicle. This involves looking to see whether these statements have been correctly prepared according to the applicable accounting norms and also implicitly covers the fair value of the investment, carried interest and the income and expenses of the investment vehicles among others (CACEIS, 2009). Legal advice and support is required for the entire structure and to ensure that there is sufficient protection from a legal stand point for

each party involved. Legal documentation is required on elements involving structuring and financing, shareholder's or subscription agreements and/or debenture agreements (ibid). Lastly, tax advisors are required to set up suitable investments schemes within a worldwide framework given the growing globalisation of PE investments. Companies are structured in different jurisdictions where VAT costs and tax on income can be reduced using the know-how of such advisors.

Another important player in the PE ecosystem especially in the case of leverage buyouts (LBO) transactions are banks, whose role needs to be highlighted. Not only can banks be investors in PE funds as mentioned previously but they also act as lenders or advisors. Banks can provide the leverage in LBOs where this debt can be channelled from one single investment bank or through several know as syndication. In this model, banks are constrained by the fact that losses fall on their balance sheet where consequently risk is higher than in the advisor model. The latter has been growing in popularity in recent years where the proportion of loans held by a lead bank has been falling for a number of years (Wright & Gilligan, 2008). Here, the source of fees is no longer interest earned from lending a portfolio of loans but from the act of arranging debt. Banks thus play an important function with regards to the dynamics of the ecosystem either in the role as an investor or a lender to the PE industry.

2.1.3 The private equity cycle and incentives

As seen earlier on, a PE fund has a limited lifetime during which it undergoes four main stages that can be classified as organisation/fundraising/, investment, management and harvesting period. In the fundraising stage, GPs focus on recruiting investors and getting them to pledge capital to the fund while also clarifying its strategy and investment focus. This may be quite a lengthy phase and be more or less challenging depending on the economy, the credentials/reputation of the investment manager, the investors' appetite for PE and the nature of the investment strategy being proposed. In addition, standard advertising channels may not be used i.e. newspapers thus fund promotion depends very much on word of mouth and personal contacts in order to raise sufficient capital.

The subsequent phase concerns the development of deal flow for the fund through the sourcing, evaluation and execution of investments that coincide with the fund's investment strategy. On identification of suitable companies to invest in, which may be a process between 1-4 years,

the GP will call capital from its LPs (known as a drawdown), and a GP can do this at any point in time up until the investment period of the fund ends. Normally during the second year, the fund will focus on managing the investments in its portfolio company and on maximising the value of investments already made which may involve a change in the management team in a portfolio company.

Finally, in the harvest period the PE fund seeks to realize gains made on their investments and distribute proceeds to investors. After a holding period that can range between 3-7 years, the GP exits through either an outright sale (to a strategic buyer), an initial public offering (IPO) or a merger (Elli & Florin, 2011). It is the GP's goal to realize all investments before the fund's liquidation at the end of the fund's lifetime however extensions to the life of the fund may be necessary to ensure successful exits (Wadecki & Cendrowski, 2012). The distribution of funds is then based on a waterfall model where first investors receive back the capital they invested in the fund. Then LPs may receive a hurdle rate or a preferential return on that capital that can be between 6-8%. Lastly, any profits earned are then split between the GPs and LPs. The GP return on capital known as carried interest amounts to 20% where the return for LPs amounts to 80%. A slight difference however exists between the American waterfall model and the European one which is worth mentioning. As Cendrowski (2012) points out, in Europe, proceeds are only distributed until after the fund has been liquidated whereas in the US distributions can occur before a fund is liquidated.

Carried interest represents the primary incentive mechanism for GPs. This serves to align the interests of the GPs with those of the LPs since it incentivises GPs to generate strong returns on investments (Wadecki & Cendrowski, 2012). Fees also act as an important source of revenue for GPs as do returns made from investments. The management fee, which is the bulk of a GPs fixed revenue, is remuneration for services provided by the GP involving advice, analyses, fund management and reporting. The fee can be anything from 1.25 to 3% per year and is normally calculated as a percentage of the fund's size. For smaller funds, the fee is 2% where larger funds charge a slightly lower percentage being able to benefit from the administrative economies of scale (Wadecki & Cendrowski, 2012).

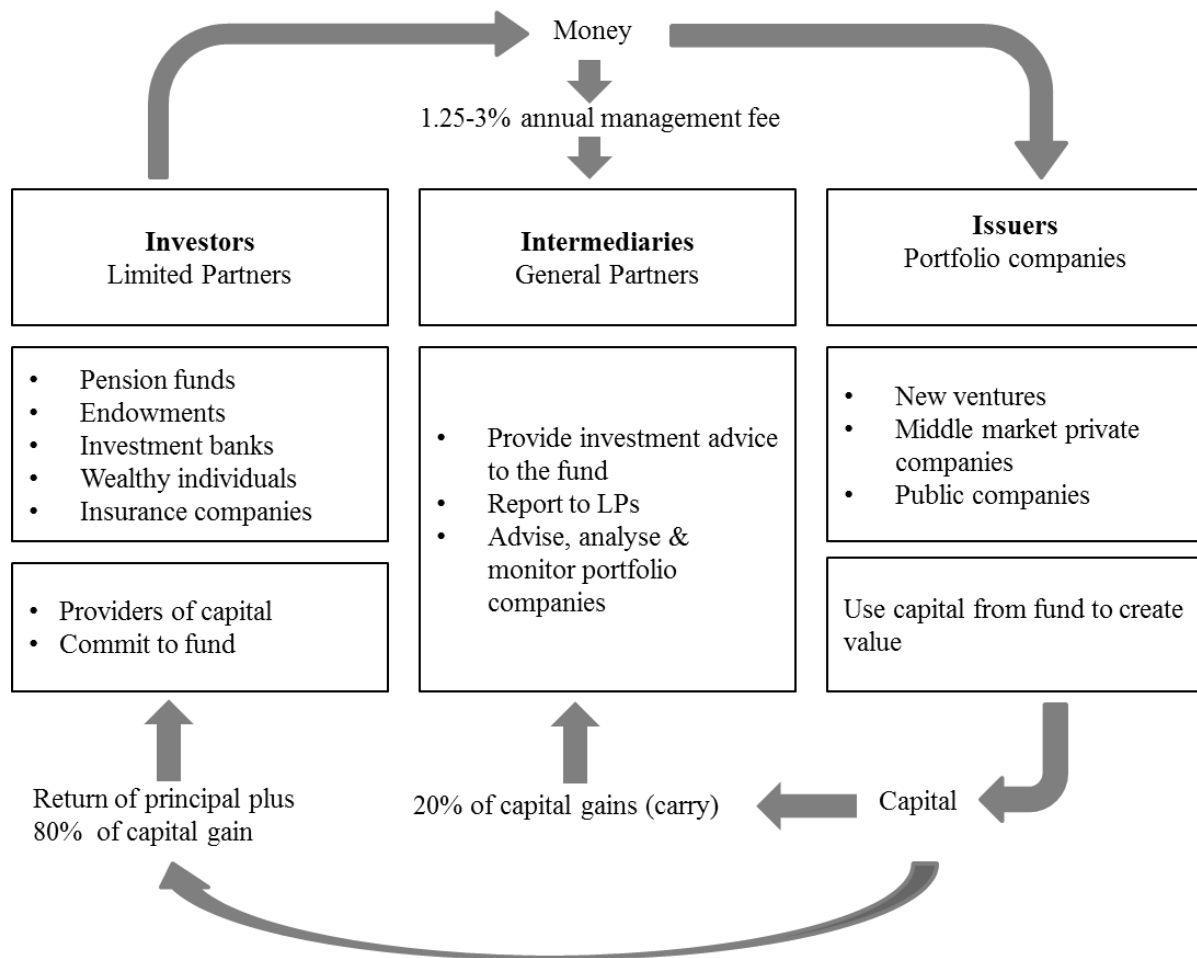


Figure 1 – Private equity process and cash flow overview (Demaria, 2012, Wadecki & Cendrowski, 2012)

2.1.4 Value creation and the private equity model of governance

In order to complete the overview of the PE business model, a summary of the governance model that truly distinguishes the PE asset class from other alternative asset classes needs to be looked at. While there has to be an entrepreneur at the core of the business according to Demaria (2012), who is in part the source of value creation, the driver and development of value creation is the PE firm. Initially of course, in the companies financed by PE there has to be some presence of innovation either in the product or service delivered, the processes it has engineered or the way it contributes to the structure of the market (ibid). However, in order to deliver a high level of returns, a PE firm can focus on value creation through concentrating on boosting companies through top-line growth, operational improvements or other areas of company improvement (ibid). Binding together these levers of change is corporate governance,

the idea that management dominates change (Wadecki & Cendrowski, 2012) and which PE firms have appeared to master and implement successfully at portfolio firm level.

PE firms have been claimed to have pioneered efficiency enhancing innovations regarding corporate governance, which is claimed to be their real, overlooked source of success (McKinsey, 2007). Having in mind that the goal of a PE firm is to maximise a company's long-term value within a set time period, all decisions and changes are made in support of this effort. The focus of PE firms is thus to monitor performance, incentivise management, instil a culture of discipline and to generate cash flow (Wadecki & Cendrowski, 2012). The last point is particularly important since cash is important for a business to maintain its liquidity enabling it to pay bills and also any interest payments on debt raised to finance the deal in the case of buyouts. "Because PE buyouts are often financed with large amounts of debt, cash discipline is paramount to the success of a deal" (Wadecki & Cendrowski, 2012, p. 170).

Consequently, as Wadecki & Cendrowski (2012) go on to explain various changes are incorporated and can be noted at firm level when a PE firm takes control of any organisation. Regular monthly or weekly reporting can be introduced in order to detect any performance issues that can be dealt with immediately. This also ensures proper management of cash and financial position. Secondly, in order to align interests of management with those of the GP, managers can subscribe to large equity stakes for their participation in a buyout deal. This makes sure that they work towards the general corporate strategy as defined by the GP and also since they are less concerned or pressured by the opinions of the outside equity community (unlike in a public firm), they are able to focus their efforts on long-term planning without any fear of penalties. Furthermore, to generate cash flow, the PE firm will sell non-core assets and/or close non profitable business lines, or cash hungry business lines to use this cash to pay down the debt used in a deal. This is what has earned PE the reputation of assets strippers especially in its early days, however with an eye on creating shareholder value, they are better placed or more able to make hard decisions that a portfolio company would shun from taking, hence the conclusion that: "private-equity firms often seem to provide better corporate governance than is generally found at many public firms" (Capitalism's new kings: How private equity is changing the business world, 2004)

The general perception that the PE governance model supersedes that of the public corporation is a result of several advantages that PE intervention brings (Beroutsos, Freeman, & Kehoe,

2007). This can be attributed to several main reasons. As already mentioned above, a strong alignment of interests is created between management and the PE firm through the structure of incentives whereby management at portfolio companies can buy into equity stakes at the time of the PE transaction thus being able to profit from gains made in the event of a successful turnaround of the firm. Secondly, PE professionals take an active management approach on the board of the companies they own, influencing heavily strategic issues with a focus on performance rather than compliance, which is the case of directors on the board of public companies. Lastly, there is a clear focus on 'invest to sell', where value creation must be achieved by the exit period of an investment where "successful exits are essential to the long-term existence of a private equity firm" (Harrigan, Daniel, & Welge, 2009, p. 12). The willingness of LPs to invest in PE is essentially dependent on a track record of positive returns where cash returns to LPs are a determining factor in their commitment to the asset class (ibid).

To elaborate further on the last point, fund performance is normally based on two indicators that of the multiple of investment and the internal rate of return (IRR). Academic research on private equity returns versus public equity returns is mixed, where some experts do not sing in unison with one another claiming that the level of returns is lower than that of public market indexes as a result of the management fee structure (Elli & Florin, 2011). Nonetheless, there is evidence to suggest that returns to PE have exceeded those of the public market; McKinsey research shows that only 25% of PE firms outperform relevant stock market indexes overtime and when they do, they do so by a considerable margin (Beroutsos, Freeman, & Kehoe, 2007). The source of this performance can be attributed to a combination of financial engineering (i.e. increasing leverage to drive returns) and active ownership, however there appears to be agreement that a high IRR is mainly as a result of the PE governance model more than anything else. In the combined study between Klier, Welge and Harrigan (2009), the authors compare two PE model management types, one the 'Financial Investor' that has a strong focus on financial engineering and the 'Interventionist' that engages in active management to improve performance. They reveal that the interventionist model outperforms the less active management model by a substantial margin. The former outperforms the latter by 5% points in net IRR over a 5-year performance period where over a 10-year time frame the performance gap increases to 14%. Furthermore, other research has shown also that 'flips are indeed a flop', where for PE backed companies to generate higher returns versus public indexes, they need to stay a significant time in the GP portfolio (Guerrera & Politi, 2006).

2.1.5 Determinants of private equity activity and development

In order to understand the impact of the 2008 financial crisis on the PE industry and its business model, a brief overview of widely acknowledged variables that influence the development and activity of the sector needs to be taken into account.

Before going into further detail however, a note has to be made on the use of the term private equity in the context of determinant analysis. As mentioned previously, the term private equity refers to late stage investments and venture capital refers to early stage/seed investments, particularly in the US. While most literature available focuses on the VC segment, it is worth taking a look at factors that influence the VC industry since (1) academics tend to make a distinction between variables that determine the level of venture capital activity and that of late stage investments and (2) many determinants tend to be valid across the PE investment spectrum.

Ever since the industry began to take form since the 1960s/1970s, it has undergone a series of fluctuations that can be attributed to a variety of environmental and institutional factors, that have been analysed from either and/or the supply and demand side. Supply refers to factors that incite investors to place commitments in PE funds whereas as demand refers to why companies seek capital/funding. Not all authors reach the same concluding remarks or make the same correlations emphasising some variables more than others however a common set of determinants does re-appear in current academic literature. In addition, some factors carry more weight than others depending on the countries under study and where they are in the stage of economic development.

Among environmental variables that have been cited that impact the PE ecosystem are economic growth, interest rate, private pension fund engagement, and capital gains tax rate. GDP growth or the economic cycle can lead to an increase in the number of start-ups and greater VC activity³ which thus increases funds supplied (Jeng & Wells, 2000). Since economic cycles influence consumer confidence and behaviour alongside projected demand and thus sales, the attractiveness of firms as investment targets changes accordingly (Demaria,

³ The market need for capital inflow is difficult to determine due to the inability to measure the number of company creations needing PE backed capital that depend on a number of macro-economic drivers and market conditions (Demaria, 2012).

2012). Interest rates can impact supply since high rates would decrease the attractiveness of investing in VC funds, given that bonds can be a viable alternative investment to VC (Gompers & Lerner, 1998). Also according to Demaria (2012), high rates affect LBOs since they can condition the impact of financial leverage in a deal. Capital gains tax also can be an important variable in the PE ecosystem where a lower tax can incite workers to start their own company (Gompers & Lerner, 1998). While it has been shown that investor commitments increase as a result of the stimulation of demand (Romain & de la Potterie, 2004), supply can also be stimulated through the fact that a lower rate will lower the tax impact on an LP's bottom line (Demaria, 2012). Another element affecting supply is regulation surrounding institutional investors such as pension funds whose contribution to the asset class in the United States was eased after the passing by Congress of the 'Prudent Man rule' in 1978.

Other environmental variables that are frequently looked at and that may be more relevant at VC level include entrepreneurship activity, quality of accounting standards and labour market rigidities. Strict labour laws make the hiring and firing of employees more time consuming and costly thus negatively impacting the demand for VC funds (Jeng & Wells, 2000). Good accounting regulation on the other hand impacts supply positively since there is more information with which to monitor investments. Furthermore, an economy that encourages enterprise and entrepreneurialism is viewed as crucial to a buoyant and well-functioning PE ecosystem by leading investment managers (J. Moulton, personal communication, 10 November 2014). While entrepreneurship is difficult to measure in itself, proxy measures may be used such as good economic climate, low capital gains taxation and flexible labour markets (Marti & Balboa, 2001).

Looking at institutional variables, the regulatory framework and legal framework has been cited as being important in determining industry structure and development. The European Private Equity and Venture Capital Association (EVCA) have listed a number of factors that shape a favourable environment including favourable conditions for pension fund and insurance company investment, availability of dedicated fund structure for PE, fiscal incentives for LPs as for companies financed by PE (Bedu & Montalban, 2014). Legal enforcement of contracts as well as investor protection further positively encourage investor commitment. The latter determinant though is claimed to decrease in importance though as investments shift from the VC segment to LBO with other variables growing in significance such as low employment protection and the ability of LPs to invest in LBO funds (Bedu & Montalban, 2014). Bedu and

Montalban (2014) highlight the role of the state and government VC/LBO orientated programmes, as well as the role of regulation on the development of financial markets that is more or less influential depending on the legal origin of countries. Having a well-defined, solid, tax and regulatory base is viewed by the GP community as crucial to the ongoing operation and development of PE industry (J. Moulton, personal communication, 10 November 2014).

One other variable frequently discussed between authors is having an exit mechanism for investments such as IPOs or trade sales that are more prevalent in Europe. Leachman, Kumar and Orleck (2002) claim that profitable exit options are essential to the growth and development of private equity across both time and countries where the importance of IPOs is picked up by Jeng and Wells (2000) which is particularly important in later stage VC capital investments. Black and Gilson (1997) also claim that an active IPO market is crucial to a VC ecosystem but is more prevalent in a stock market centred capital market than a bank centred market, with the presence of a developed stock market a prerequisite. On the supply side, large investors are more willing to supply funds if they know they can recover their investment and on the demand side, an exit mechanism gives entrepreneurs an added incentive to start a company in the case of the VC segment (Jeng & Wells, 2000).

Other factors that can be classed as more firm specific or micro determinants and that influence the scale of investor commitments are performance (as mentioned in the previous section) and reputation. Fund performance is an important factor in the ability of PE firms to raise new funds as is reputation in the form of age and size (Gompers & Lerner, 1998). The decision to invest is clearly based on the expectation of future returns, where both past performance and reputation are components of such expectations (ibid). Older, larger VC or PE firms have more established reputations with a track record so they may be able to receive larger capital commitments than similar young firms (Marti & Balboa, 2001).

To conclude, the PE ecosystem requires a variety of conditions in order to grow and flourish, with some diminishing and others growing over time as the focus of investment stage changes. Some impact purely deal flow or supply of funds while others impact both elements. With this in mind, an overview of PE activity up to the financial crisis and beyond shall now be carried out.

2.2 Overview of private equity activity

2.2.1 Private equity trends up to 2007

As aforementioned, private equity is an asset class originally American in nature but rapidly spread to Europe, which became the second most mature market for private equity before taking root in other less developed markets such as Latin America and Asia. In 2008, North America was home to the largest share of funds in number and aggregate value representing 48.1% and 54.4% respectively (CACEIS, 2009). Western Europe had a 24.1% market share in terms of number of funds and a 22.8% market share in terms of aggregate target value with the remaining share represented by funds based in other geographies (ibid). Given that the concentration of the industry is overwhelmingly present in these two regions which are most likely to represent the features of the traditional private equity ecosystem as outlined in the previous section, the focus of this literature review thereon shall be on Europe and the United States, data permitting.

Since the emergence of PE as a recognised and organised asset class in the 1980s, private equity activity has experienced several boom and bust cycles. The first significant wave began in the 1980s, the second one at the end of the 1990s and third began in the early 2000s. The 1980s was the decade in which arose the current form of the private equity industry in the United States with the first massive waves of LBOs (Mahieux, 2013). Those years also saw the development of firms as fund managers and the creation of the overall institutional framework for investments (ibid). Buyout fundraising had surpassed VC fundraising for the first time that was facilitated by low capital gains tax rates, high availability of bank debt and the establishment of the junk bond market (Wadecki & Cendrowski, 2012). Other characteristics of transactions of the 1980s were small \$5-100 million mature middle market firms; 100% PE ownership; exits through IPOS / sale in 3-5 years with expected IRR of 25%; LP composed of endowments and pension funds and modest EBITDA multiples (Rizzi, 2009).

As competition for transactions increased PE firms moved from mid-sized companies to public to private transactions and this had resulted in overpriced, over leveraged capital market driven transactions (Rizzi, 2009). Purchase prices as a multiple of EBITDA had increased from 6 to over 9x and leverage levels had increased from 4x to over 6x. EBITDA (ibid). The LBO wave came to an abrupt end in 1989-1991 with the collapse of the high yield bond market and the onslaught of recession that did not help generate stable returns (Acharya, Franks, & Servaes,

2007). LBO volume underwent a severe contraction and fell from \$88 billion in 1988 to only \$7.5 billion in 1991, a drop of more than 90% and it would be only until 2003, when the LBO market would again exceed the total value reached in 1989 (ibid).

The 1990s on the other hand became the boom time for venture capital, which benefited from huge capital investment in areas such as internet and computer technologies. VC fundraising levels grew from about \$12 billion in 1995 to over \$111 billion in 2000 representing a CAGR of 55% where buyout fundraising in this period experienced a CAGR of 22% reaching \$72 billion in 2000 (Wadecki & Cendrowski, 2012, p. 35). Accelerated economic expansion and the American Telecommunications Act of 1996 that helped foster competition in the sector, further fuelled private equity investments (Elli & Florin, 2011). Dot com fever had set in where investors strayed away from typical market based evaluation methods such as price revenue multiples and gave preference to price/web hits multiples (Wadecki & Cendrowski, 2012). The Dot.com bubble however crashed in March 2000 and venture investors who until then had been receiving net annual returns of up to 200%, had lost on average 40% of their capital in the following year (Wadecki & Cendrowski, 2012, p. 37). Both VC and the buyout industries declined significantly with investment and fundraising levels plummeting; buyout fundraising went from \$72 billion in 2000 to \$21 billion in 2002 and the industry went largely into hibernation (ibid).

The industry soon shortly began to revive again with deal activity beginning to pick up from 2003 onwards. Similar economic forces were at work as in the first boom wave experienced by the sector in 1980s such as a favourable capital market context characterised by high equity prices, plenty of cheap debt and large influxes of capital (Mahieux, 2013). Other characteristics in common included a shift in focus from midsize companies to public to private transactions⁴, high price multiples (up to 10x EBITDA) and excessive use of leverage that could present up to 80% of the acquisition price (ibid). However, the third boom phased demonstrated some distinctive characteristics that were additionally driven by economic forces that underlined the subprime movement (see next section) (Rizzi, 2009).

⁴ Public to private acquisitions of listed companies by LBO funds accounted for 15% of the volume in 2003 and 45% in 2007 (Rizzi, 2009, p. 2)

With low returns on public equity as a result of low interest rates, investors began to look to other more lucrative alternative asset classes in which to place their money such as PE and hedge funds. In addition, there was an explosion in liquidity in the credit markets from 2003 onwards fuelled by increased levels of investment in petrodollars, huge government surpluses as well as pension, foundation, and private wealth (Acharya, Franks, & Servaes, 2007). This drove an unprecedented supply of leverage throughout the global financial system and huge amounts of cheap debt were available to finance LBO operations. The banks' 'originate to distribute strategy' plus the recourse to securitisation technology resulted in the development of structured products that gave management companies access to an endless supply of debt. This coupled with a deterioration in the level of protection of covenants and less stringent borrowing conditions for borrowers impacted the size and nature of transactions in the market (Mahieux, 2013). The industry became focused on megadeals where acquisitions in excess of \$1 billion dollars were commonplace. In 2007 in the US, this segment represented three quarters of the value of total PE investments which had grown more than 15x in value since 2003 (ibid). The record transaction of the time was the acquisition of Texas Utilities for \$44.4 billion in June 2007 by KKR and TPG (Rizzi, 2009). The industry was enjoying a renaissance never seen before by investors where fund sizes, returns and distributions were at record highs (Wadecki & Cendrowski, 2012). This all however was to come to an abrupt end in the summer of 2007 with the onset of the subprime crisis to which our attention now turns before examining the impact of the crisis on PE activity.

2.2.2 Origins of the 2008 financial crisis

The financial crisis that hit the global economy from late 2007 is without precedent in post-war economic history (European Commission, 2009). Although it had many features in common with previous financial-stress driven recession episodes such as high leveraging, soaring asset prices and a long period of rapid credit growth, its size and extent were exceptional (ibid).

The crisis had multiple causes but in order to understand how it unfolded, developments in the housing sector and mortgage lending up to 2007 in particularly in the US need to be glossed over. A bubble had formed in the American housing market as house prices increased each year from the mid-1990s to 2006, moving out of line with fundamentals like household income (Baily, Litan, & Johnson, 2008). In addition, interest rates were kept low where the demand

for mortgaged financed housing increased. Thus cheap mortgages, coupled with the widespread belief that housing values would continue rising, accelerated the rising demand for homes and the resulting price spike (Beachy, 2012). This as a result helped drive the loosening of lending standards leading to a mortgage lending spree and a change in the composition in mortgage lending (Baily, Litan, & Johnson, 2008).

Mortgage lending dropped after 2003 but the share of subprime lending and Home Equity Loans increased with the total share of prime mortgages dropping from 64% in 2004 to 52% in 2006 (Baily, Litan, & Johnson, 2008, p. 14). People with poor credit histories (sub-prime) were no longer closed out from the housing market and people were now also able to borrow against the rising value of their home. Lending standards were visibly much more lenient and could be sustained by the fact that housing prices were on a continuous upward trend where if there were to be any default, properties could be re-claimed and taken back as collateral to pay back any outstanding debt.

Roots of the crisis can further be traced back to incentives and instruments used in the housing and mortgage origination markets. With US Treasury bonds offering uninteresting returns as a result of declining interest rates, investors were on the lookout for more lucrative opportunities where banks saw an opportunity to meet investors needs for higher returns and those of homebuyers seeking accessible mortgages through the use of financial products such as mortgage backed securities (MBS). Financial innovations had made it possible for the selling off of a completed loan by the originator to another financial institution. The institution that originated the loan had no interest in ensuring that it is a good loan since it did not sit on their balance sheet with risk being transferred to the new recipient. This had the effect of increasing the supply of credit and encouraging originators to lend to risky borrowers, which in turn increased housing demand and housing prices (Baily, Litan, & Johnson, 2008).

Securitisation, the process of combining assets into a financial instrument, which is then divided and sold off to a variety of investors with different risk appetite, contributed to the build-up of the crisis in another way in that it created an enormous gap between the origination of the loan and the investors who ultimately held the underlying risk (Baily, Litan, & Johnson, 2008). Banks possessing receivables of thousands of prime and sub-prime mortgage loans would issue a security (known as an MBS) from this pool which would be separated into senior, mezzanine (junior), and non-investment grade (equity) tranches. The top or senior tranche were

the safest ensuring that investors here would get the preferred claim on the revenue streams generated from the mortgage repayments while the investors in the lowest tranches would only get paid after the upper tranche payments have been made. Evidently, returns and risk would be lowest at higher tranches with lower tranches offering higher risk but higher returns too.

Securitisation however did not stop here, since MBSs were subject to second and third rounds of repackaging in the form of collateralized debt obligations (CDOs). Here numerous assets would be pooled together from MBSs to other asset-backed securities (ABS), where CDO investors like with MBSs acquired both default risks and the rights to mortgage payments, mimicking again a similar structure of return/risk as with stratified tranches. Risk was only being further re-distributed further down the private financial sector however with the view that CDOs represented safe, high yielding opportunities where the sales of mortgage backed CDOs went from \$30 billion in 2003 to \$225 billion in 2006 (Beachy, 2012, p. 27). In addition, the rise of credit insurers and credit default swaps (CDS), where insurance companies would insure the top tranches of these products against default risk, further heightened the confidence of banks in the tradability and the money making potential of MBSs and CDOs. This in turn encouraged financial institutions to borrow more and more money (increasing their leverage) to finance their purchases of such mortgage related securities. Leverage also allowed banks to amplify their returns where from 2000 to 2007, the average degree of leverage in the financial industry increased by 30% (Beachy, 2012, p. 29).

A complex, opaque and intertwined structure had thus developed linking house owners to the broader financial community, where the former unaware that if house prices were to decline or defaults in mortgage payments were to occur, the demise and paralysis of the financial community would ensue. This is indeed what happened from late 2006 when, America suffered a nationwide house-price slump (Crash course, 2013). As house prices plunged, the trillions of dollar worth of MBOs and CDOs held by financial institutions slumped massively in value provoking an asset dump that only caused prices to drop even further (Beachy, 2012). Meanwhile highly leveraged banks that were facing increasing losses on MBOs/CDOs, could not benefit from CDSs which they possessed. Insurers began to run out of funds as defaults started exceeding CDS payments from investors who also began to lose faith that insurers could actually cover such losses further worsening in turn the insurers ability to deliver. Banks thus found it increasingly difficult to pay off loans taken from other financial institutions, culminating in the Lehman bankruptcy in 2008.

The complex chain of debt between counterparties that had developed as a result of the boom in the housing market, was vulnerable to just one link breaking provoking a domino effect (Crash course, 2013). The failure in one financial institution provoked a successive chain of defaults and bankruptcies in other institutions linked by debt. Consequently, panic spread throughout the international financial community prompting a contagion effect where the failure of one firm caused a panic-induced contraction of credit, causing even unconnected financially stable companies to suffer due to the inability to take out new loans (Beachy, 2012). The impact of both these tendencies was a 'credit crunch' where banks stopped lending to each other, to businesses, to individuals provoking a credit freeze. Nobody trusted anyone anymore. Non-financial companies, unable to rely on being able to borrow to pay suppliers or workers, froze spending in order to hoard cash, causing a seizure in the real economy (Crash course, 2013). The credit crunch was no longer confined to the financial world but had transmuted into a fully blown economic crisis sending ripples around the world.

Panic broke out in the stock markets, banks restrained credit and economic activity plummeted alongside world trade (European Commission, 2009). Companies saw sales drop and confidence of both consumer and business fell to unprecedented lows (ibid). The financial crisis triggered a global economic recession that resulted in more than \$4.1 trillion in losses (Authers, 2014, p. 139). Unemployment rates climbed to 10% if not more in some countries, stock markets crashed across the world and American investors lost roughly 40% of the value of their savings (ibid). The effects of the crash in addition were still being claimed to be felt five years on, with GDP still below its pre-crisis peak in many rich countries and general recovery remaining feeble (Crash course, 2013). Given the long term, far-reaching implications sparked by the crisis, the state of the PE industry after the credit crunch shall now be described with a specific focus on Europe and the United States.

2.2.3 Movements in the private equity market since the financial crisis 2007-13

In order to comprehend the evolution of the private equity market, the latter will be analysed through the main industry indicators that are funds raised, investments and exits.

2.2.3.1 Europe

Statistics for Europe are taken from the 2013 European Private Equity Activity Survey. The survey covers the main EU member states alongside some peripheral markets such as the

Ukraine and the Baltic states⁵. Reference here will be made to the VC segment as well as late stage investments given the definition of PE in the European context as seen previously. In addition, investment and divestment figures pertain to market statistics, which look at activity according to location of portfolio companies (in this case Europe) irrespective of where the investor/PE funds are based.

2.2.3.1.1 Fundraising

According to EVCA statistics the amounts of funds raised by PE houses across all segments in Europe in 2007 was around €80 billion market. Indeed, the record amount had been reached in the year prior that stood at €112 billion, where 75% of these funds were earmarked for buyout (Raade & Rosa, 2008). Turmoil in the markets from late 2007 had obviously began to impact the supply of funds as credit conditions worsened and markets began to seize up. The impact of the latter hugely impacted funds raised in 2009 which stood at a mere €19 billion. Since then funds doubled in 2011 to suffer a setback in 2012 but picked up again in 2013 remaining at only half the level compared to the heydays of 2006. Looking at funds raised by stage focus, the largest segment, buyouts peaked in 2008 at €65 billion but drastically fell into the teens in 2009 and 2010. Buyouts in 2008 accounted for around 80% of total fundraising and hovered between 60-70% between 2010 and 2012 to reach a share of 84% in 2013. Buyout fundraising in 2013 reached 76% of total buyout equity value raised in 2008. Venture capital fundraising in 2007 that stood at \$8 billion more than halved in 2009 and 2010 and remained at similar value in 2013 standing at €4 billion. The number of funds raising capital also followed a similar pattern. Totalling 483 funds in 2007 this figure stood at 253 in 2013 where the largest decline was in the buyout segment which stood at 160 in 2007 to level out at 77 in 2013.

Concerning funds raised by investor type across all segments of PE, pension funds were the largest investor constituting 18% then 29% share in 2007 and 2008 out of all identified investors. Their participation declined in 2009 but steadily increased since and again outpaced all other investors by 2013 securing a 34% share. The only other actor whose fundraising share increased since 2009 was sovereign wealth funds whose share went from 3% to 10% in 2013, representing the second largest source of funds. Funds of funds remained

⁵ Countries covered include Netherlands, Austria, Poland, Portugal, Romania, Slovakia, Finland, Sweden, United Kingdom, Belgium, Czech Republic, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Hungary, Baltic states, Bulgaria, Hungary, Luxembourg, Norway, Other CEE, Switzerland and Ukraine.

the second main source of fund contributor outside 2009 and 2010 when their share dipped. The most significant drop regarding share of fund contribution to PE funds has been that of banks which despite two peaks in 2009 and 2011 dropped to 2% in 2013 from 19% in 2009. In 2013, banks were ranked as the 8th largest fund provider.

Furthermore regarding origin of sources of funds, the percentage of funds coming from Europe increased from 2007 onwards reaching 76% in 2009 coinciding with a decrease from flow of funds from outside Europe. From 2010 onwards however, the reverse trend can be observed with funds from outside Europe constituting 50% of total funds and funds from Europe representing 40% of fund flows in 2013.

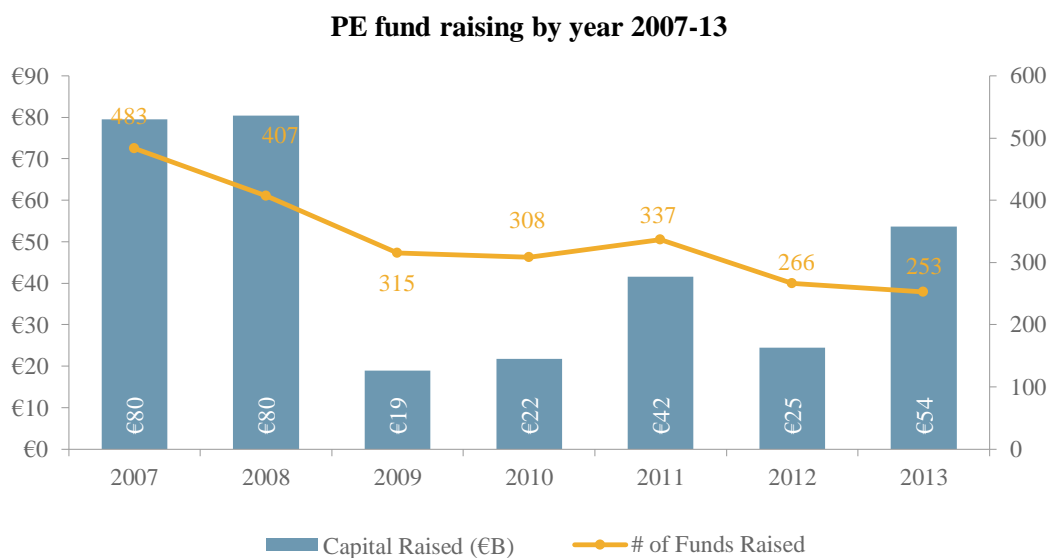


Figure 2 – PE Funds raised in Europe 2007-13 (EVCA, 2014)

2.2.3.1.2 Investments

Unlike fundraising levels that remained high in 2007 and 2008, investments peaked in 2007 at €70 billion to similarly drop in 2009 to €24 billion as a result of macroeconomic uncertainty and reduced availability of debt before rising to €45 billion in 2011 to decline again slightly in 2012. Investments in European companies remained steady in 2012 and 2013 at around €35 billion where 2013 was the first time since 2008 where fundraising levels surpassed investments. Investment levels in 2013 made up only 50% of the actual equity value invested compared to 2008. In addition, when looking at investments by stage focus, buyouts accounted between 72-81% of total investments between 2007 and 2013 aside 2009

when it dipped to 53%. The amount stabilised around 75% between 2011 and 2013. Investment levels in VC since the peak of 2008 have declined by 40-50% by 2012-13 and its share of total PE investments remained around the 8-9% mark since 2009 where it had peaked to 16%. Conversely, the number of companies invested in the growth capital segment consistently increased since the crisis, rising from 348 in 2007 to 1131 in 2013, surpassing the number of buyout targets invested in in 2009.

Regarding equity investments in the buyout segment, equity investments have tumbled across all buyout investment sizes, however the largest fall was in the mega deal segment (transaction value > €300 million) in which investments decreased by almost 70% in 2013 compared to 2007. Looking at the share of equity investments per segment as a total of equity investments YOY, equity in mega fluctuated between 2007 and 2010 but declined from then onwards. On the other hand, the share of equity investments in mid-market (transaction value €15-150 million) has increased going from 39% in 2010 to 46% in 2013. Share of equity investments in large transactions (€150-300 million) have also increased since the crisis stabilising at around 25% by 2013.

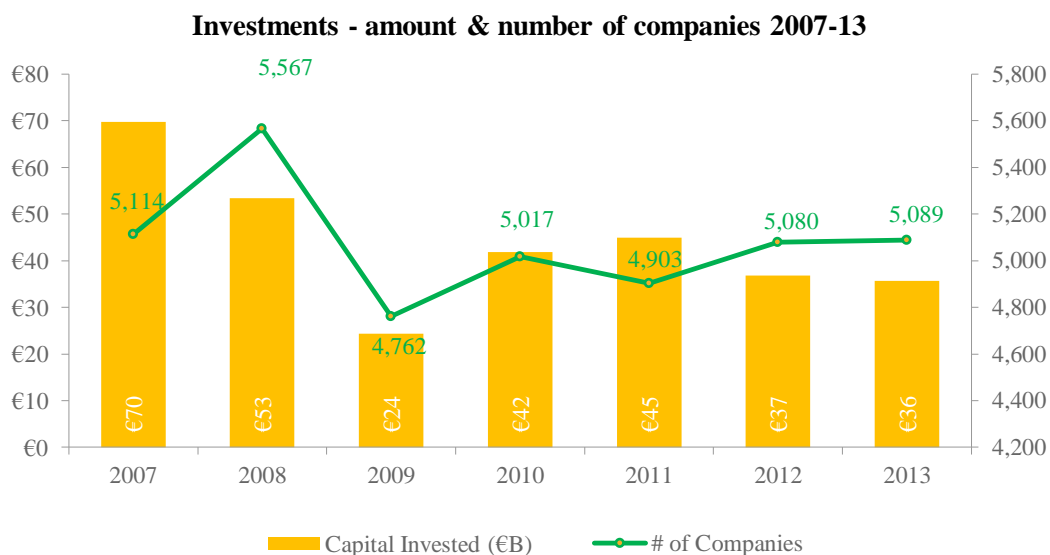


Figure 3 – PE Investments in Europe 2007-13 (EVCA, 2014)

2.2.3.1.3 Divestments

Divestments across all PE classes in Europe in 2008 underwent a significant drop falling to €14 billion from €27 billion in 2007. A record low was hit in 2009 with €12 billion but rose

again in 2010 and 2011 to reach €30 billion. Fluctuating again in 2012, divestments rose to €33 billion in 2013 possibly reflecting improved market conditions. When looking at the exit route between 2007 and 2013, most exit routes underwent a reduction in activity especially in 2009 aside write-offs, which gained momentum and overtook trade sales and sale to other PE firms as a result of worsening economic and operating conditions for companies sparked by the recession. The most prominent exit routes by amount however have remained trade sale and sale to other PE firms.

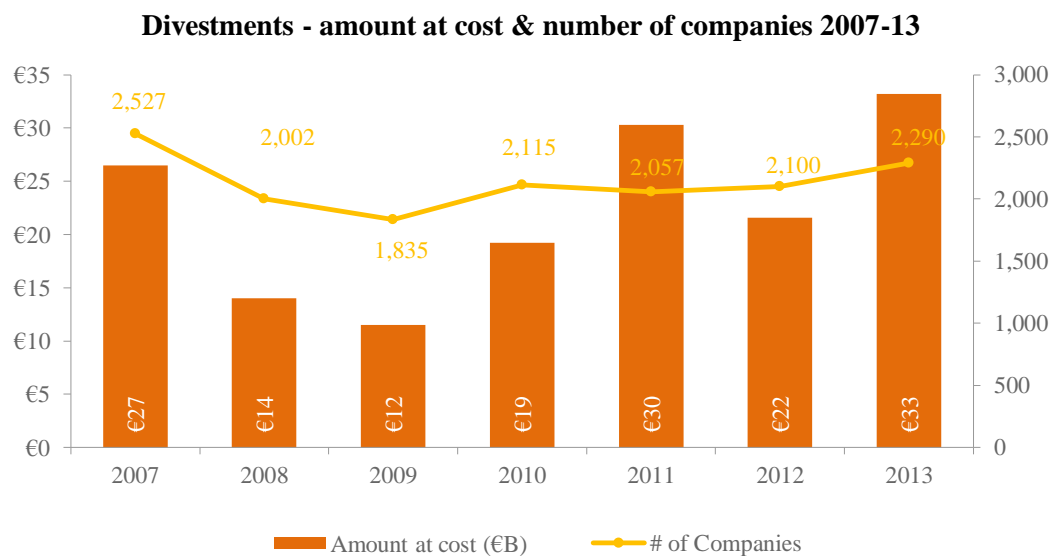


Figure 4 – PE Divestments in Europe 2007-13 (EVCA, 2014)

2.2.3.2 United States

Information on PE trends pertaining to fundraising, investments and exits has been used from the 2014 Annual US PE Breakdown report from Pitchbook. PE investments here refer to buyout, growth, PIPE (private investments in public equity), re-capitalisation, and add-on (acquisitions by companies with PE backing) investments made in target companies headquartered in the United States. It does not include venture capital, as is the case for Europe.

2.2.3.2.1 Fundraising

Looking at PE fundraising by year, fundraising by value reached a peak of \$275 billion in 2007 with a record account of funds closed standing at 307. Fundraising however then decreased from YOY to reach a rock bottom value of \$67 billion in 2010 representing only 24% of the amount raised in 2007. Capital raised had then begin to pick up from 2011

onwards reaching a value \$122 billion, then \$128 billion in 2012 to reach \$179 billion in 2013 which has been the best year for fundraising since 2008. The number of funds closed has mirrored this pattern of funds raised by value, closing at 212 in 2013. While there have been three years of consecutive increases, these levels in 2013 remain considerably beneath those in 2007 representing 65% of funds raised by value and 70% of funds closed by number.

In terms of funds raised by size, upper market funds (over \$1 billion) accounted for 79% of PEs total for 2008, to increase to 81% in 2009. This rapidly dropped to 56% in 2010 with an absence of deals of \$5 billion + where the share of middle market funds (under \$1 billion) accounted for 44%, reaching the highest percentage share of PE fundraising totals in the 2008-2013 period. The percentage share for upper market funds steadily rose to 67% in 2011, to reach 76% in 2013.

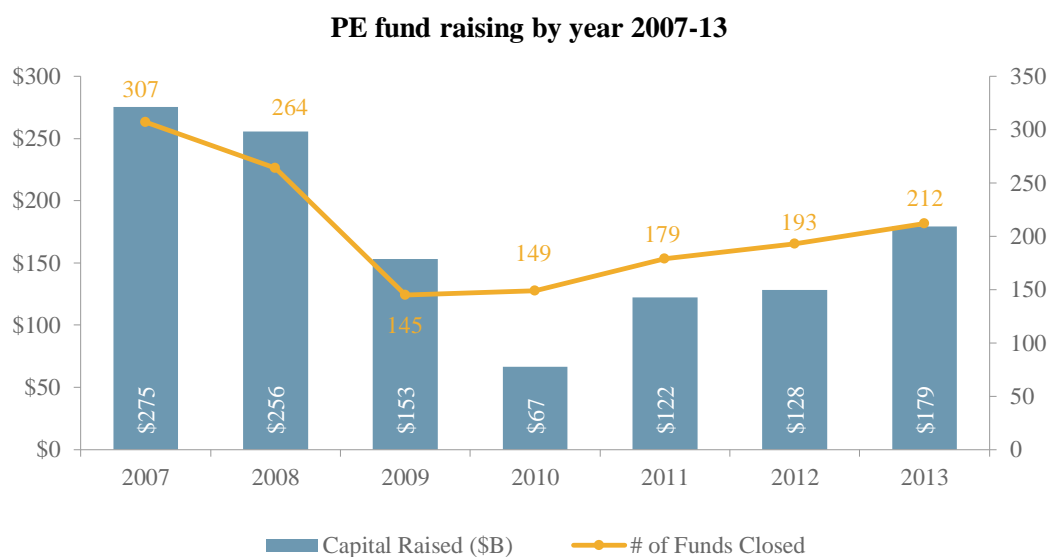


Figure 5 – PE Funds raised in the United States 2007-13 (Pitchbook, 2014)

2.2.3.2.2 *Investments*

2007 saw a record number of PE investments at \$874 billion that drastically decreased in the following two years to \$362 billion and then \$156 billion in 2009, representing 18% of 2007 levels. Capital invested picked up in 2010-13, steadily increasing YOY from \$358 billion in 2010 to \$426 billion in 2013. The rough double increase in funds in 2010 versus 2009 can be attributed to probably the capital overhang, funds available for investment from high fundraising in the pre-crisis period, as seen in Europe earlier on. 2013 investment levels

represented just under half of levels attained in 2008. The number of PE investments again appeared to follow similar fluctuations, peaking at 3,235 in 2007 to fall to 1,559 in 2009. This number since rose to exceed 2,000 but unlike investments in 2013 contracted by 13% versus 2012 to 2,124 which could have reflected possibly a lack of quality targets in which to invest.

Looking at investments by deal size, upper market investments in 2007 represented just over 50% of total PE investment that steadily declined to just under a 20% share in 2010. This steadily rose to reach one third of the total value of PE investments in 2013, with a significant capital flow increase into mega deals (\$2.5bn plus) accounting for nearly a quarter of total capital invested. Looking at deal flow, the number of investments in the \$100 million and less bracket rose from just around 60% in 2007 to just under 80% in 2009 but dropped to under 70% from 2010 onwards. Interest in particular turned away from small deals of less than \$25 million which dipped in 2013 below 40% of PE transactions for the first time since 2007.

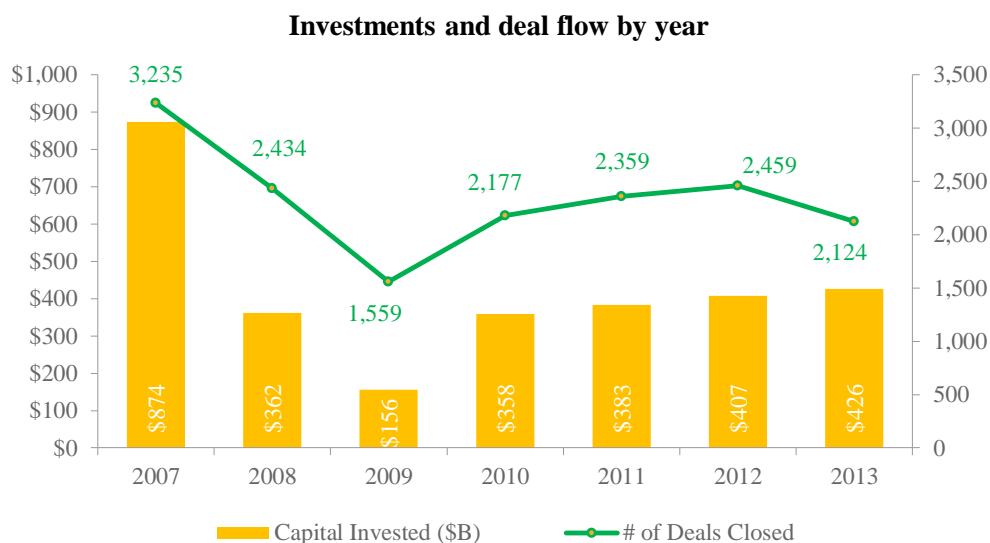


Figure 6 – PE Investments in the United States 2007-13 (Pitchbook, 2014)

2.2.3.2.3 Divestments

Exit activity by value stood in 2007 at \$156 billion and dropped in 2009 to reach only a quarter of that value as did the number of exits. Capital exited and exit since increased to reach a record peak in 2012 at \$176 billion and 758 exits representing respectively a 13% and 22% increase compared to 2007. This in part could have reflected improved market

conditions allowing firms to exit investments profitably and clear down the backlog of exits that had accumulated and been put on hold since the crisis. Regarding exit routes, the most significant change has been a rise in secondary buyouts (sale to another PE firm) whose percentage share in total volume of exits since 2007 has been increasing from around 30% to reach 44% in 2012 and 40% in 2013. IPO while having steadily decreased between 2010-12 to hit 5% of total exits has regained popularity in 2013 to reach 10%.

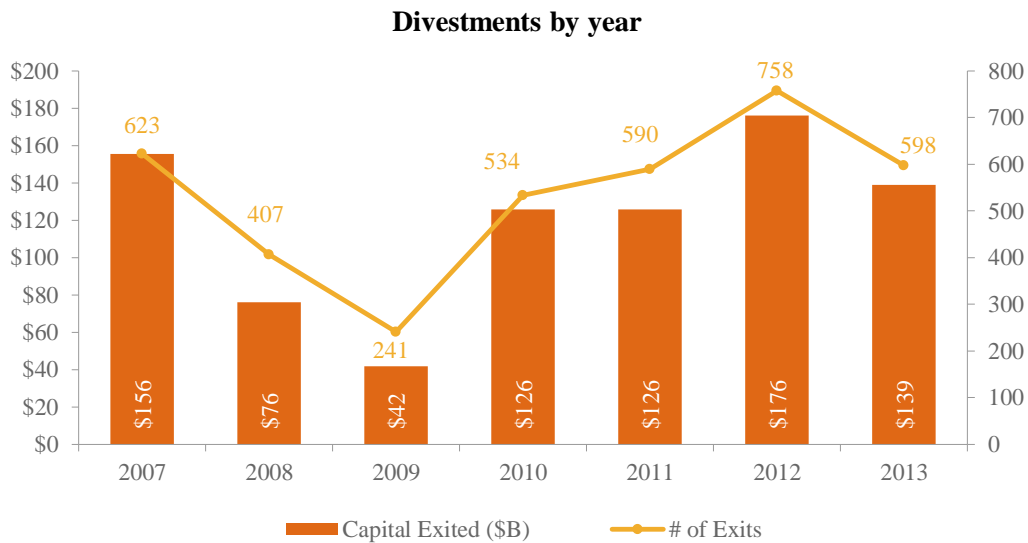


Figure 7 – PE Divestments by year in the United States 2007-13 (Pitchbook, 2014)

As has been seen, the credit crunch has had an important impact on PE activity and fundraising and investment volumes experienced during the golden years of 2003-2007. In addition, different operating conditions as a result of the crisis and recession have resulted in PE funds being confronted with a new set of challenges that have seemingly pushed the industry to respond/evolve in different ways. As a result of considerable business declines and disappointing results, it is claimed that the sector underwent profound changes (Mahieux, 2013). An overview of what these challenges were and how the industry has seemingly responded in the post crisis era according to current available literature will now be explored.

2.2.4 Evolutions in the private equity business model

2.2.4.1 *The private equity 'shakeout'*

With the huge downturn in transactions and fundraising in the immediate aftermath of the credit crunch, the future of the private equity industry immediately came under the spotlight,

as did the viability of its business model in the long run (Rizzi, 2009). With PE firms no longer having access to its perceived weapon of value creation, debt, there was a belief that the model was broken and that the industry needed to re-assess its practices. In a joint study by BCG and IESE business school (2008), it was claimed that 20 to 40% of PE firms would go out of business within the following 2-3 years where only an expected 30% would survive. The firms most likely to survive and least affected by the shakeout would be those who were diversified in other asset classes such as infrastructure, real-estate or distressed debt funds. Looking at the overall number of active partners, 90 GPs were said to have disappeared in 2009 making this the first time in history that the number of players decreased in absolute value (Demaria, 2012, p. 275). Large established house names such as UK based firm Candover went into liquidation in 2010 after 30 years of activity. The view that PE was at a crossroads was shared by other observers, where EY claimed that the recession would have a 'game changing effect' on the PE industry which would be forced to 're-evaluate previously held assumptions about business models in an attempt to come to some conclusions about what the new normality will look like for PE' (EY, 2009).

This belief of a 'shakeout' was further reinforced by the fact that companies across industries from then on given poor macro-economic conditions would experience negative growth, where the situation was only expected to get worse (Meerkatt & Liechtenstein, 2008). With the prospect of negative growth, a sale of portfolio companies with reduced earning expectations and lower multiples would severely dent GPs' revenues and also returns to investors. Furthermore, almost 50% of portfolio companies were expected to default on their debt obligations that would only provoke write-offs in PE portfolios further reducing returns (ibid). Thirdly, institutional investors were expected to shy away from the asset class and reduce their commitments by discounting or threatening defaults as a result of depreciation of assets that had the effect of heightening their initial targeted commitment to PE (ibid). Known as the denominator effect, with the sharp decline in the value of public asset investments, investors became over allocated in PE, where this imbalance was resolved by reducing the denominator, that was the percentage of PE holdings. Also the imbalance between capital calls and distributions further contributed to this cash flow squeeze where as a result the secondary market experienced a surge in activity as a response to investors' demand for immediate liquidity (Elli & Florin, 2011). Secondary funds had raised a record \$23 billion in 2009 (ibid) which accounted for one third of total values of funds raised on the secondary market between 2000 to 2010 (Wadecki & Cendrowski, 2012).

Indeed the future of the industry and the form it would take on in light of challenges viewed above, have been neatly depicted by a four scenario situation on the topic outlined by Josh Lerner (2011). Using a 2 by 2 matrix with providers of capital (investors) that can remain constant or shift on the horizontal axis and returns to PE funds that can be fair or disappointing on vertical axis, Lerner points out the PE will either recover, return to the future, be broken or be subject to an LP desertion. ‘Recovery’ involves a return to conditions that have characterised the industry over the past two decades such as shifts in supply or demand for PE investments that lead to the view that industry is inherently cyclical involving periods of rapid growth to be followed by periods of retrenchment. Here the opinion is that boom and bust is more the rule than the exception where the disruption of the crash is not likely to be persistent. ‘Back to the future’ involves some investors exiting the asset class since the effort required to manage the investment in relation to actual returns garnered is viewed as too significant. This situation was characteristic of the 1980s that saw PE dominated by mid-size sophisticated investors such as corporate pensions and endowments. ‘Limited Partners desertion’ predicts that PE funds do not generate the returns that investors expect, due to in part management fees and suffer from poor organisational structure thus driving away many investors. The last equally gloomy scenario, ‘a broken industry’, implies also poor returns however investors remain loyal to the asset class committing funds due to either stubbornness, self-interest or misleading data. Lerner is of the opinion that the sector will either ‘recover’ or ‘go back to the future’. Rizzi (2009) also believes that the nature of the industry is cyclical and will ‘recover’ after a period of initial re-structuring and re-building as it did in the 1990s. He points out however that memories of the industry’s cyclical nature may fade prompting a return to excessive fundraising and aggressive transactions and thus ‘bring us back to the future again’.

2.2.4.2 Alternative fund structures

One recurring theme that appears to be a factor influencing business models in the industry post crisis is the changing behaviour and demands of investors. With returns from funds remaining a matter of controversy (Mahieux, 2013) especially from funds not situated in the top quartile and the pot of capital available for allocation to new funds having decreased, there has been a so called ‘flight to quality’ on the part of investors (EY, 2009).

LPs have focused on a smaller number of GP relationships⁶ becoming more selective where funds that had historically a better performance track record naturally would attract a larger percentage of LP capital (EY, 2009). Consequently, given this heightened competitive environment for funds, it has been claimed that the balance of power in the GP/LP relationship has become more favourable to the investor, who is well positioned to dictate terms and conditions (Wadecki & Cendrowski, 2012). This has resulted in investors using their enhanced bargaining positions to improve terms, fund structures and/or lower fees (Rizzi, 2009). LPs in the US for example responded by reactivating the International Limited Partners Association (ILPA) whose aim is to promote the interests of LPs in PE (Mahieux, 2013). A guide to PE principles was published in 2009 to encourage best practices in the industry such as suggesting that all transaction and monitoring fees be paid to the funds and not the management companies (ibid). In turn, some players like KKR and Carlyle have reacted by agreeing to adhere to ILPA principles.

Other GPs have responded to this new balance of power by offering different formulas involving the traditional 2% management fee and 20% carried interest fee model. Bain Capital for example in 2012 while fund raising for its eleventh fund introduced a 'choose your own fee strategy' offering investors three different fee structures involving lower management fees and higher carried interest (Primack, 2012). This move has been viewed as an attempt to attract more public pension fund investors (ibid). In addition, instead of making the standard 1% GP commitment, the partners were expected to make a commitment of up to 10% of the total (ibid). Aside flexibility being provided regarding compensation terms, GPs have been offering various arrangements/options as to how investors can invest in a fund aside the traditional route of primary fund commitments.

Such arrangements include co-investments and separate managed accounts. Co-investment which consists of LPs investing directly in companies alongside GPs are said to have gained significant momentum where according to Preqin in 2012, 43% of partners actively sought co-investment rights when committing to funds (Demaria, 2012, p. 297). Not only are fees lower helping boost returns but investors are able to exert more control over investments enjoying greater exposure to industries/geographies that appeal to them and can put money to

⁶ California Public Employees' Retirement System (CalPERS) announced in 2014 to drop hedge funds from its investment portfolio and seeks to further reduce the number of private equity GP relationships it holds, by up to two-thirds. (Preqin, 2015).

work faster (Bain & Company, 2014). Other reasons can include better transparency, better alignment of interests with GPs, privacy and customisation (Demaria, 2012). However, investors are exposed to a higher number of risks when co-investing since it requires a different skill set and competencies to manage the investment on the LP side (ibid). Separate accounts, while also offering the prospect of better returns, normally respond to specific investment strategies and interests of a particular investor (McCahery & Vermeulen, 2013). They also allow a more personal and close relationship to be formed between an LP and a fund manager enabling investors to bargain for better terms and conditions (ibid). The number of investors, who claimed to have set up a separate account arrangements increased by 12% between 2012 and 2013 (ibid).

2.2.4.3 *Activity diversification*

Other developments that have been noted as a result of the changing dynamics in the PE ecosystem is diversification and/or experimentation with alternative structures to compensate for decreasing revenues. Some fund managers have been said to be expanding not only to new business activities such as underwriting and corporate finance advisory but launching new funds dedicated to new asset types such as distressed debt, infrastructure or PIPEs that involves taking stakes in listed companies having trouble raising capital on the stock exchange (McKinsey, 2007). They have been said to be functioning flexibly and opportunistically in order to sustain turnover and to offset shrinkage in the LBO market that has further pushed GPs to explore alternative investment avenues (Mahieux, 2013). Following on from the credit crunch, LBO debt has been reduced dramatically since 2007 affecting the number and value of buyout deals. LBO loan volumes in Europe in 2008 represented less than 25% of the total in 2007 where in the US loans volumes decreased by 80% over the same period (Demaria, 2012, p. 167). Banks have become more and more reluctant to provide debt in the context of LBO operations as a result of the instant risk adverse attitude sparked by the crisis and tightening regulation in the form of Basel III⁷ that obliges banks to meet certain capital requirements and maintain proper leverage ratios.

⁷ Basel III's focus is on capital and funding where banks are required to triple core tier one capital ratios from 2% to 7% by 2019. The impact on the banking sector would be significant; for Europe alone the banking sector alone would need €1.1 trillion of additional Tier 1 capital, €1.3 trillion of short-term liquidity, and about €2.3 trillion of long-term funding. This would have a substantial impact on banks' profitability where the ROE for European banks would be reduced by 4% points and 3% points for US banks (Harle, Luders, Pfetsch, Poppensiker, & Stegemann, 2010, p. 1).

2.2.4.4 *Operational engineering*

Furthermore, in response to declining revenues following on from heightening LP demands and banks' retreat from the lending space, some firms have claimed to have shifted their focus from financial engineering to improving operations at portfolio level (Rizzi, 2009). Financial engineering attempts to create value at the time of the deal rather than during the holding period using large amounts of debt to acquire a business that is then paid down by the portfolio company through the sale of non-core assets and reductions in working capital (Klier, Welge, & Harrigan, 2009). With the economic downturn, PE firms have transformed their management models to changes in the market place translating into a shift towards active ownership to achieve the acquired rates of return in the post-crisis era (ibid). This has led firms to apply industry and operating expertise to improve operating performance of portfolio companies by recruiting professionals with the relevant experience (Seretakis, 2013). According to a PwC report⁸ (2009), 91% of participants claimed to have made to 'some extent and great extent' changes to their business model in 2009, with this figure dropping to 51% for 2010 and 2011 to rise to 65% in 2012 and hit 59% in 2013. The most prominent changes cited were greater focus on active portfolio management, less use of leverage and more cooperation with strategic investors.

A sense of urgency was created by the crisis as a result of high leverage levels, prompting decisive action on behalf of GPs regarding operational initiatives in portfolio firms (BCG, 2010). According to a BCG (2012) study, operational improvements have become the chief source of value delivered by PE firms and can be delivered in four main areas: financial structure (working-capital productivity, capital expenditures optimisation), bottom line (overhead cost reduction, re-organisation of sourcing/logistic/procurement functions), top line core business (review of marketing, sales, pricing, product line development strategy/structure) and top line expansion (geographic expansion, M&A, channel strategy). Firms tend to systematically use more often bottom line and financial structure initiatives rather than top line ones where 10 out of the 14 such listed initiatives are used by only 27% of respondents or less according to the report.

⁸ 232 funds were interviewed of which 13% were based in Germany, 16% in the UK and 71% in the rest of Europe. (PwC, 2014)

2.2.4.5 *Specialisation*

Another development debated in the aftermath of the crisis is that PE firms have become more specialised either by function or investment strategy illustrated by the fact that they have taken steps to review their internal organisation. According to Pappas, Allen, & Schalock (2009), the recession has forced PE firms to re-consider its list of priorities moving the review of organisational structure to the top of the list. The crisis has added complexity to the environment in which PE firms operate in particularly increased competition that has forced firms to increase the specialised skills of their staff, moving away from the generalist model. Evidently not all firms have the scope to do so due to size constraints, however according to the authors, the firms that have adopted the functional specialisation route have either created dedicated sourcing teams, operation teams, moved support functions in-house and/or hired functional experts. Consequently, this also assumes an increasing standardisation and institutionalisation of processes. The investment approach involves adding staffing specialisation in industry verticals either via sector or geography focus. Organisational structure is increasingly viewed as key lever that influences fund performance as well as increase efficiency evermore so in an uncertain economic environment.

2.2.4.6 *The issue of regulation*

Lastly, a mention needs to be made regarding regulation that has been significantly reinforced on both sides of the Atlantic since the credit crunch. While PE was not the creator or disseminator of risk in the financial markets, the crisis became the perfect opportunity for politicians to fulfil their desire to regulate the private equity industry (Seretakis, 2013). This has taken the form of Alternative Investment Fund Manager Directive (AIFMD) and the Dodd Frank Act, both adopted in the aftermath of the credit crunch and that contain provisions aimed directly at the industry (ibid). These regulations seek to reduce systemic risk and promote stability and efficiency of the financial markets by promoting transparency through stringent registration and reporting requirements for alternative investment funds (McCahery & Vermeulen, 2013).

2.2.4.6.1 *Europe*

The AIFMD adopted in November 2010, targets funds that are marketed and managed within the EU involving fund managers that are based outside the EU as well as inside the EU. Small fund managers that have a total of AuM of up to 100€ million AuM or have unleveraged total AuM of up to €500 million do not have to comply to many of the AIFMD

requirements (Elli & Florin, 2011). On all other players the Directive imposes ‘minimum capital requirements on AIFMs and requires them to devise and maintain appropriate liquidity and risk management systems, remuneration policies that discourage excessive risk-taking and systems for identifying and managing conflicts of interests. AIFMs must also ensure that a depository is appointed for each AIF under management and that each AIF’s assets are valued at least once per year’ (Seretakakis, 2013, p. 657). Furthermore, it imposes a range of transparency and disclosure obligations such as regular reporting of a fund manager’s activities to the relevant supervisory authority plus audited annual reports to investors and other information that should be disclosed to investors prior to an investment in a fund (ibid). One other aspect of the Directive is the creation of an internal market for AIFs via a passport system that gives non-EU fund managers the same rights of access as EU fund managers to the European Union market (Elli & Florin, 2011). The deadline for transposing the Directive into national law was 22nd July 2013 where EU based funds were meant to fully comply with the Directive’s requirements from July 2014⁹.

While the full impact of the AIFM on the industry is still unclear, there is a general perception that the proposed European regulations could negatively impact PE (Rizzi, 2009) while also create a ‘Fortress Europe’ that protects local managers (Spangler, 2013, p. 276). This could lead to fatter back office functions, outsourcing of compliance to specialised consultants adding undue costs to PE operations (McCahery & Vermeulen, 2013). The sum of one time and ongoing costs have been estimated to amount to €1 billion while forcing PE firms to exit the European market (Seretakakis, 2013, p. 660). If strict application of AIFMD rules were to be applied, McCahery & Vermeulen (2013) claim that the Directive would likely ‘have a decreasing effect on the supply of private equity, thereby seriously hampering the working of the private equity cycle’ (p.8).

2.2.4.6.2 *United States*

The US approach to regulating the PE industry on the other hand has been claimed to be more benign (Rizzi, 2009). The Dodd-Frank act, passed in July 2010 and the first attempt in the US to regulate the PE industry, obliges the industry to disclose information about its operations to regulators and investors (Seretakakis, 2013). All PE firms¹⁰ are required to

⁹ As of March 2015, countries which have not finalised their national transposition measures are Poland and Romania. See http://www.evca.eu/media/370036/aifmd-fund-marketing-guide_march-2015_preview.pdf

¹⁰ Firms excluded involve those who are classified as venture capital advisors, have less than \$150 million in assets under management, do not have a place of business in the US (Wadecki & Cendrowski, 2012).

register with the SEC as investment advisors and in doing so must provide information for example that pertains to basic organisational/operational data on each fund managed, business practices that may present conflicts of interests, types of clients/funds advised and put in place a chief compliance officer (Wadecki & Cendrowski, 2012). Most of the required information though pertains to the managing company, rather than the operations of the managed funds (Mahieux, 2013). Another equally important provision is the Volcker rule that prohibits banks from retaining any equity, partnership or other ownership interest in a PE fund (Seretakis, 2013). Coming into effect in April 2014 with full compliance required by July 2015, banks may not hold more than 3% of the total amount of a fund and more than 3% of their tier one capital in funds of this type (Mahieux, 2013). They are also not allowed to sponsor a PE fund which involves serving as a general partner, managing member; selecting or controlling the fund's management; or sharing the same name as the fund (ibid). Banks are still allowed to advise such funds however and can still act as independent fund managers as long as it does not give credit to the fund, buys its assets or provides any guarantees for it (ibid).

As with the AIFMD, the Frank Dodd act is expected to increase compliance costs but not to the same extent as in Europe given that disclosure agreements bestowed on US firms are more limited and not as wide ranging (Seretakis, 2013). The Volcker rule on the other hand by seeking to remove banks as investors in PE, could have 'a chilling effect on PE activity since banks are an important source of investment capital for private equity' (Seretakis, 2013, p. 663). According to a US law/consulting firm in 2011, many PE funds have banks as anchor investors representing 20% or more of the fund's capital (Wadecki & Cendrowski, 2012, p. 58). While the full extent and impact of regulation on the PE business model on both sides of the Atlantic is still not fully known, it is predicted that it will significantly alter the contours of the industry leading to better governance and increased standardisation (Mahieux, 2013).

PE firms have been confronted with a host of challenges in the aftermath of the crisis involving a worsening macro-economic environment that has impacted portfolio companies' performance and thus returns to investors who have thus become more selective in the type of assets they invest in. GPs thus have been faced with an increasingly competitive fundraising environment alongside investor pressure to reduce fees. PE houses have responded to investors' desire to reduce portfolio diversification in a variety of ways by either offering a variety of fund structures besides the traditional 2/20 framework, diversifying into other asset

classes to make up for the revenue shortfall or by becoming more specialist in terms of function or strategy. A 'return to fundamentals' could also be noted with a focus on operational engineering to achieve value creation and higher returns, which could however be jeopardised by the strengthening of regulation whose impact is yet to be fully understood.

3 METHODOLOGY

3.1 Explanation of methodology

A qualitative exploratory approach was decided upon in order to investigate development trends amongst PE operators in the aftermath of the financial crisis. While this methodology is normally deemed the most appropriate on topics on which little information exists (Njie & Asimiran, 2014), unlike the current topic of this study in question, this approach was perceived to be more enriching, given that the novelty of this study is to provide several accounts of relevant industry players on how they personally adapted to new post-crisis realities as well as the point of view of third party service providers. Furthermore, it can uncover rich details that cannot be gathered in research methods that rely on figures and absolutes through the means of thorough questioning, interaction and observation (ibid).

In addition, given the broad and heterogeneous nature of the PE industry, it was felt that a case study approach would be the most suitable. Considered a common framework for conducting qualitative research, it is also necessary in cases where context plays an important role in the decision-making process (Baxter & Jack, 2008), in this example how the context of the crisis influenced PE firms to make changes regarding strategy, organisation (etc.). According to Yin (2003) (as cited in Baxter & Jack, 2008), the case study approach should be used when contextual changes are believed to be important /relevant to the phenomenon under study but also when the focus of the study is to answer how and why questions (ibid). The purpose is also to get in depth details as much as possible an event, person or process (Njie & Asimiran, 2014).

Out of the three types of case study identified by Stake (1995) (as cited in Baxter & Jack, 2008) (intrinsic, instrumental or multiple case) the latter was preferred since this would enable the researcher to draw differences within and between cases. However, given that the heterogeneity of the cases under study could not be guaranteed since data collection was by interview, which is important in the multiple case scenario, the approach used may have to be intrinsic. The intent here is to better understand each case on its own and treat it as a unique situation, since the results obtained would have limited transferability (Baxter & Jack, 2008). This may not be representative of a generic phenomenon where the case under study relies exclusively on the living account of this group (Njie & Asimiran, 2014).

The methodology thus employed by this paper consisted in a qualitative approach in case study format that was multiple but due to the varied sample obtained, displayed also intrinsic characteristics.

3.2 Sample and selection criteria

The sample involved in this study involves six participants who are based in the United Kingdom and France. Three of the participants currently work in a PE firm based in the UK, two participants work in an advisory and audit firm that interacts with PE clients in both France and the UK and the sixth participant works in a state backed French funding organisation with previous experience in PE.

The objective was to interview respondents working in PE funds and professionals interacting with the industry in matured geographies. The PE segment as opposed to VC was of particular interest given that it is more developed in Europe and was the segment deemed to be the most impacted following the credit crunch, given its reliance on banks for debt to fund transactions and amplify returns. Given also that Europe and the US together represent the majority of worldwide PE activity in terms of transaction value and that those geographies are more likely to employ similar business models as opposed to underdeveloped markets (Seretakakis, 2013), the focus of the study would be a mature market. As a result of the location of the author in France, the geographical scope of the study was centred on Europe.

The types of funds targeted were not the mega market funds or the funds situated necessarily in the top quartile since their activities have been well documented in secondary literature and would not bring necessarily anything new to the literature review already covered. Additionally, some of the large fund managers have become so diversified developing funds in real estate and infrastructure that one can question 'at what point in time a PE firm ceases to be a PE firm at its heart and becomes some other form of financial or investment enterprise (Spangler, 2013, p. 305). Secondly, in light of the literature review, where the industry has become seemingly polarised with the funds with the best long standing track record attracting the larger share of capital, it was deduced that the smaller players in order to remain a float would be forced to make more substantial changes with regards to their business models than the larger more established players.

With regards to the selection of professionals external to the industry at the time of the study, this was achieved through locating relevant contacts via the university network as well as PricewaterhouseCoopers at which the author was temporarily based. Respondents who had previously worked in a PE environment or who were interacting with PE actors on a regular basis as part of services rendered to the industry, were considered to be best positioned in order to give an opinion on what they perceived the greatest changes to be concerning the PE business and operating model.

Additionally the size of the sample sought in both cases was not large since unlike quantitative research, its richness in unearthing clearer views of a particular situation or process is considered more prominent than the numbers (Njie & Asimiran, 2014).

3.3 Research method design and interpretation of findings

Given the secretive and confidential nature of the industry and the unlikelihood to obtain first hand documentation from professionals within the sector, research sources have come exclusively from interviews. The majority of questions asked in the interview guide were open ended (How, what, Do you think..) in order to allow for flexible discussions in which the researcher could ask probing on questions and in which the interviewee could explain the reasoning behind their response. Respondents are able to explain their experiences in their own words and the researcher is able to recover a full picture of factors and processes at work in the respondent's thinking as well as the opportunities and constraints present in the environment that shaped his perceptions, beliefs and behaviours (Starr, 2014).

The interview followed a pre-defined structure where the topics to be discussed were selected on the basis of relevant themes that had been identified from the literature review (see annex for questionnaires). The structure of the topics touched upon also attempted to follow the lifecycle of a PE fund that is fundraising, investment, management and harvesting period in order to have a rounded overview if and what type of processes had been impacted in the post-crisis period. PE professionals were asked to respond having in mind changes that occurred in their organisation or in the industry at large from the start of the financial crisis up to the present. Professionals external to the PE industry were equally asked to comment on the same topics as targeted towards PE professionals. Where possible interviews were carried

out face to face or by phone and lasted between 30-45 minutes. The subjects discussed involved the following:

- Fundraising
- Investment strategy
- Investment process
- Alignment of interests
- Internal organisation and compliance
- Regulation

4 ANALYSIS AND DISCUSSION OF RESULTS

4.1 Presentation of findings

4.1.1 Participant overview

Interviews were carried out with the following people and the discussions that took place with them are recorded below.

Interviewee	Company	Position	Country
Serge Bedrossian (SB)	Banque Public d'Investissement (BPI)	Investment Director	France
Philippe Loiselet (PL)	PricewaterhouseCoopers (PwC)	Partner	France
John Luff (JL)	PricewaterhouseCoopers (PwC)	Partner	UK
Jon Moulton (JM)	Better Capital	Founder	UK
Sarah Williams (SW)	Electra Partners	Investment Director	UK
Mike Fell (MF)	Key Capital Partners	Investment Partner	UK

Table 2 – Interviewee profile overview

4.1.2 Participant 1: Serge Bedrossian

Serge Bedrossian (SB) serves currently as an Investment Director at the Banque Public d'Investissement (BPI) in France. BPI's purpose is to invest in and provide funding to French mid and large caps. Previously he worked at 3i, a PE firm in London and also in mergers and acquisitions at Morgan Stanley and Merrill Lynch in London and Paris. Having had first-hand experience in a PE environment immediately prior to 2008 and at the start of the crisis, SB was contacted to gain his point of view on main developments, challenges and trends facing the industry in a European context.

Fundraising

In order to understand if the investor base of PE changed following on from 2008, I asked SB his opinion on the matter, where he said that he was under the impression that French based funds as a result of tightening regulation and lack of liquidity began to target LPs such as banks and high net worth individuals based in geographies further afield such as the Middle East. I also asked him to elaborate on challenges surrounding fundraising that he claimed was not only heavily impacted by the dire economic environment but also by the lack of attractive assets in which to invest. There was no clear visibility on how portfolio companies/investments would perform and the price at which this asset would eventually be sold making GPs reluctant to invest and LPs reluctant to commit according to SB. There was also a general widespread fear that the Eurozone would disappear and a general sentiment

that French government wanted to raise taxes creating a sense of distrust and uncertainty around the French market. Given that the investment environment presented a high level of risk, with an unfavourable macro-economic and tax conditions, this put a damper on fundraising activity in France. Nevertheless, SB said this is no longer such an issue in the last year or so since the Eurozone is stabilising, there is no more talk of recession and confidence is slowly returning to the French and European market.

Investment strategy

Regarding whether PE firms' investment strategy had shifted following the onslaught of the financial crisis, SB said that the investment strategy of firms did not change so much as the geographic and industry segments in which funds invested. Preferred investment targets were companies in sectors that were 'resilient' and 'countercyclical' that meant either low cost industries such as food and pharma or luxury segments such as cars (BMW) or retail (LVMH). All middle market companies suffered the most during the crisis such as Renault and Peugeot and thus were not perceived as interesting investments targets for PE funds. As SB stated, this polarisation of investing in either the high end or low-end investment market was in a way a shift 'back to fundamentals'. Regarding geographic interest, French funds in particular became more receptive to looking at companies based in the Mediterranean zone or the North African continent. As for change in investment strategy, most PE firms remained loyal to their initial core business, according to SB, with only one or two funds branching out into distressed debt.

SB, when asked about the evolution of funding, said that leading up to the crisis debt was the main preferred source of funding for mid to large cap deals with high debt EBITDA multiples as a result of several conditions. Interest rates were fairly low, bank covenants were very flexible and funds were in a position to shop around for the best deals from banks. High competition existed between banks who were eager to have PE funds as clients. Pricing of debt was very much in funds' favour since it did not take into account the value of companies where they took on high risk for not very high returns. From 2008 onwards this all changed, with banks refraining from lending where possible as a result of tightening regulation in the form of Basel 3, tighter covenants and higher rates at which they lend. More emphasis on testing was placed as well on company valuations, where businesses had to be worth more than their debt. Banks were more likely to get together and present 'club deals' and present one package with uniform rates and covenants, leaving PE houses no scope to manoeuvre or

negotiate. As a result, some PE houses began to put as much as 50% of equity into deals whereas pre-crisis this figure was about 20-30%.

To understand whether firm management style at portfolio had changed at all since the crisis, I asked my interviewee's opinion on how he thought they style for engaging and working with portfolio firms had changed. He stated that dialogue between firms and their portfolio companies had increased as a result of necessity in order to safeguard returns. The focus on value creation at bottom line level involving cost reductions, management of working capital has always been there and remains in the business model pre and post crisis but has been however accentuated since 2008. Furthermore, it has been difficult to focus on any top line initiatives as result of unfavourable macro-economic conditions resulting from the crisis. Consequently, funds have now become more implicated in the management of their portfolio companies where as prior 2008, funds were more likely to let management function unassisted. Funds were riding the wave of multiple debt expansion that was abruptly stopped with the onslaught of 2008 financial turmoil.

When asked about how expectations regarding returns have changed, SB said that expectations on the whole are no longer so demanding primarily as a result from the industry having reached a certain level of maturity rather than being a direct result from the crisis. Whereas expected returns were around the 25% mark pre 2007, they are now accepted at 15%. The PE sector in Europe has become much more competitive. Not only have LPs become more sophisticated but the high growth phase is over and low interest rates still remain in place thus lowering expectations of high returns.

Alignment of interests

LPs have become more demanding in the post crisis era according to SB. They want to re-negotiate fees and like to be offered the choice to co-invest in order to get around paying high management fees. They expect now to be offered this choice. This evolution contributes to the continual education of GPs.

4.1.3 Participant 2: Philippe Loiselet

Philippe Loiselet is a partner at PwC Paris office for Delivering Deal Value in the Strategy division. He is responsible for handling due diligence engagements for PE firms based in

Paris as well as developing PwC's M&A service offering and clientele base in this area. PL was contacted because of his longstanding interaction and understanding of PE firms' needs especially concerning the screening and the evaluation of investments and could shed some light on what he has observed as changes in PE houses' behaviour since the crisis.

Investment strategy

On the question of how PE firms have changed their investment focus since the crisis, PL claimed that PE houses have not really diversified or become more specialised since the crisis due to primarily the need for the correct skill set. A specific skill set is required for certain investment strategies and if the firm is too small or does not have a track record, a firm will not be able to raise the finance required especially from banks since risk is higher.

Regarding the subject of value creation at portfolio level, my interlocutor reminded me that the three main sources are top line growth, operational efficiency and bottom line initiatives. Since the crisis it has been the latter two that PE firms have tended to focus on favouring a more hands on approach with their investments. Given also how competition between firms has increased since 2008 and that investments bought pre-2008 are sitting longer in portfolios with no recourse to leverage, the focus has shifted very much to operational improvements where possible according to PL.

Investment process and internal organisation

PL sensed that PE firms' internal processes such as reporting have become more structured following on from 2008 since this is viewed as a way firms can add value. He claimed also that processes have become more professionalised and as a result this has created a need for a different skill set within firms where more atypical profiles will have to be hired.

Furthermore, conscious of costs, GPs are now more reluctant to involve third parties such as PwC at the due diligence stage in order to lower the fees that get passed on to LPs. Firms are also have become much more conscious on identifying the right type of target where there are many more exclusive talks between a GP and the target company before committing themselves to an investment.

He further added that firms also have to work harder not only at marketing themselves to LPs about their capabilities but to potential portfolio companies too. Unlike before, potential targets now carry out due diligence of PE firms who are interested in investing in them by

looking at their track record and how they have interacted with previous portfolio investments in the past such as management, employees and other stakeholders. PL further elaborated to say how a firm interacts with portfolio companies is also what will give a PE house a better competitive edge versus its competitors going forward. Value creation is also about culture within a firm, its management style at firm level as well as with portfolio companies. The way firms now brand themselves to potential targets has become increasingly important, and a change in how PE brands itself to targets can be detected.

4.1.4 Participant 3: John Luff

John Luff is Partner at the PwC Guernsey office and is responsible for the development of the firm's private equity offering across audit, advisory and tax as well as establishing new client relationships in this area. He previously worked in the industry as CEO of a private equity fund administrator in Guernsey. He has also served on the Board of several General Partners of offshore private equity funds, and has been involved in the audit of numerous entities in many private equity and venture capital structures. JL was perceived to be ideally placed given his exposure to the industry in a location to which PE firms have traditionally outsourced or off-shored back office tasks due to its special tax jurisdiction status.

Investment strategy

On asking JL on how he believed PE firms' investment strategy had changed as a result of the crisis, he claimed that PE is entrepreneurial by nature and opportunistic at heart and will continuously look for new avenues to make money. Consequently, a slight change had been observed with some firms shifting to distressed or mezzanine debt. The business models in this segment are pretty much the same as the traditional business model hence it has been easier to make the transition, however he claimed there has been no significant move into new areas. Hedge funds have been more active in 'straddling different clothes' rather than PE firms which seem to be replacing the role of banks in the provision of funding.

When asked about how PE firms are setting about creating value in their investments, JL stated that there is a clear return to fundamentals with a strong focus on operational improvements since the crisis. Firms now try to see what their portfolio companies have in common with the aim of centralising their assets as well as stripping non-core assets. PE firms have become more ruthless according to my interviewee.

When asked about banks and their role as investors in PE, JL was quite clear that this trend is on the way out since the crisis with banks having to keep more and more capital on their balance sheets. In their role as lenders, there has been no consistency in their offerings and have displayed what is seems schizophrenic behaviour but they still remain important actors within the PE ecosystem.

In response to how the industry has developed in Europe since 2008, JL claimed that the PE industry is polarising where firms who are able to attract capital are those with strong reputations and impressive track records. There are also no more spinouts from banks or large PE firms as was the trend in the pre-crisis period. Funds from the United States on the search for higher returns have shifted their focus eastwards in particularly the Middle East that has better economic prospects. As to his views on how the industry will evolve going forward, he said there is no room for generalists anymore since the big houses manage that quite well and the way forward now will be through increasing specialisation either via sector or geography focus.

Alignment of interests

When asked about investors' attitudes to the asset class since the crisis, my interviewee said that sovereign wealth funds and pension funds such as the likes from Norway and the Middle East still view it as an attractive asset class. They now search however to invest directly where possible to reduce costs and they tend to look at deals now more on a deal-by-deal basis. They now search for more control over their investments, greater mobility and to reduce the amount of time they are locked into a fund. Despite these changing demands, JL said that fee structure, the 2/20 rule and deal terms have remained pretty much the same.

Internal organisation

When asked about changes regarding firm structure or operational infrastructure, JL stated that processes have become much more institutionalised at large players such as Blackstone. Furthermore, third party players that make up the PE ecosystem such as accountants are more likely to be insourced in the United States and outsourced in Europe since 2008. The carry that a PE earns will also remain crucial to a firm being able to attract top talent.

Regulation

When asked about the impact of regulation, JL stated that the AIMFD and Volcker rule will only further slow down deals and fundraising while bringing in an extra layer of cost. PE was not the cause of the financial crisis or systemic risk and has been caught up in the crossfire. Also actions resulting from the current debates over base erosion and profit shifting¹¹ (BEPS) may prove harmful to the industry since PE uses the same structuring techniques as multinationals to decrease tax and could too be subject to these new changes in tax rules.

4.1.5 Participant 4: Jon Moulton

Jon Moulton is founder of Better Capital that focuses on investing capital in troubled businesses in the UK or continental Europe with up to a turnover of up to £500 million. Prior to that, he had also founded Alchemy Partners that specialised in investing in distressed and undervalued or underperforming businesses. He had also spent time at Apax Partners, a UK PE firm focusing on the firm's buyout group operations as well as Citicorp Venture Capital, now CVC and Schroder Ventures, the private equity arm of Schroders in the 1980s. With extensive experience in turn around investments, JM is viewed as a prominent figure in the UK PE industry, hence why he was contacted in the context of this study.

Investment strategy

When asked about challenges facing the industry since the crisis, JM said that megafunds were initially impacted but now have fully recovered where it has been the mid-sized deals that have been mainly impacted if anything. The big catastrophe that was predicted did not happen and even if more equity has been pumped into deals since 2008, there is still a continual presence of low interest rates that has ensured the survival of LBOs. The only concern is that PE firms have had to deal with a drop in the value of their portfolios and in order to exploit economies of scale they have been diversifying into other asset classes such as real estate.

Concerning players in the market, the large brand names have been almost untouched by the crisis and if anything are becoming more powerful due to the presence of a track record and

¹¹ In June 2013, the OECD launched an action plan to crack down on international tax avoidance to be implemented over the course of 2014-15. The objective is to provide countries with local and international instruments that will better align rights to tax with economic activity while providing more standardised tax rules globally. This has been in response to multi-national companies increasingly using tax planning strategies that rely on mismatches and gaps that exist between the tax rules of different jurisdictions in order to reduce corporate tax owed. The objective is to provide countries with local and international instruments that will better align rights to tax with economic activity while providing more standardised tax rules globally.

performance. Consequently, it is now much harder for smaller and new players to enter the market unless founders themselves have a strong reputation in the industry. The market has clearly polarised. In addition the bulk of the industry remains generalist with few specialists having developed.

LPs return expectations since the crisis have moderated where they no longer demand 18% but 10-12% return on investment. Even if there is a desire on their part to reduce fees by carrying out direct investments, JM claimed that most LPs don't have the infrastructure, teams or skill set to do so effectively where PE firms are still indispensable to investors.

Investment process

When asked about whether standardisation had occurred with regards to processes internal to PE firms since 2008, he disagreed and said there is no standardisation in the industry in deal process regarding how firms identify, acquire, monitor or exit portfolio companies. Every fund is different and processes may vary from fund to fund.

Regarding the development of the PE business model and its competitive advantage going forward, JM stated that this does not lie in the upper value chain of PE such as deal sourcing or execution. These areas have become commoditised and the focus should be on creating value through operational improvements such as cost reduction at portfolio level. In order to achieve this, firms don't necessarily need an in-house team of operational experts, since they can buy them in.

Alignment of interests

According to JM, alignment of interests in the industry has not improved with the fee structure remaining the same as in the pre-crisis period. GPs do not necessarily put more 'skin in the game' and the funds in which GPs put the lowest commitments have shown to generate ironically the best returns.

Regulation

When asked about the impact of regulation such as AIFMD, JM said that it threatens to make the PE business less attractive due to added cost and process that makes due diligence much more tedious. What will pose a significant threat according to JM, is changes in the tax base which he views as crucial to a well-functioning PE industry. Initiatives concerning base

BEPS threaten to bring about possible taxation on management fees that currently remains untaxed. This would affect a whole host of projects in the United Kingdom such as infrastructure projects funded under private finance initiative (PFI) models as well as PE and if any talk were to shift to taxation on carry then the PE industry would shut down in London.

4.1.6 Participant 5: Sarah Williams

Sarah Williams is an Investment Director at Electra Partners, which is a private equity fund manager managing funds primarily from a listed investment trust that is a constituent of the FTSE 250, Electra Private Equity PLC. Investors such as pension funds, family offices and insurance companies buy shares into the quoted fund from which they receive dividends that are dependent on performance. While this firm has no direct contact with LPs and functions slightly different from standard PE fund set ups, SW, in regular contact with other PE professionals, was deemed to be a suitable contact to give a perspective of changes and trends occurring within the UK market as well as Electra Partners.

Fund raising

On how the firm has responded to fundraising challenges presented by the crisis, SW pointed out that given that Electra Partners manages funds on behalf of a listed investment trust, their firm has no need to fund raise, having continual access to a permanent pool of capital. Consequently, they have not been subjected to the same pressures as other PE firms who are raising funds directly from LPs. Capital available for investment has remained fairly constant even throughout the crisis at an amount of around £300 million.

Investment strategy

SW stated that their investment focus regarding strategy following on from the crisis did not alter significantly. While the buyout segment fell to 40% immediately after 2008, it now constitutes 60% of their business returning to pre-crisis levels. She also pointed out since they are a generalist fund rather than looking to invest in a particular sector, an investment is judged more by the nature of the opportunity and the business. However, she did point out that between 2008-10, there was a strong preference to invest in 'resilient' businesses where consumer facing companies were deemed unattractive. During that period there were very few deals, and there was a huge gap in expectations between what sellers wanted as a price and what buyers were willing to pay. 2013, according to SW has been a turning point in the industry where PE firms once again are taking interest in consumer facing businesses

claiming it's a return to 2006-07 scenario. This in part is not only due to a revived economy but the fact that PE firms have a backlog of un-invested committed capital dating from the pre-crisis era and are desperate for deals to invest in. The intense competition for deals combined with the sheer size of capital needing a home has according to SW driven some PE houses to do unusual things that they would not normally consider. This involves looking at investing in different geographies and even scaling down deal size from mega deals to mid-market deals. She mentioned in particular the increasing visibility of previously unheard of American funds who are looking to invest in Europe as a result of a lack of attractive opportunities back home.

When questioned on the firm's management style, SW said that Electra's approach involves having a few people present on a portfolio company's board to assist in strategy and financial aspects. She stated that they are not interested in micro-managing or running a business if the management team proves competent and they are not interested in having operating partners. So style of management at portfolio level has not significantly changed however, SW said that they look more towards 'bolt on deals' now. That is they buy additional businesses that can be managed by the same management team of a company already in their portfolio.

Investment process

SW stated that nothing significantly changed with regards to Electra's investment process in the post crisis period however in the industry at large other PE firms were extremely wary and spent a much longer time reviewing financials and business plans of given targets. Most potential deals as a result 'fizzled out' and were never completed due to increased cautiousness on the GP side. However, she pointed out that 2013 has been a turning point in the industry with a return to old habits from the pre-crisis era. Due diligence procedures are not always fully completed with PE houses expressing their interest to buy before the second round of due diligence process is completed.

When asked about the firm's strategy regarding exits, SW stated that this has remained unchanged due to Electra Partner's business model. Since they have no fixed life funds they have a flexible investment mandate and are not time driven like other funds. They can hold an investment up to an indefinite time period and they only exit when demanded returns are achieved. Looking at the industry at large, the immediate years after the crisis witnessed a

depressed IPO market and lower multiples but all of this appears to have been reversing from 2013 onwards according to SW.

Alignment of interests

SW stated that since the crisis, there has been pressure to reduce management fees paid on cash however there has been no significant shift observed in compensation structure. Top tier firms who have strong reputation for performance will always be in a position to dictate their terms. There have been demands however from LPs for GPs to increase their 'skin in the game' raising the percentage of capital committed in co-investment situations from 1% to 3%. She views there as being perfect alignment of interests in the industry however, where misalignment of interests has occurred are in 'run off funds' which have no prospects of raising successor funds, where the portion of PE firms in this situation has increased in wake of the crisis. GPs are not motivated to improve value and push for an exit in a poor portfolio, comfortably earning their annual management fee. Consequently, the investors here are the greatest losers.

Risk/Compliance/Internal Organisation

No changes have been made to either company structure or operational structure at Electra following on from the crisis according to SW. Given Electra's business model they are not in direct contact with investors and are thus not subject to any direct compliance pressure on behalf of LPs.

Regulation

When asked about the influence of regulation on PE's industry of mode of operation, SW said it has not had really any impact and cannot see it having any impact in the foreseeable future. She had in mind the AIFMD, the Bribery act and the Energy saving regulation in particular that are more about box ticking and only have the effect of slowing the industry down. It's all counterproductive.

4.1.7 Participant 6: Mike Fell

Mike Fell is currently an Investment Partner at Key Capital Partners, a PE firm founded in 2007 that specialises in the smaller buyout market in the United Kingdom. He has over 20 years experience in the PE industry having worked at Bridgepoint and then with Baird Capital Partners where he held the position of UK managing director for over 10 years. He

has also written articles for the Financial Times on the PE industry, the latest being 'Crisis engenders new private equity model' published in April 2011, hence why his contribution was viewed valuable to this study.

Investment strategy

On asking what Key Capital's firm management style is and how they create value, MF said that they increase the number of people in the management team and put key people in various functions of the business. Additionally they can invest up to £2-3 million in the overhead structure of the target. They normally buy into small to mid-size businesses in any sector that have sales of several million pounds with multiples of 5/6x EBIT. They then sell them off to mid-market PE players such as Sovereign Capital and ECI once these companies have reached turnovers of around £5 million and EBIT multiples of 10x.

With regards to sources of funding, MF said one interesting development in the funding landscape as a result of the crisis has been the appearance and development of unitranche banks that have been lending more and more to the PE industry versus the large traditional players such as Lloyds bank. An attractive feature of these loans is that repayment is only due at exit whereby cash flow earned by a business during the holding period can be used to be re-invested back into the business. The traditional players are unwilling to loan amounts of under £10 million to small businesses since this presents high risk given the new capital requirements that banks have to abide to. This has heightened however competition between lenders and my interviewee believes that another banking bubble is in the making.

Alignment of interests

Regarding the question on how fund structures have changed since the crisis, MF said that there has been evidence of change however this has been only a temporary feature in the UK at least. He said that for most of the history of PE, the typical fund structure has been a 10 year closed fund which involved a 5 year investing period and a 5 year realisation period with the standard two twenty compensation rule. Back then, fund sizes were relatively small and no one foresaw the huge increases in fund sizes that came about in the subsequent decades. As funds got larger, compensation metrics remained the same allowing PE individuals to get rich on the back of management fees alone. With the arrival of the crisis however, funds developed losses in their portfolio with companies going bust and investors losing money. The level of fee income then became an issue for investors since pre-crisis returns were no

longer guaranteed and yet GPs still managed to make a profit. There was a lot of resentment about paying the 2% management fees. Some pension funds took to investing directly into firms, in order to cut out the middle man and some PE houses altered the structure of their funds in order to attract capital. The largest casualty has been funds of funds that have almost gone underground since the crisis and have been forced to substantially re-develop their fund structures. Additionally, LPs looked to exit funds before the 10 year holding period, sparking off growth in the secondary market. Changes in fund structure were short-lived however since 2012-13 has seen the return of liquidity to the markets with quantitative easing facilitating fundraising and interest rates remain low making PE an attractive asset class once again. According to MF, it is only the LPs, which can really force change upon the PE industry but need to act in unison. Unfortunately, LPs have shown that they are really poor at driving change hence the market is seeing a return to pre 2007 habits.

GP commitment has also increased from 1 to 2 % and in the United States it has gone up even to 10% in some cases. Investors like to see this and expect to see more ‘skin in the game’ as investors want to see proof of GPs seriousness to any given fund. In addition, investors now are much more wary with whom they place their funds and conduct lengthy due diligence on PE houses even asking them to hand over personal asset statements.

Referring to Key Capital Partners, MF said that the company was created immediately prior to the crisis in 2006/07 in the spirit of a ‘return to fundamentals’. Fees are meant to cover costs and should not be a source of profit. That is purpose of the carry according to MF. Their model consists of having a fund structure that only has a 3-year lock in period for LPs, the management fee is decided on a deal by deal basis and should only cover administration costs. There is no hurdle or claw back and the carry is set at 10%. Their experience though with investors has been that Key Capital’s non-standard fund is of little interest to investors. MF felt that investors found it too complicated to understand the firm’s model but were also not willing to take the time to understand the new fund structure on offer. They also did not appreciate the deal-by-deal fee structure. This attitude has become all the more prevalent since 2012. Consequently, the firm has now begun to fund raise for a standard closed 10-year fund since the general sentiment is as long as investors pick up a profit, they are not really bothered by what fees they pay.

Regulation

When asked about the impact of regulation on the operation of PE houses, MF said that mid and large houses have had to increase their back office functions as a result of increasing EU regulation and tax compliance rules such as FACTA. Houses are outsourcing their accountancy and compliance tasks with some funds even going offshore in order to deal with escalating costs. Administration costs at Key Capital stand at around £200 000 so costs for large houses must be huge. GPs' revenues will evidently be impacted so in order to cover these fees larger funds will need to be raised.

4.2 Interpretation of findings

4.2.1 Analysis of interviewees' responses

Out of the participants interviewed in the sample, three were currently based in the UK and working in the PE industry while the remaining three were considered external third parties who interact/have interacted with PE players in a professional capacity in either France or the UK. Dialogues between interviewees were compared according to the main axes as defined in the questionnaire, following the multiple case study approach to see what kind of themes emerge and how it corresponded to themes depicted in the literature review. The reader must also have in mind that while responses are compared, the profile base of interviewees is significantly different hence observations cannot necessarily be considered representative of the industry at large, highlighting simultaneously the intrinsic characteristic of this analysis.

4.2.1.1 Fundraising

The only participant to express an in depth opinion on challenges surrounding fundraising was SB. This was not a relevant theme for SW at Electra Partners given that they have no direct contact with LPs being a listed fund and Key Capital having been created at the height of financial turmoil was not ideally positioned to give a view of how the firm's fundraising profile changed as a result of the credit crunch. According to SB, in the aftermath of the crisis, LPs showed a reluctance to commit funds forcing GPs in France at least to search for investors in the Middle East. This lack of investor commitment can be illustrated by the drop in funds raised as seen in EVCA figures from 2009 onwards. This figure picked up in 2013 and coincides with SB stating that there has been a return in investor confidence from 2013 onwards with the perceived stabilisation of the Eurozone and a more favourable macro-economic environment.

4.2.1.2 *Investment strategy*

Amongst interviewees, there seems to be agreement that following the crisis, firms altered their investment focus to some extent in order to deal with a harsher operating environment and more competition both at deal end as well as between GPs for funds. While some diversification has been noted in terms of investment strategy such as shift to distress debt according to JM and JL, asset class diversification remains limited due to the need for the correct skill set in order to manage such investments as pointed out by PL. This remains more of a possibility for the larger PE houses that have the scale of operations and organisational infrastructure to do so. Consequently, respondents both in and outside the PE industry such as PL and JM, concord that the industry has remained fairly generalist. Furthermore, internal organisational overhaul within firms as a result of more geography or sector specialisation has not really been noted by interviewees as described by Pappas, Allen, & Schalock (2009) in their article on firm restructuring. What has occurred though as pointed out by SB and SW, has been more of a temporary shift in focus rather than a permanent turnaround in the types of industry segments, geographies and size of deals invested in. SB and SW agree that immediately following the crisis, there was a preference to invest in resilient, counter-cycle industries that were less impacted by the economic downturn where mid-market consumer facing companies were the most to suffer. This reminds the reader of the importance of the economic variable in influencing PE activity viewed earlier on in the literature review where the attractiveness of segments as investment targets will fluctuate according to economic cycles. Consequently, with improved economic prospects as pointed out by interviewees from 2013 onwards, consumer-facing industries were once again back in favour. Furthermore, SW's remark on the increasing presence and interest of US funds in the UK market can correspond to the observation made from EVCA data where the portion of funds raised from outside Europe has been on the increase from 2010 onwards.

Regarding changes in the funding landscape, there is common agreement that banks have retracted from the lending landscape forcing firms to put as much as 50% of equity into deals. This has also, prompted the appearance of unitranche banks according to MF who have entered the funding space for small PE deals. Thirdly, as a consequence of less access to leverage, respondents also tend to agree and confirm the trend seen in the literature review that the source of value creation since the crisis is now coming from operational improvements. As highlighted by the three external participants, there is more

interventionism at portfolio level since the credit crunch and a more hands on approach. This however has not been corroborated by SW at Electra Partners, who said that there has not been so much a shift in how they manage portfolio firms as in how they look to streamline management teams across portfolio companies. This discrepancy can also be attributed simply to a difference in choice of management styles between firms as opposed to one-response fits all approach where Electra Partners can be considered a ‘unique’ case. Lastly, the expected return profile has lowered not only in response to the harsher economic environment created by the credit crunch but also as a result of the natural maturation of the PE industry in Europe according to SB.

4.2.1.3 Investment process

From the respondents who expressed an opinion on the matter, there is common agreement that PE firms would spend much more time conducting due diligence on the prospective investments from 2008 onwards. PL from the perspective of a third party service provider to PE firms, further added that GPs have become more cost conscious and would exclude professional services firms’ assistance from the screening and due diligence stage while also prioritising more in depth discussions between the PE house and the target. This cautiousness seems to have dissipated however according to SW from 2013 with a return to pre-crisis habits involving non-completion of due diligence processes. In addition, internal participants such as JM do not believe that standardisation of processes regarding the way deal process is conducted has occurred/is occurring as is claimed in BCG’s study (2012) even if it may cut costs and bring about efficiency. Paradoxically, while standardisation can free up executives’ time to focus on core activities of the firm, it would not necessarily confer a source of differentiation in the long term (Brigl, Nowotnik, Pelisari, Rose, & Zwillenberg, 2012) .

4.2.1.4 Alignment of interests

Most participants in the sample claim that investors have become more demanding regarding the variety of channels available through which an LP can invest. Besides the standard limited partnership agreement set-up, there has been pressure on GPs to allow LPs to co-invest, which is all part of the drive to decrease costs that has become the main pre-occupation since the crisis. Regarding the modification in fee structure, little change has been noted by the interview sample despite attempts made by some funds to offer alternatives as seen in the literature review. In fact according to MF at Key Capital, when an alternate fund

structure was offered with more favourable terms to investors, this found little success/interest amongst the investor community obliging the firm to raise a new fund according to the traditional 10-year lock in model. Firstly, given the tougher fund raising environment and the expectation that larger successful funds would attract the most capital since 2008, it would be expected that smaller firms, like Key Capital, would experiment with different fund structures. The irony however is that the firm's experience seems to go against the perception that funds are on the hunt for more favourable terms or lower fees suggesting that any changes in the PE business model have been temporary and are indeed driven by LP demands. Again the case of Key Capital cannot be taken as a generic trend of the industry and must be treated as one example of many. Lastly, in response to investor demands again and increased selectivity on the part of investors, SW and JL shared the sentiment that the amount of equity GPs commit to investments has also gone up in order to convince LPs of the seriousness of any given investment.

4.2.1.5 Internal organisation and regulation

Given the nature of the looming regulatory change discussed in the literature review for Europe and the responses of interviewees, it seems more appropriate to discuss internal organisation and regulation in tandem with one another. External participants including PL and JL share the opinion that since the crisis operating processes in PE firms have become more structured, institutionalised and professionalised. SW at Electra Partners though has stated that no significant internal changes have been made at Electra Partners since 2008. Again this assumption may not be taken as a generalisation for the industry as a whole. According to JL, the tendency has been to outsource back office functions since 2008 where this trend has only gained in popularity as a result of regulation surrounding new tax rules for example that has had the effect of fattening up back office functions while increasing costs. While the view amongst all interviewees is that AIFM directive will slow down the industry bringing more red tape, regulation at present has not had any impact on the operation of Electra Partners and the BEPS initiative (not brought up in secondary literature) if anything appears to be more worrisome for industry players than the AIFMD. It seems however that given the relative novelty of regulative initiatives resulting from the credit crunch, its full impact on the PE business models cannot yet be fully established.

To conclude, participants have expressed various points of views on how the PE business model should develop in order for firms to retain a competitive advantage in this new post-

crisis landscape. JM is of the opinion that PE firms' upper hand will come from how good they are at enacting operational changes at portfolio level requiring access to or hiring industry experts. Another opinion from JL is that funds will need to become more specialist either in terms of geography or industry focus if to remain afloat alongside the big players whose reputation will continuously attract LP attention. And finally, PL claims that a fund's point of difference will come from how a firm has interacted and managed its previous portfolio companies, which have become more selective as to which firm takes them over.

4.2.2 Summary of key points raised by interviewees

Key themes and characteristics of the post-crisis PE business model as perceived or experienced by interviewees

Participant profile	Fundraising	Investment strategy	Investment process	Alignment of interests	Internal organisation	Regulation	Other observations
SB Investment Director Banque Public d'Investissement External participant France/Europe	<ul style="list-style-type: none"> ◆ Tightening regulation, lack of liquidity, lack of attractive assets to invest plus unattractive macro and tax environment, LPs reluctant to commit ◆ French based funds targeting LPs in Middle East 	<ul style="list-style-type: none"> ◆ Shift in geographic & industry focus. Investments in resilient or counter-cyclical industries with French funds looking at targets based in Mediterranean or North African region ◆ Banks retracting as lenders to PE due to regulation on capital requirements. Presence of 'club deals' ◆ GPs increasing equity of up to 50% in deals ◆ More interventionism in portfolios and more dialogue with portfolio companies ◆ Lower returns expected in order of 15% as a result of maturation of industry 		<ul style="list-style-type: none"> ◆ LPs demand alternate ways to invest. Pressure to re-negotiate fees 			
PL Partner PwC External participant France/Europe		<ul style="list-style-type: none"> ◆ Not much specialisation or diversification has taken place since need for correct skill set ◆ Shift to operational improvements and more 'hands on approach' due to inability to exit investments & no access to leverage 	<ul style="list-style-type: none"> ◆ GPs desire to reduce costs thus tendency to exclude third party participation at due diligence stage ◆ More exclusive talks between GP & target 		<ul style="list-style-type: none"> ◆ Internal processes have become more structured & professionalised 		<ul style="list-style-type: none"> ◆ Target firms are more likely to conduct due diligence on take over firm ◆ Competitive advantage of PE firms will depend on their reputation of interaction with past targets
JL Partner PwC External participant France/Europe		<ul style="list-style-type: none"> ◆ Shift to distressed or mezzanine debt ◆ Return to fundamentals with strong focus on operational improvements ◆ Attempts to centralise assets ◆ Industry polarisation occurring ◆ US funds have shifted focus to Middle East in pursuit of better returns 		<ul style="list-style-type: none"> ◆ LPs search to invest directly ◆ Deals looked at more on deal by deal basis ◆ Little change observed regarding fee structure 	<ul style="list-style-type: none"> ◆ Processes more institutionalised ◆ Europe tendency to outsource more back office structures than the US 	<ul style="list-style-type: none"> ◆ AIFMD/Volcker rule will slow down cycle and bring extra cost ◆ Tax changes in form of BEPS could be harmful 	<ul style="list-style-type: none"> ◆ No room for generalists ◆ Competitive advantage will be achieved through specialisation either via geography or sector

Participant profile	Fundraising	Investment strategy	Investment process	Alignment of interests	Internal organisation	Regulation	Other observations
JM Founder Better Capital Internal participant UK/Europe		<ul style="list-style-type: none"> ◆ Diversification to other asset classes to make up for loss of revenue but industry remains generalist ◆ LBOs surviving due to low interest rates ◆ Large players unscathed, have in fact become more powerful ◆ Industry polarisation occurring ◆ Expectation of return on investment lowered to around 12% 	<ul style="list-style-type: none"> ◆ Processes remain inherently different from fund to fund - no standardisation 	<ul style="list-style-type: none"> ◆ No improvement or change in alignment of interests observed 		<ul style="list-style-type: none"> ◆ AIFMD will add extra cost and process ◆ BEPS initiative is more concerning 	<ul style="list-style-type: none"> ◆ Competitive advantage will come from focusing at improvements and cost reduction at operational level
SW Investment Director Electra Partners Internal participant UK/Europe	<ul style="list-style-type: none"> ◆ Listed fund so not subject to same fund raising pressures as other funds ◆ Capital for investment constant at £300 million 	<ul style="list-style-type: none"> ◆ Preference to invest in resilient businesses (non consumer) but since 2013 trend has reverted due to improved economy but also pressure to clear backlog of dry powder ◆ Intense competition at deal end has forced GPs to invest in 'out of character investments' ◆ Visibility of US funds desiring to invest in Europe has increased ◆ No change to Electra's approach of managing portfolio firms but looks at doing more 'bolt on deals' 	<ul style="list-style-type: none"> ◆ Due diligence much more lengthy however this trend has reverted since 2013 to old pre-crisis habits ◆ Exit strategy has remained unchanged due to Electra's business model that is not time driven 	<ul style="list-style-type: none"> ◆ No significant shift in compensation structure observed ◆ 'Skin in game' has increased on demand of investors ◆ Misalignment of interests has occurred in run off funds, whose proportion have increased since crisis 	<ul style="list-style-type: none"> ◆ Electra has not made any significant internal changes 	<ul style="list-style-type: none"> ◆ Regulation has not had much impact at present on fund operation aside slowing down the cycle 	
MF Investment Partner Key Capital Partners Internal participant UK/Europe		<ul style="list-style-type: none"> ◆ KCP business model involves investing in overhead structures of small to mid size targets ◆ Development of untranche banks that have taken place of traditional large bank lenders as source of funding for small deals 		<ul style="list-style-type: none"> ◆ Change in fee structure has occurred in some cases but only been temporary ◆ 2012-13 has seen return to pre-crisis habits ◆ 'Skin in game' has increased due to investors increased wariness in whom they place funds ◆ KCP developed an alternate fund structure - 3 year lock in period, no hurdle with carry at 10% but little interest from investors so reverted back to standard 10 year lock in fund 		<ul style="list-style-type: none"> ◆ Regulation such as FACTA has had impact of increasing significantly back office functions in PE firms ◆ Trend is to outsource or go offshore 	

Table 3 - Key themes and characteristics of the post crisis PE business model as perceived or experienced by interviewees

5 CONCLUSION

The aim of this paper was to identify changes that had occurred in the PE business model regarding business, management and operating practices in the aftermath of one of the most significant financial crises in modern history with a specific focus on developed markets. Through the interview of various industry players both internal and external to the industry, the objective was to see what the main observations and experiences were of these participants and to see how this corresponded with the themes depicted in literature. Over the period studied from 2007 onwards, it can be concluded that the industry did indeed undergo various changes immediately in the aftermath of the crisis however the depth and nature of these changes can be questioned from 2013 which appears to be witnessing a possible return to old habits and norms that characterised the pre-crisis era.

The credit crunch had a profound effect on the industry impacting various actors within the PE ecosystem as well as important environmental and institutional variables that influence the structure, development and level of activity in the sector. The financial crisis brought about a liquidity drought with the ensuing credit freeze and a loss of confidence in financial markets provoking a huge decline in asset values. This evidently impacted the level of commitments that investors would dedicate to the PE industry reflected by the low fundraising figures in both Europe and the US from 2008 onwards. This tough fundraising environment has persisted, heightened by investors' increasing selectivity in whom they place their money, further intensifying competition between GPs for funds. At the same time, the ensuing recession and tough economic environment impacted portfolio companies' performance, and valuations while also decreasing the number of attractive deals in which to invest, simultaneously increasing competition at the deal flow end. The industry confronted with a drop in revenues was faced with a further possible decline in profitability having to conform to looming regulation such as the AIFMD, heightening back office costs. Furthermore, banks' role as investors and lenders to the PE industry has dramatically changed as a result of new financial regulation where PE firms can no longer depend on debt and leverage as levers for value creation impacting activity levels, investment strategies and deal sizes. Consequently, the industry in the aftermath of the crisis faced and still faces a multitude of challenges that has impacted the operation and behaviour of industry players in a variety of ways.

According to participants interviewed in the study, some of the main trends occurring in business models since the crisis in response to the above mentioned challenges involve either diversification to other lines of business/asset classes, but more commonly shifts in investment strategy regarding sector or geography. In addition, there is a common perception that the industry has significantly polarised as a result of this heightened competitive environment with the largest most successful houses growing stronger where the way forward for smaller firms would be indeed to specialise via sector or geography. Furthermore, in response to the pressure for cost reduction due to decreasing revenues, PE firms have focused on operational improvements at portfolio level and tried to cut out third parties involved in the due diligence stage that too became much more lengthy following on from the credit crunch. That said, it appears this latter trend has reverted from 2013 onwards with a shortening or improper completion of due diligences further substantiated by investors' attitude regarding fee structures and alignment of interests. While investors have become more demanding regarding alternatives investment structures, it seems that the standard fee structure in the industry remains largely unchanged with the 2/20 model remaining the norm. Even when confronted with a new alternative (based on the experience of one participant), it appears that investor preference is for the known rather than the new and unknown. Then with regard to internal operating practices, it appears that process have become more structured and institutionalised with outsourcing of back office functions on the rise especially under the growing spectre of regulation. The impact of the latter on the development of PE business model however seems to be of limited importance to date given the relative novelty of the AIFMD where changes to tax structure is of more concern going forward.

To conclude, the landscape of the PE industry has undergone some changes in the post-crisis period however modifications to the business model remain limited. This is due in part a perception of possibly improved economic conditions in Europe from 2012/13 onwards plus the lack of a unified investor base that could truly enforce change on PE actors' operating practices. It appears when times are good, cautious and risk averse actions undertaken in periods of stress or crisis by financial players are cast aside in the aim of being able to ride on the wave of opportunity of the moment. Thus it could be as Lerner (2011) predicts, a situation of recovery, given the inherently cyclical nature of the industry where booms are followed by busts to be followed by booms again. Besides this apparent short-termist

outlook, investors, who seem to have considerable influence on the way the industry operates, have not taken advantage of the favourable shift in balance of power to LPs in the post crisis period. The fact that some GPs have responded to LP concerns about fee expenditures through offering co-investments/alternative fund structures shows that they are receptive to investor demands, however if investor interest lacks (as was case of Key Capital), traditional fee structures re-appear. On the other hand, given the ‘flight to quality’ that has taken place following the crisis with increasing polarisation of the industry, strong performers will be in a position to attract the most capital and will be less sympathetic to investor pressure regarding compliance, transparency or fees. Thus one can conclude that the most significant changes would take place in smaller PE firms hence appropriately leading on to the limitations of this study.

In order for the comparative multiple case study approach to be truly effective, the interview sample should have ideally been composed of a more homogenous group that has a larger number of characteristics in common. For example contacts within PE firms, with a similar creation date ideally before the crisis targeting small to mid-size firms in the same country should have been targeted in order to compare and contrast industry insights. Nevertheless, given the heterogeneity of the industry and the diversity of PE players, the sample of three to four interviews would be considered to be too limited to make generalisations about the sector as a whole. Thus the study would prove of more value if a maximum number of interviews could be included in order to identify larger trends taking place amongst management firms. In addition, given the different stages of development of the PE industry from one country to another even within the European Union, a comparative study would have proven more meaningful if it focused on one country in particular such as either France, UK or Germany, where the PE industry is considered the most developed. Finally, this research would be interesting to carry out again in a few years time once regulation relating to the asset management and banking industry has had been fully implemented and which the effects by then on PE business models could be fully analysed.

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7 ANNEX

7.1 Interview guide – PE firm

Research objective:

To understand changes in the operation of the Private Equity industry and its business model since the 2008 financial crisis with the aim of identifying

- The nature of this change (if any)
- The main drivers of this change
- The extent to which this change be attributed to the impact of the crisis

The sections below are to be answered having in mind any changes that have occurred from the start of the financial crisis to the present

Fund raising

- Has your **investor base** changed? How and why?
- How have the **number of funds** and the **size of funds** under management changed over time?
- How has the firm responded to **challenges** encountered towards fund raising?

Investment strategy

Investment focus

- How has the firm's **investment focus** (strategic, geographic, industry) changed?

Funding

- What are the **sources of finance** that have been used to finance deals?
- How has the firm's use of **leverage** evolved?

Firm management style

- Has the firm's **style** for engaging and **working with** portfolio companies evolved?

Value creation

- How has the firm's methods used to **create value** at portfolio company level changed? (financial, engineering, restructuring, strategic re-positioning, leveraging, operational improvements....).
- What is the expected **return** profile for investments (IRR, multiples)?
- What would you say has had the most influence on your investment strategy since 2008?

Investment process

Selection criteria

- What factors do you look for when **rating/selecting** a new investment opportunity? (quality of management, margins, efficiency of internal control..)

Due diligence

- Has the firm's screening and **due diligence process** of a target changed in anyway? (steps involved, outsourcing..)

Monitoring

- Has the firm's **monitoring policy** of portfolio companies changed?

Exits

- How has the firm's strategy / criteria and **plan for exiting** investments altered?
- What factor, if any, has influenced the most, any changes in your investment process since 2008?

Alignment of interests

- Has **GP commitment** /capital committed by your firm as a percentage of total funds committed remained (stable, increased, decreased) and if so why?
- Has the **compensation structure** within the firm or the firm's **management fee** changed?
- Would you say **alignment of interests** between your firm, investors and top management at portfolio companies has remained (stable, worsened, improved) and if so why?

Risk / Compliance / Internal organisation

- What steps have been undertaken to **reduce risk** at the firm if any?
- What changes have been made to the **company structure** / back office functions/ operational infrastructure? (way employees are organised, do their work, reporting)
- Have rising **investor demands** regarding reporting/transparency/compliance influenced your firm in anyway?

Regulation

- To what extent has **regulation** impacted the firm's strategy / mode of operation / organisation?

Open questions

- What do you believe will be a key determinant of the firm's **competitive advantage** going forward?

7.2 Interview guide – External Participant**Research objective**

To understand changes in the operation of the Private Equity industry and its business model since the 2008 financial crisis with the aim of identifying

- The nature of this change (if any)
- The main drivers of this change
- The extent to which this change be attributed to the impact of the crisis

The sections below are to be answered having in mind any changes that have occurred from the start of the financial crisis to the present according to you as an external participant

General Information

- Please describe what is your connection to the Private Equity industry?

- In what capacity do you interact/have you interacted with the industry?

Fund raising

- How has the **profile** of investors in PE changed? Why?
- What have been the **challenges** encountered towards fund raising?
- How has the industry responded to these challenges?

Investment strategy

Investment focus

- How have PE firms' **investment focus** (strategic, geographic, industry) changed?

Funding

- How are PE firms financing their deals since 2008?
- How have PE firms' use of **leverage** evolved in deals?

Firm management style

- Have PE firms' **style for engaging and working** with portfolio companies changed? If so how?

Value creation

- Have methods used to **create value at portfolio company level** changed? (financial engineering, restructuring, strategic re-positioning, leveraging, operational improvements...).
- How have expectations regarding **return profile** for investments (IRR, multiples) evolved?
- What would you say has had the most influence on PE firms' investment strategy since 2008?

Investment process

Selection criteria

- Do you think that PE firms have changed the manner in the way they **rate or select** new investment opportunities? If so, why?

Due diligence

- Have PE firms changed the way in which they screen a target or conduct a **due diligence process**?

Monitoring

- Has the way in which PE firms **monitor and track** portfolio companies changed at all? If yes how?

Exits

- Has the way in which PE firms **plan for exiting investments** changed at all? (type of exit, timing..)
- What factor, if any, has influenced the most, any changes in the investment/deal process since 2008?

Alignment of interests

- Has **GP capital committed** to funds ('skin in game') remained identical, increased, decreased?
- Has the **compensation** structure and **management fees** at PE firms evolved?
- Would you say **alignment of interests** between PE firms, investors and top management at portfolio companies has remained stable, worsened, improved and if so why?

Risk / Compliance / Internal organisation

- How have PE firms taken steps to **reduce risk** in their operations?
- Have any **changes** been made to the **company structure / back office functions/ operational infrastructure**? (way employees are organised, do their work, reporting)
- Do you think rising **investor demands** regarding reporting/transparency/compliance have influenced PE firms in any way?

Regulation

- To what extent do you think **regulation** has impacted PE firms' strategy / mode of operation / organisation?

Open questions

- "The private equity business model is just as robust now as it was before the crisis. No adjustment is necessary. Agree or disagree?"
- What do you believe will be a key determinant of PE firms' **competitive advantage** going forward?

