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Introduction and overview

1.1 INTRODUCTION

In recent years the profile of the private equity industry has increased dramatically. While the industry has been actively investing in companies across a wide range of industries for several decades, the combination of astute buying by private equity funds focused on buyouts in the early part of the last decade and the extremely liquid credit markets of 2004–2007 fueled some impressive exits. Similarly, private equity funds focused on venture investments had very successful exits in the late 1990s. These exits helped to substantially increase the profile of the industry.

Over the last 20 years or so private equity has grown to become a sizable asset class at its peak, responsible for up to a quarter of global M&A activity and as much as half of the leveraged loan issues in the capital markets. At the top of the last cycle, private equity funds found themselves able to acquire very public assets and seemed to be able to deliver extraordinary returns, both for their investors and for their managers. This "institutionalization" of private equity saw its profile rise substantially with a number of commentators focusing on this "new" industry.

Towards the end of this decade the industry, like every other, had to weather the financial crisis. During the crisis a number of new private equity investments fell dramatically, despite the historically high level of capital commitments made to private equity funds. The prevailing economic uncertainty combined with a very significant reduction in the amount of leverage available to dealmakers combined to severely restrict new-deal activity. The global financial crisis and associated recession also led to a sharp slowdown in fundraising.

Despite the considerable challenges, the economic environment produced a surprisingly small number of private equity–backed business failures. Many portfolio companies benefited from the active, hands-on involvement of their private equity owners. As a result, private equity portfolio companies managed to weather the economic downturn through a combination of revenue protection, production efficiencies, cost cutting, and careful working capital management. Also, lower commodity prices, lenders willing to restructure the debt, and new opportunities to refinance the debt due to a strong high-yield bond market have helped to mitigate financial pressures.

Indeed today it may be that the private equity industry has become a victim of its own success. The exceptional performance of the early part of the last decade certainly

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attracted ever more capital into the industry and some of it has been deployed to acquire large and visible companies. Thus, for the first time, private equity has been brought into the public arena and, now that it is there, it is likely to remain. In the future it seems clear that the industry will have to communicate more effectively with the various stakeholders and will be subject to increasing levels of external scrutiny and regulation. The calls to regulate the industry have increased, mainly due to the perception that the industry has contributed to the severity of the credit crisis. Such initiatives as the Alternative Investment Fund Manager (AIFM) regulations may prove to be the beginning of an increasingly onerous regulatory process.

However, despite the challenges that the industry faces (not least of which, the difficult economic environment that seems likely to persist in the medium term in most of the Western world), many within the industry retain their high hopes for the future.

Background

Private equity is the name given to that part of the asset management industry where investments are made into securities which are usually not quoted in the public markets. Private equity investments are normally made through special purpose fund structures of finite life which are established to follow specific investment strategies. These funds provide capital to a wide array of companies, ranging from business startups to very large and mature companies. One of the reasons the private equity industry exists is that, in many cases, companies have needs for capital which, for various reasons, cannot be met from the public markets. Investors that provide capital to private equity funds invest in an asset class that entails relatively high risk and high illiquidity in what remains a largely unregulated market.

At its highest level, the private equity industry can be subdivided into *buyout* and *venture capital* funds. Both buyout funds and venture capital funds share similar organizational structures in terms of their management fee structure and longevity. However, they are quite different when it comes to their investment strategy. Buyout funds usually focus on established and mature companies rather than young businesses and use debt as well as equity financing. They also tend to be larger in size than the venture funds. Venture funds focus on startups, young and high-growth companies, and do not use debt capital when providing financing. In both cases the general partners (or managers of the funds) normally play an active role in the lives of the portfolio companies that they invest in, often taking seats on the management board of portfolio companies and monitoring the delivery of an agreed strategic plan. Typically, a successful investment would see the execution of this strategic plan and the eventual exit of the private equity owner after between 3 and 7 years.

Private equity funds differ significantly from other investment funds found in the public markets in that the typical concentration of ownership allows the investor a far higher degree of control. In essence, private equity fund managers seek to influence the companies they invest in and, in the case of buyouts, choose an optimum capital structure. Prior to investing they conduct extensive due diligence and have significant access to the views of management of these companies. It could easily be argued that private equity funds operate with much better information and stronger controls over portfolio companies than, for example, mutual funds holding quoted equities.

Worldwide, private equity funds manage approximately USD2.5tn of assets and committed capital of which the vast majority is in buyout funds (CityUK, 2010). Some of the largest investors in the asset class are pension funds (who in turn supply the capital to the various special purpose vehicles that actually make the underlying investments).

Leveraged buyout transactions have grown significantly over the last two decades. In 1991, new buyout transactions were USD10bn and by the beginning of 2006 they had reached USD500bn. This annualized total was equivalent to 5% of the capitalization of the U.S. stock market (Acharya et al., 2007). This growth was fueled by a virtuous circle of supportive economic environment, favorable credit terms, and continuing demand from investors for steadily larger private equity funds.

Origins of private equity

The history of private equity as an asset class goes back to before the Second World War with the beginning of angel investing in the 1930s and 1940s. Wealthy families, such as the Vanderbilts, Rockefellers, and Bessemers provided capital to private companies as angel investors. One of the first venture capital firms, J.H. Whitney & Company, was founded in 1946.

The early seeds of the venture capital industry can be traced to 1946 with the founding of two venture capital firms: American Research & Development Corporation (ARDC) and J.H. Whitney & Company (Wilson, 1985). General Georges F. Doriot, an influential teacher and innovator at Harvard University is known for his role in the formation of ARDC which raised outside capital solely for investment in companies. In its 25-year history, ARDC helped fund more than a hundred companies and earned annualized returns for its investors of 15.8% (Fenn et al., 1995; Kocis et al., 2009). ARDC is credited with the first major venture capital success story when its 1957 investment of USD70,000 in Digital Equipment Corporation increased in value to over USD355mn after the company's initial public offering in 1968.

In 1958 early venture capital got a boost from the U.S. government when small business investment companies (SBICs) were licensed. This license gave these finance companies the ability to leverage federal funds to lend to growing companies. SBICs became very popular in 1960s. During this period, the development of limited liability partnerships for venture capital investments took place. In this arrangement corporations put up the capital, with a few percentage points from this capital paid every year for the management fees for the fund. The remaining capital was then invested by the general partner in private companies.

However, the big boost for venture capital in the U.S. came in the 1970s. The first boost was the reduction of capital gains tax. Despite inroads made by SBICs and the reduction in capital gains tax, total venture capital fundraising in the U.S. was still less than USD1bn a year throughout the 1970s. The second boost was from the U.S. Congress in 1974, when it enacted the Employee Retirement Income Security Act (ERISA), a set of pension reforms designed to help U.S. pension managers into more balanced custodianship. This act was clarified in 1979 to explicitly permit pension funds to invest in assets like private equity funds. Consequently, in the late 1970s and early 1980s a few pension funds added a small amount of venture capital to their portfolio and a few university endowments joined in (Metrick, 2007).

The first of today's big private equity firms, Warburg Pincus, was formed only in the late 1960s, and had to raise money from investors one deal at a time. Another large private equity firm today, Thomas Lee Partners, was founded in 1974 and was among the earliest independent firms that focused on the acquisition of companies with leverage financing. KKR was another early firm and managed to successfully raise the first institutional fund of investor commitments in 1978. By the late 1980s private equity had grown big enough to be noticed by the general public, but it made hostile headlines with a wave of debt-financed "leveraged buyouts" (LBOs) of big, well-known firms. In the late 1980s, funds often borrowed massively to pay for buyouts, many of which were seen as hostile by the management of the intended targets. When KKR bought America's Safeway supermarket chain in 1986, it borrowed 97% of the USD4.8bn the deal cost (Bishop, 2004).

1.2 CYCLICALITY OF THE PRIVATE EQUITY INDUSTRY

Private equity activity appears to experience recurring boom and bust cycles that are related to past returns and to the level of interest rates relative to earnings. Since it emerged as a major asset class in the 1980s, private equity has experienced three major expansions followed by sharp downturns.

In the 1980s, the private equity industry capitalized on the sale of many poorly run public companies and corporate divestitures available at low cost and largely financed with junk bonds. That expansion ended abruptly when the main provider of financing, the high-yield bond market, collapsed.[1] The collapse was followed by a recession (1990–1992) due to a crisis triggered by savings-and-loan institutions in the U.S. The bond market recovered very slowly after this episode, so activity in the private equity industry was very slow for almost 5 years.

In the 1990s, debt financing played a less prominent role. First, the Telecommunications Act of 1996, a major overhaul of United States telecommunications law, fostered competition and fueled private equity investments in the sector. Second, the private equity industry was driven by the accelerated economic expansion. This period saw the emergence of more institutionalized private equity firms and a maturing of the investor base. In particular, venture capital firms benefited from a huge surge of interest in the new internet and computer technologies that were being developed in the late 1990s. These firms started raising bigger pools of capital to finance larger deals at higher valuations. This boom ended, however, when the dotcom technology bubble burst in March 2000. Over the next 2 years, many venture firms were forced to write off significantly their fund investments. Meanwhile, the leveraged buyout market also declined dramatically. A lot of buyout funds invested heavily in the telecommunications sector which suffered after the dotcom bust.

The private equity industry recovered relatively quickly. By 2003 deal activity had exceeded the peak before the recession that started in 2001. Over the past decade, private equity rode a credit bubble inflated by low interest rates to record deal values. In 2005, 2006, and the first half of 2007 new buyout records were set. The buyout boom was not limited to the U.S. but also spread in Europe and the Asia–Pacific region. The boom has been driven primarily by the availability of syndicated bank debt. Leveraged lending grew larger and more complex than ever before, and investor demand for structured finance vehicles such as collateralized loan obligations (CLOs) powered the market for leveraged loans to new heights. In CLOs the bundled pools of loans were sold to investors in various risk tranches. Searching for different returns from different markets, hedge funds found fertile ground in the syndicated loan market, especially second-lien and mezzanine debt and payment-in-kind securities. This last

1. One investment bank, Drexel Burnham Lambert, was largely responsible for the boom in highly leveraged private equity transactions during the 1980s due to its dominance in the issuance of high-yield debt. The bank was sued by the Securities and Exchange Commission for insider trading and fraud in 1988. The bank filed for bankruptcy protection in early 1990 after dismantling its high-yield debt department.

boom came to an abrupt end with the mortgage-led debt crisis that froze credit markets in 2008 and triggered a global recession.

The burst of the credit bubble in 2008–2009

The economic slowdown triggered by the credit crisis had a significant impact on completed private equity deals. Buyouts' share of total investments fell for the second year running in 2009, a direct result of the abrupt economic slowdown, huge uncertainty, and virtual evaporation of the debt markets. Despite an increase in the share of total investments, venture capital deals were also down. The stress and dislocation in the system caused by this abrupt shock to the system has more recently led to a significant pickup in activity in the "secondary" market for private equity interests as investors strive to reconfigure their balance sheets for the new reality.

The global credit crisis that started in 2008 had a significant effect on the number, size, and type of PE deals concluded ever since. The crisis manifested itself in many ways:

- *Debt became scarce and expensive*. The most immediate impact of the crisis was a significant tightening of private equity funds' access to leverage. By the middle of 2009 the loans extended to buyout transactions virtually disappeared, falling to a small fraction compared with the previous years. Equally dramatic was the impact on the cost of debt financing. The spread on syndicated term loans and revolving credit had more than doubled from 2005 levels. This decline in leveraged financing dampened the buyout activity to its lowest level since 2001, when the industry was just a fraction of its current size. The drop was most dramatic in the buyout industry's traditionally strong North American and European markets. Even deals in the fast-growing Asia–Pacific markets decreased although not as much. While leveraged loan issuance for buyouts had a significant drop, high-yield debt issuance saw significant increases in 2010. Most of this went into refinancing existing portfolio company debt as the high-yield bond market filled the financing gap left by the decline in bank lending.
- *Buyouts started using less debt*. With debt-financing scarce, the buyout deals struck in 2008 and 2009 were structured with modest amounts of leverage, well below peak levels. Therefore, buyout deals needed far bigger infusions of equity. In U.S., the average equity contribution reached 52% of the total purchase price on average in 2009, the highest level since at least 1997, while in Europe the average equity contribution increased to 56% in 2009 (Bain & Co., 2010).
- *The size of buyouts decreased*. The credit crisis marked an end to the blockbuster transactions that dominated headlines between 2005 and 2007. Buyout deals valued at USD10bn or more accounted for nearly one quarter of the total value of buyout transactions at the peak in 2007, but in 2009 there was no deal that large. In parallel with the shift to smaller deals was a rotation in the types of investments private equity funds were making. The trend that saw many private equity funds convert public companies into private businesses reversed as the proportion of public-to-private deals declined to its lowest level in more than 5 years.
- *Buyout firms readjusted their focus*. Buyout funds started to focus their investments on carveouts and sales of non-core assets by cash-strapped parent companies and increased their international presence in emerging markets. They also started to invest with strategic buyers through minority stake investments and

provide capital to finance add-on acquisitions for their portfolio companies. Finally, buyout funds started to invest in debt and distressed debt investments trading below par value. Some of these debt securities enabled private equity funds to acquire ownership stakes via debt conversions.

- *Fundraising decreased significantly*. Fundraising came almost to a halt in 2009, when new funds raised worldwide raised less than 40% of what the industry brought in during 2008. Funds focused on buyouts saw the biggest declines. In addition, new funds took longer to close. One reason for some investors' lack of interest in making new commitments to the asset class was that for those investors whom private equity formed part of a balanced asset portfolio they found their de facto allocation to private equity rose sharply as the value of public asset investments fell (the so-called "denominator" effect). A cash flow imbalance between capital calls and distributions further contributed to the squeeze.

1.3 STATISTICS ON THE PRIVATE EQUITY INDUSTRY

Putting the effect of the recent crisis aside, the private equity market has been growing rapidly in terms of funds raised. However, international fundraising patterns differ markedly. Only 10% of U.S. private equity funds are raised from foreign investors while European and Asian funds are much more international since more than half of their funds come from foreign investors. International funds largely come from the U.S. market. In mature markets, such as the U.K. and Continental Europe, U.S.-based investors are the largest providers of capital (EVCA, 2008). Also, the development of private equity funds in India and China is to a large extent caused by flows from U.S.-based institutions (e.g., Deloitte, 2005).

Private equity investments are now found on most continents and international flows of capital are increasing rapidly. For example, 34% of the amount raised by European venture capital and private equity firms in the period 2003 to 2007 is dedicated to non-domestic investments (e.g., EVCA, 2008). During the same period, U.S. private equity firms accounted for 32% of all international buyout investments. The Asia–Pacific market has developed as a third important private equity market with strongly developed markets in Japan, Australia, Singapore, Hong Kong, South Korea, and Taiwan, and emerging markets in China and India.

An important reason for the increased interest in the private equity market since the 1980s has been the fact that the private equity asset class on average has generated consistently higher returns than most public equity markets and bond markets. Evidence provided by private equity industry trade associations indicates that private equity funds outperform public equity indices, although the variation between the top-performing buyout and venture funds and the others is very wide. However, academic evidence attempts to adjust for the inherent risk associated with private equity investments as well as fees charged by private equity managers and finds that, on average, private equity funds do not outperform the public indices (Kaplan and Schoar, 2005; Phalippou and Gottschalg, 2009). Nevertheless, this academic work still finds that the top-performing funds (the top quartile of the funds) have significant and persistent outperformance.

Preqin, an independent data provider, offers one of the most comprehensive and detailed sources of private equity performance data covering both buyout and venture funds. Their statistics are based on data from a number of different sources, including from GPs themselves. This dataset covers over 5,000 private equity funds of all types

EXHIBIT 1.1

PERFORMANCE OF VENTURE FUNDS AS OF DECEMBER 31, 2009, WORLDWIDE (PREQIN MEDIAN BENCHMARKS)

Vintage	No. funds	Median fund			Median quartiles			IRR quartiles			IRR	
		Called (%) DPI	Dist (%) RVPI	Value (%)	Q1	Median	Q3	Q1	Median	Q3	Max	Min
2008	34	21.8	0.0	84.4	1.08	0.89	0.75	n/m	n/m	n/m	n/m	n/m
2007	50	43.7	0.0	92.8	1.05	0.94	0.79	2.4	−3.5	−16	182	−38.3
2006	52	65.6	0.2	83.9	1.02	0.88	0.78	0.4	−7.3	−12.7	52.0	−51.8
2005	44	80.1	10.8	77.6	1.19	0.95	0.78	7.2	−2.3	−7.3	32.9	−93.5
2004	22	91.4	17.4	75.5	1.11	0.95	0.74	4.2	−2.9	−9.7	55.4	−22.0
2003	19	90.0	21.1	65.0	1.50	1.01	0.83	14.0	0.1	−5.5	35.1	−17.2
2002	35	94.5	41.2	62.9	1.31	1.03	0.79	7.3	0.2	−7.4	23.0	−47.2
2001	59	99.8	46.0	50.1	1.35	0.95	0.70	7.5	−1.8	−8.0	28.6	−100.0
2000	69	97.0	52.2	41.2	1.29	1.00	0.65	5.3	0.0	−6.9	28.8	−22.7
1999	48	100.0	47.5	21.1	1.32	0.73	0.51	7.2	−6.7	−14.4	28.7	−40.6
1998	31	100.0	131.9	4.1	1.63	1.39	0.62	22.0	8.4	−10.2	514.3	−46.1
1997	38	100.0	207.5	0.0	4.18	2.26	1.20	80.5	32.8	3.7	267.8	−35.0
1996	18	100.0	199.9	0.0	3.27	2.00	1.46	61.1	17.8	8.5	133.3	−33.3
1995	22	100.0	213.2	0.0	5.45	2.13	1.12	89.7	22.6	3.4	447.4	−19.9
1994	20	100.0	190.2	0.0	4.99	1.90	1.37	47.9	25.5	7.0	73.2	−22.0
1993	27	100.0	247.5	0.0	3.53	2.48	1.59	40.8	31.7	8.0	87.4	−14.8
1992	26	100.0	187.9	0.0	3.32	1.88	1.39	34.1	18.6	4.4	110.4	−20.1
1991	15	100.0	247.0	0.0	3.61	2.47	1.56	39.7	25.3	10.6	346.4	1.2
1990	20	100.0	183.0	0.0	2.52	1.83	1.11	24.9	16.0	3.9	74.4	−35.9

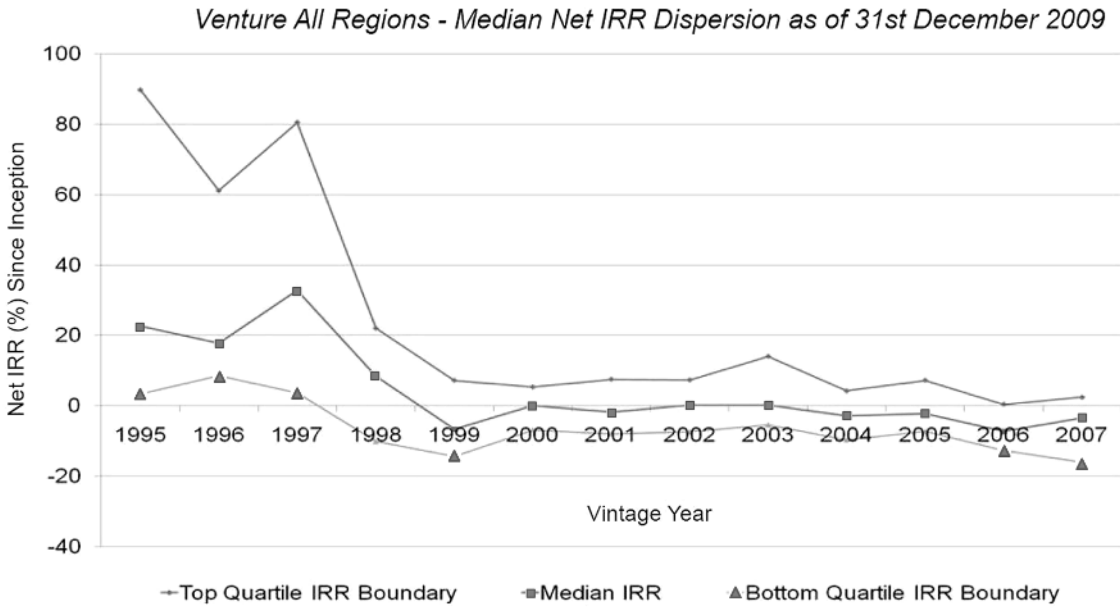
Source: Preqin (2009a).

and a geographic focus that represents about 70% of all private equity capital committed worldwide (Preqin, 2009). As private equity investments are generally medium and long-term investments, 1-year returns are inappropriate as a realistic measure of private equity performance due to the volatility in returns. As a result, most data providers that measure the performance of private equity funds rely on multiples on investments and internal rates of return (IRR). We discuss these measures in detail in Chapter 3.

Exhibit 1.1 presents the performance of 649 venture funds with vintages starting in 1990 until 2008. The sample covers all regions of the world. For early vintages, the performance is higher both in terms of multiples and IRRs provided to investors due to the fact that the funds have liquidated or are close to liquidation. The median fully liquidated venture fund (i.e., funds with vintages prior to 1998) returned a multiple

EXHIBIT 1.2

NET IRR PERFORMANCE OF VENTURE FUNDS AS OF 31 DECEMBER 2009, WORLDWIDE



Source: Preqin (2009a).

varying from 1.83 times the money committed to the fund to 2.48 times the money committed (for the same group of funds the IRRs vary between 16% and 32.8%). Net IRRs are computed after removing the management fees, expenses, and the carried interest received by the fund managers. The median venture fund raised at the peak of the dotcom bubble (in 1999) generated losses to its investors (multiple is 0.73; IRR is −6.70). It is worth noting the large variation in performance. The top-quartile fund delivers, on average, across all vintages returns that are twice as large than the bottom-quartile fund.

A plot of the net IRR performance of the median fund (Exhibit 1.2) shows a significant gap between the top-quartile and bottom-quartile venture fund. It also indicates a sharp drop in the performance of venture funds in general starting with the 1999 vintage.

Exhibit 1.3 presents the performance of 676 buyout funds with vintages starting in 1990 and ending in 2008. Again, the sample covers all regions in the world. As in the case of venture funds, the performance of buyout funds is higher in early vintages (i.e., the funds were liquidated or close to liquidation). The median buyout fund close to liquidation (i.e., funds with vintages prior to 1998) returned a multiple varying from 1.57 times the money committed to the fund to 2.23 times the money committed (for the same group of funds the IRRs vary between 10.6% and 23.8%). Net IRRs are computed after removing the management fees, expenses, and the carried interest received by the fund managers. The top-quartile buyout fund delivers significantly higher returns than the bottom-quartile buyout fund indicating great variation in the performance of the funds.

EXHIBIT 1.3

PERFORMANCE OF BUYOUT FUNDS AS OF DECEMBER 31, 2009, WORLDWIDE (PREQIN MEDIAN BENCHMARKS)

Vintage	No. funds	Median fund			Median quartiles			IRR quartiles			IRR	
		Called (%) DPI	Dist (%) RVPI	Value (%)	Q1	Median	Q3	Q1	Median	Q3	Max	Min
2008	53	23.6	0.1	86.9	1.04	0.93	0.76	n/m	n/m	n/m	n/m	n/m
2007	72	43.0	0.4	89.2	1.05	0.92	0.79	4.6	−5.7	−14.2	24.3	−52.4
2006	53	67.3	2.4	82.8	1.05	0.89	0.78	3.6	−5.6	−12.8	28.9	−76.7
2005	64	87.2	24.4	87.9	1.36	1.18	1.01	14.6	7.1	0.4	76.9	−26.7
2004	33	91.1	32.7	82.6	1.76	1.23	1.04	25.3	7.2	1.5	90.4	−14.2
2003	22	93.1	65.6	84.5	2.49	1.60	1.31	46.9	18.5	11.3	92.9	−7.8
2002	31	93.9	85.5	53.3	1.98	1.59	1.38	30.3	16.9	11.0	72.0	−3.5
2001	29	97.0	160.8	38.7	2.77	2.16	1.51	40.3	29.0	13.8	95.7	9.5
2000	59	97.0	136.3	47.8	2.24	1.72	1.42	24.7	17.3	11.0	34.8	−9.5
1999	36	97.3	134.3	14.4	2.03	1.56	1.22	19.4	11.3	5.4	40.3	−25.1
1998	46	99.8	142.7	6.7	1.87	1.48	1.08	15.9	8.6	0.3	31.3	−45.4
1997	35	100.0	149.5	1.2	2.15	1.61	1.25	20.6	11.8	4.2	84.5	−13.9
1996	21	99.6	179.9	0.6	2.36	1.82	1.13	25.6	12.8	1.4	147.4	−8.9
1995	23	100.0	151.7	0.0	2.29	1.57	1.19	34.5	10.6	2.7	59.9	−15.5
1994	30	100.0	205.8	0.0	2.47	2.06	1.52	37.4	21.6	13.9	92.2	−1.2
1993	18	100.0	200.7	0.0	3.12	2.03	1.51	25.3	18.0	9.0	58.0	0.8
1992	19	100.0	195.5	0.0	2.54	1.96	1.19	36.9	21.2	4.7	58.1	−49.9
1991	9	100.0	219.2	0.0	3.19	2.19	2.01	30.3	23.8	19.8	54.7	−0.5
1990	23	100.0	222.6	0.0	3.21	2.23	1.54	27.0	16.8	7.0	70.0	2.4

Source: Source: Preqin (2009b).

The time series performance pattern of the median buyout fund is different from that of the median venture fund. The performance (net IRR) peaked for the 2003 top-quartile vintage and then started to drop for the funds raised after. This is also the year where the gap between the top-quartile and bottom-quartile performance is the largest.

Exhibits 1.4 and 1.5 present disaggregated information on buyout fund performance for the two largest markets: North America and Europe. The data on North American funds spans a longer period with vintages as early as 1980.

In Exhibit 1.7 we present a ranking of the largest private equity firms and their location based on the capital raised over the 5-year period prior to the end of 2009 (the ranking has been compiled by *Private Equity International*). Goldman Sachs Principal Investment Area is the largest private equity firm in the world. The private equity division of Goldman Sachs has managed to raise USD54.5bn for private equity direct

EXHIBIT 1.4

PERFORMANCE OF NORTH AMERICAN BUYOUT FUNDS AS OF DECEMBER 31, 2009 (PREQIN MEDIAN BENCHMARKS)

Vintage	No. funds	Median fund			Median quartiles			IRR quartiles			IRR	
		Called (%) DPI	Dist (%) RVPI	Value (%)	Q1	Median	Q3	Q1	Median	Q3	Max	Min
2008	32	23.8	0.2	93.4	1.07	0.95	0.85	n/m	n/m	n/m	n/m	n/m
2007	45	40.1	0.9	90.3	1.05	0.95	0.83	3.7	−5.4	−11.2	22.2	−40
2006	31	64.8	2.8	82.9	1.02	0.88	0.78	0.9	−5.9	−11.9	28.9	−76.7
2005	38	85.5	14.7	94.7	1.23	1.12	1.01	10.1	4.7	0.6	41.0	−20.6
2004	21	91.1	30.6	93.4	1.62	1.22	1.04	20.0	6.9	1.5	60.9	−7.5
2003	15	90.3	61.6	84.2	2.25	1.57	1.30	40.6	14.8	8.0	92.9	1.0
2002	18	95.5	73.4	61.1	1.65	1.51	1.28	22.2	12.0	8.6	35.9	−3.5
2001	16	96.7	167.2	39.3	2.53	2.04	1.47	39.7	28.1	13.6	95.7	9.5
2000	38	96.7	105.0	53.3	2.09	1.65	1.39	22.1	14.7	9.7	34.8	−0.8
1999	23	98.5	118.2	20.6	1.82	1.49	0.93	15.0	9.2	−1.2	29.6	−25.1
1998	33	99.8	126.2	9.3	1.72	1.43	0.96	15.3	7.3	−2.3	26.9	−20.7
1997	23	100.0	149.5	1.7	2.15	1.59	1.08	15.0	11.8	1.9	33.6	−13.9
1996	15	98.7	130.8	1.1	2.28	1.31	1.02	23.4	6.4	0.6	147.4	−8.9
1995	16	100.0	147.8	0.0	2.30	1.51	1.21	29.8	10.1	4.0	59.9	−8.6
1994	22	99.5	200.7	0.0	2.24	2.01	1.52	32.6	18.8	13.9	92.2	−1.2
1993	15	100.0	230.0	0.0	3.27	2.30	1.71	28.1	19.8	11.4	58.0	2.7
1992	13	100.0	156.2	0.0	2.39	1.56	0.86	41.4	21.2	−6.1	58.1	−49.9
1991	6	100.0	246.5	0.0	n/m	2.47	n/m	n/m	22.1	n/m	54.7	−0.5
1990	13	100.0	247.1	0.0	3.62	2.47	1.82	31.7	15.3	8.8	54.2	2.9

Source: Preqin (2009b).

investment over the past 5 years, including the USD20.3bn GS Capital Partners VI raised in 2007. The top 10 list is dominated by American private equity firms (8 out of 10). The largest private equity firms outside North America are CVC Partners with USD34.2bn raised and Apax Partners with USD21.7bn raised, both based in London.

The largest non-American or European firm comes at the bottom of this league table: Abraaj Capital, based in Dubai, raised USD6.5bn. The largest firm headquartered in Asia is Beijing-based CDH Investments, with USD4.1bn in capital raised over the past 5 years (not in the top 50).

The top 300 private equity firms in the 2010 ranking by *Private Equity International* have raised a total of USD1.315tn over the past 5 years, a decrease from the USD1.337tn raised by the largest 300 firms over a similar timespan ending in April 2009.

EXHIBIT 1.5

PERFORMANCE OF EUROPEAN BUYOUT FUNDS AS OF DECEMBER 31, 2009 (PREQIN MEDIAN BENCHMARKS)

Vintage	No. funds	Median fund			Median quartiles			IRR quartiles			IRR	
		Called (%) DPI	Dist (%) RVPI	Value (%)	Q1	Median	Q3	Q1	Median	Q3	Max	Min
2008	12	21.3	0	72.5	1.00	0.77	0.49	n/m	n/m	n/m	n/m	n/m
2007	19	48.5	0.0	84.0	1.11	0.85	0.69	9.6	−10.3	−20.3	24.3	−52.4
2006	17	67.1	4.1	80.9	1.09	0.86	0.72	4.5	−6.3	−15.2	11.7	−32.1
2005	18	87.7	44.0	79.7	1.61	1.25	0.94	26.5	10.2	−2.9	76.9	−26.7
2004	10	89.1	82.0	69.8	1.94	1.62	1.13	65.7	22.0	5.5	90.4	−13.0
2003	6	97.1	120.1	75.6	2.49	2.16	1.46	47.1	26.9	19.3	48.7	−7.8
2002	13	91.8	157.1	49.0	2.52	1.83	1.51	42.9	29.0	13.2	72.0	11.0
2001	10	99.5	218.9	26.9	3.23	2.39	1.55	44.2	32.0	13.7	52.6	10.0
2000	18	97.9	164.7	23.1	2.49	2.31	1.43	26.7	23.0	17.3	33.2	−5.5
1999	10	93.5	154.3	7.1	2.19	1.82	1.52	24.4	16.8	9.3	40.3	6.0
1998	10	90.4	166.6	7.2	2.32	1.76	1.48	18.1	15.0	8.0	31.3	−3.2
1997	11	98.9	166.8	0.0	2.49	1.67	1.47	24.0	17.9	7.6	84.5	0.1
1996	5	99.6	220.7	0.0	3.28	2.21	1.77	45.4	23.2	19.6	63.0	17.2
1995	5	98.7	185.6	0.0	2.73	1.87	0.84	45.4	22.0	−6.9	55.4	−15.5
1994	8	100.0	250.6	0.0	3.13	2.51	1.55	55.5	41.8	18.5	56.1	10.1
1993	4	100.0	119.9	7.0	n/m	1.27	n/m	n/m	9.0	n/m	16.9	0.8
1992	5	100.0	206.1	0.0	2.83	2.06	1.84	34.3	22.4	13.5	40.0	11.0
1991	3	100.0	210.2	0.0	n/m	n/m	n/m	n/m	n/m	n/m	25.3	25.0
1990	8	99.9	165.1	0.0	2.99	1.65	1.43	26.0	21.1	15.4	70.0	7.0

Source: Preqin (2009b).

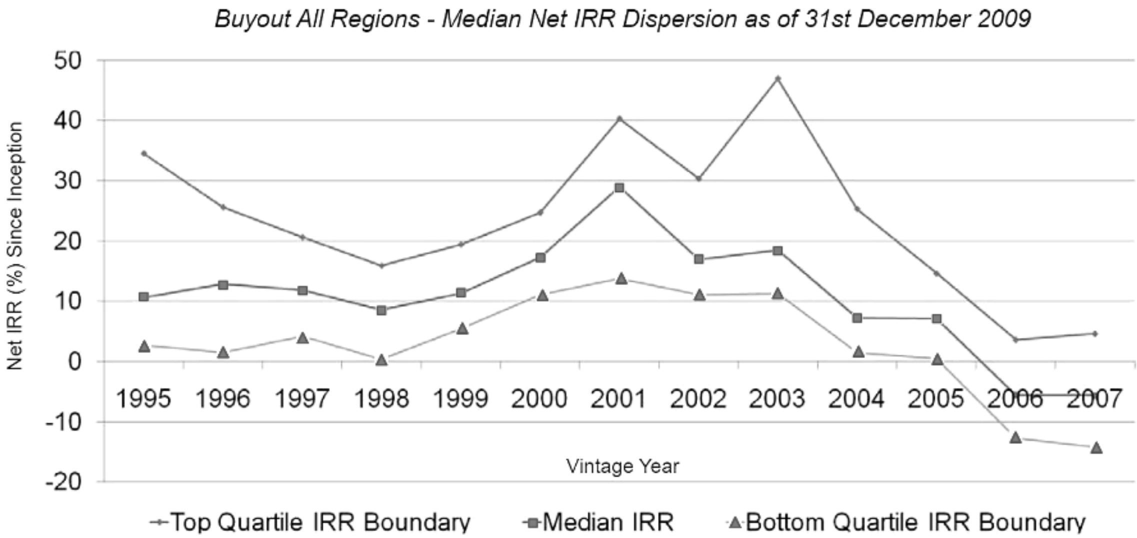
1.4 RECENT REGULATORY ACTIVITY

Until now, private equity firms were exempt from many of the oversight treatments that other types of investments face such as daily and quarterly reporting requirements and registration with financial regulators. However, private equity firms are coming to terms with more regulatory oversight. Certain proposals, such as registration and some increased reporting requirements, are not likely to have a major impact on larger private equity firms but will definitely affect the smaller ones.

New financial regulation will place additional requirements and restrictions on private equity funds. Although there is considerable uncertainty around the detail of any long-term regulatory changes two pieces of recent legislation will have a significant impact on the activities of private equity firms. In the U.S., lawmakers

EXHIBIT 1.6

NET IRR PERFORMANCE OF BUYOUT FUNDS AS OF DECEMBER 31, 2009, WORLDWIDE (PREQIN MEDIAN BENCHMARKS



Source: Preqin (2009b).

passed a financial reform bill in July 2010 (i.e., The Dodd–Frank Wall Street Reform and Consumer Protection Act 2010) which will require private equity funds with more than USD150mn in assets to register with the Securities and Exchange Commission. In Europe, the Directive on Alternative Investment Fund Managers (AIFM), adopted in November 2010, will bring a number of changes including increased disclosure and governance requirements, capital requirements, and limits on leverage. This directive is expected to significantly increase compliance costs and to make it more difficult for managers based outside the European Union (EU) to market their funds in the EU.

The pace of regulation of private equity entities in other parts of the world is much slower as governments are still focused on cutting risks that were responsible for the collapse of the global financial system. Tax pressures on the private equity industry are likely to rise around the world as governments seek to increase tax revenues in order to reduce large deficits. In both the U.S. and U.K. there are discussions about proposals to tax carried interest as ordinary income. Whether these will materialize into final legislation remains to be seen.

AIFM Directive

The AIFM Directive is a response to the recent financial crisis and aims to establish uniform requirements governing fund managers in order to moderate risks in the financial system. The Directive will generally apply to fund managers managing all types of hedge, private equity, and real estate funds (these are typical alternative investment funds). The Directive applies to fund managers that are (i) based in the EU, (ii) are not based in the EU but manage EU funds, and (iii) are not based in the EU but market funds within the EU. Fund managers with total assets under management up to €100mn and fund managers with unleveraged total assets under management of up to €500mn with no redemption rights do not have to comply with many of the requirements.

The Directive allows non-EU fund managers the same rights of access as EU fund managers to the European Union markets via a "passport" system at the cost of a regulatory burden. The new regulations will be introduced over time with most rules becoming effective in early 2013. The passport system for non-EU fund managers will not be implemented until 2015 or later. It is important to note that the Directive focuses on the fund managers and does not regulate the funds themselves.

Some of the provisions of the Directive that affect private equity firms include

- Small fund managers (whether EU based or not) of portfolios with total assets of under (i) €100mn or (ii) €500mn where the funds are not leveraged and investors are locked in for at least 5 years, only need to register with their home regulator and provide sufficient information as to their investment strategies and exposures to enable the regulator to monitor systemic risk.
- Fund managers need to publish annual reports of non-listed companies controlled by their funds (with control being defined as 50% of the voting rights of the company) within 6 months of the end of the fiscal year. These reports need to contain a fair review of the company's business and also its likely future development.
- Fund managers need to provide notification requirements on reaching, exceeding, or falling below the thresholds of 10%, 20%, 30%, 50%, and 75% of the voting rights of non-listed companies.
- Fund managers need to have initial capital of at least €125,000. If the assets under management of a fund manager exceed €250mn, the fund manager must provide an additional amount of own funds equal to 0.02% of the amount by which the value of the assets under management exceed €250mn, up to a maximum amount with the initial capital of €10mn.
- Fund managers have to set a maximum level of leverage used within each fund managed. While most funds already do this, the maximum level of leverage needs to be clarified (e.g., how are short-term facilities that are typically used by managers to bridge the capital calls on the fund investors classified?). Managers will also have to report regularly to their home regulator on the leverage position within their funds.
- New restrictions on senior personnel remuneration will be introduced although much of the detail is still to follow. The transparency provisions of the Directive require the fund's annual report to identify the amount of carried interest paid to each member of the relevant carry scheme.
- Fund managers must separate the functions of risk management from the operating units. Fund managers must also have a documented and updated due diligence process and ensure that the risks associated with each investment can be properly measured and monitored by the use of appropriate stress-testing procedures. Stress tests are also required regularly to assess and monitor the liquidity risks of the fund.
- Fund managers must put in place procedures for independent valuation of fund assets at least annually. If the manager chooses not to appoint an external valuer,

EXHIBIT 1.7

RANK OF EUROPEAN BUYOUT FUNDS AS OF DECEMBER 31, 2009

Rank	Name of firm	Headquarters	Capital raised over last 5 years (USD million)
1	Goldman Sachs Principal Investment Area	New York	54,584.0
2	The Carlyle Group	Washington DC	48,175.5
3	Kohlberg Kravis Roberts	New York	47,031.0
4	TPG	Fort Worth (Texas)	45,052.0
5	Apollo Global Mgmt	New York	34,710.0
6	CVC Capital Partners	London	34,175.4
7	The Blackstone Group	New York	31,139.4
8	Bain Capital	Boston	29,239.6
9	Warburg Pincus	New York	23,000.0
10	Apax Partners	London	21,728.1
11	First Reserve Corporation	Greenwich (Connecticut)	19,063.5
12	Advent International	Boston	18,179.8
13	Hellman & Friedman	San Francisco	17,300.0
14	Cerberus Capital Management	New York	14,900.0
15	General Atlantic	Greenwich (Connecticut)	14,700.0
16	Permira	London	12,963.3
17	Providence Equity Partners	Providence (Rhode Island)	12,100.0
18	Clayton Dubilier & Rice	New York	11,704.0
19	Terra Firma Capital Partners	London	11,645.0
20	Bridgepoint	London	11,203.0
21	Teachers' Private Capital	Toronto	10,890.5
22	Charterhouse Capital Partners	London	10,762.4
23	Fortress Investment Group	New York	10,700.0
24	Madison Dearborn Partners	Chicago	10,600.0
25	Oaktree Capital Management	Los Angeles	10,559.9
26	TA Associates	Boston	10,547.5
27	Citi Alternative Investments	New York	10,197.0
28	Thomas H. Lee Partners	Boston	10,100.0
29	Riverstone Holdings	New York	9,800.0
30	Cinven	London	9,606.8
31	AXA Private Equity	Paris	9,535.1
32	JC Flowers & Co.	New York	9,300.0
33	Silver Lake	Menlo Park	9,300.0
34	BC Partners	London	8,897.3
35	3i	London	8,340.9
36	Nordic Capital	Stockholm	8,340.9

Rank	**Name of firm**	**Headquarters**	**Capital raised over last 5 years** (USD million)
37	HarbourVest Partners	Boston	7,953.8
38	PAI Partners	Paris	7,929.2
39	Lindsay Goldberg	New York	7,800.0
40	NGP Energy Capital Management	Dallas	7,519.0
41	Lone Star Funds	Dallas	7,500.0
42	AlpInvest Partners	Amsterdam	7,399.2
43	EQT Partners	Stockholm	7,372.4
44	Welsh Carson Anderson & Stowe	New York	7,309.0
45	Onex Partners	Toronto	7,278.2
46	Marfin	Athens	6,955.2
47	WL Ross & Co.	New York	6,900.0
48	Oak Hill Capital Partners	Stamford (Connecticut)	6,606.5
49	Sun Capital Partners	Boca Raton (Florida)	6,500.0
50	Abraaj Capital	Dubai	6,458.8

the valuation task must be functionally independent from portfolio management to avoid conflicts of interest. The manager's home regulator may require procedures and/or valuations to be verified by an external valuer or an auditor.

The Dodd–Frank Act

This Act contains several provisions that impact private equity firms, including new registration requirements for private equity funds. Most fund managers with more than USD150mn in assets under management will be required to register with the Securities and Exchange Commission (SEC) and be subject to SEC regulatory oversight (venture capital funds will be exempt, with a definition of such funds to be provided by the SEC within a year of enactment). Fund managers that are required to register will need to establish a formal compliance policy and a framework that identifies conflicts of interest, hires a chief compliance officer, and reports to the SEC.

The Act provides an exemption from the registration requirements of foreign fund managers who (i) have no place of business in the U.S.; (ii) have, in total, fewer than 15 clients and investors in the U.S. in the private funds managed; (iii) have less than USD25mn of U.S.-based assets under management (or a higher amount that the SEC may specify). Exemptions from the registration requirement are also available for (i) venture capital fund managers, (ii) small business investment company advisers, (iii) family offices, and (iv) managers of private funds with under USD150mn of assets under management in the U.S.

The Act also requires registered private equity fund managers to take steps to safeguard client assets in their custody. Unlike the European Directive, the Act does not require a depositary to be appointed but it may still lead to increased operational costs and additional interference from independent accountants which it must appoint to verify the custody of client assets.

Another provision affecting private equity firms is the *Volckerr Rule*. Limitations are now imposed on proprietary trading and investments in hedge funds and private equity funds by banking entities. Going forward investment levels in hedge funds and private equity funds of no more than 3% of their Tier 1 capital are permitted. An additional provision limits ownership to 3% of the equity of any single private equity fund. The bill also restricts bank employees' investments in bank-managed private equity funds only to those employees who are actively involved in the managing of the fund. The Volckerr Rule is likely to reduce significantly the investor base for private equity funds as banks achieve compliance. Banks have a 2-year transition period to bring their activities into compliance with the Volckerr Rule after July 2010, although the Act contemplates few further exemptions to the transition period.

The Directive and the Act only contain a framework for the new regulatory regimes in Europe and the U.S. and there remains in practice much detail to be discussed. Once the additional details and rules are published it will be possible for the private equity industry to determine the depth of the impact of these regulatory enactments.

What is certain, however, is that the private equity industry will be subject to greater regulation, supervision, and oversight. Although private equity firms will incur greater compliance costs, the private equity industry will need to embrace these new regulations.

1.5 THE OUTLOOK OF THE PRIVATE EQUITY INDUSTRY

Increased focus on operational improvements

Simplistically, the strong returns generated in the asset class have increased competitive intensity in nearly all country markets where private equity funds operate. Moreover, as the accumulated experience in the industry rises, funds have to strive ever more to recreate the returns of the past. Gone are the days when assets could be acquired at modest prices and returns generated from executing relatively simple value creation plans. In the highly competitive world in which most funds operate the imperatives are more around deep industrial insight, flawless execution, and talent and experience in crafting and delivering more complex value creation strategies. This phenomenon, first seen amongst the largest funds, is slowly filtering down to smaller and smaller funds.

More attention is being paid to increasing the value of portfolio companies in the absence of leverage. For both financial reasons (i.e., decreased costs) and competitive reasons, there seems to be growing interest in having research conducted in-house. This will place increased importance on due diligence and understanding the competitive trends and contexts in which portfolio companies are operating. More attention will be paid to debt structures, quality of earnings, risk management, IT structure, marketing and competitive intelligence, and operational efficiency.

As a result, the emphasis will continue to shift away from "megafunds" toward those funds that specialize. In this environment, private equity firms with specialized niches, good market upturn, and, importantly, good market downturn strategies become attractive and viable.

Move towards other activities

The U.S. government's financial reform package forces investment banks to spin out their private equity businesses and limit riskier business activities. This reform package opens the door for private equity firms to get into the very same business lines that are seen as problematic for investment banks today. Sprawling private equity firms like Blackstone, Carlyle, and KKR, which built up significant lending and advisory businesses over the past few years, are likely to benefit. The large private equity firms are likely to start investing in credit, arranging financing for leveraged buyouts, and providing mezzanine and rescue financing to other businesses. These are the types of activities that will be shunned by investment banks due to the new regulations.

Emerging markets will become more important

Emerging markets seem set to form an increasing part of the global private equity landscape. Despite subdued and challenging deal activity in emerging markets, great opportunities exist in these markets. Private equity investments in developing countries are mainly based on growth—not leverage—so one could argue that they are less risky than widely believed. Most emerging markets present infrastructure opportunities as their economies need to develop their infrastructures to support growth. Emerging markets are likely to lead the worldwide economic recovery and will see their share of private equity transactions increase over the next decade. The prospect of earning better returns will likely outweigh any concerns arising from political, legal, and structural market uncertainties. Emerging markets such as Brazil, China and India will continue to garner private equity firms' interest.

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