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PREQIN MARKETS IN FOCUS: ALTERNATIVE ASSETS IN EUROPE

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Data Pack

The data behind all of the charts featured in this report is available to download for free. Ready-made charts are also included that can be used for presentations, marketing materials and company reports.

To download the data pack, please visit: www.preqin.com/europe19

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1. INTRODUCTION

- CEO's Foreword
- Generating Value through Real and Private Assets – *Pedro Arias, Amundi Asset Management*
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CEO's Foreword

As we approach mid-year 2019, the economic mood across Europe has noticeably cooled; after seven years of uninterrupted growth, most of the economic indicators over recent quarters show declining prospects for the coming year. Coupled with Europe's growth over the entire current economic cycle being below that of North America and Asia-Pacific, and the political issues which show signs of being entrenched rather than transitory, the mood is most definitely downbeat.

It is therefore important to remind ourselves that economic growth is not the same thing as activity and opportunities in alternative assets. Europe's alternative assets industry is in rude health; moreover, it is extremely diverse, both as regards the different asset classes within alternative assets, and across countries and regions within Europe.

The scale of the European alternative assets industry itself is quite remarkable. **Preqin Pro** tracks over 6,300 alternative asset fund managers across Europe (and this figure covers only professional managers of third-party capital – i.e. it excludes the many investors that are investing primarily off their own balance sheets). With combined assets under management (AUM) of €1.62tn, the European alternative assets industry ranks second only to the US, and is a key player on a global scale. Private capital deals reached €374bn in 2018, and both the number and value of deals across most private capital asset classes (private equity, venture capital, private credit, private equity real estate, infrastructure and natural resources) either reached record levels in 2018 or closely matched those of the prior year.

It is worth noting that this growth has come despite the political and economic uncertainties – most notably Brexit – that bedevil the continent. These uncertainties clearly do not help the industry; but it appears to be once again demonstrating its ability to cope with

Mark O'Hare
CEO, Preqin

uncertainty and find attractive investment opportunities whatever the external market conditions.

Who are the investors supporting the industry? **Preqin Pro** tracks over 6,100 significant institutional investors targeting Europe for their alternative assets programs. Unsurprisingly, many of these are Europe-based investors; but, interestingly, an even higher number are investors from North America (nearly 3,000 of them, 48% of the total), which clearly recognize Europe as an attractive destination for capital and a vital part of any global alternatives portfolio. Further significant inward investment comes from investors based in Asia, Australasia, the Middle East and elsewhere; these include some of the largest sovereign wealth funds and superannuation schemes.

Fundraising for private capital funds focused on Europe reached €177bn in 2018, slightly down (8%) on the 2017 banner year; but in the context of growing deal volumes and a record Q1 2019 fundraising tally (€56bn), the strong fundraising environment appears set to continue.

Moving on from private capital, Europe's hedge fund industry is truly significant, with €570bn of AUM. 2018 was a tough year for hedge funds globally, and

Europe was no exception: AUM declined from its peak of €625bn in Q4 2017 to €570bn in Q4 2018. However, the outlook for hedge funds in 2019 is looking much better, with investors seemingly acknowledging that tougher economic times and potential market volatility are precisely the conditions that should play to the strengths of hedge funds.

Europe's fund managers have long been well represented across the two largest alternative asset classes – hedge funds and private equity – but it is notable that the industry's dynamism and diversity is resulting in especially strong growth across the entire spectrum of asset classes. European venture capital is growing significantly; private credit has been an especially strong performer in recent years (and most notably the direct lending segment); private equity real estate continues to hit new highs; infrastructure is an area where Europe is a clear global leader; natural resources are growing very quickly; and the secondaries business also continues to grow.

The industry is also incredibly geographically diverse across Europe. The UK is the largest single hub for alternative assets, with over 2,000 fund managers; but over two-thirds of the industry's fund managers are based elsewhere, with significant numbers not only in the large economies of Western Europe, but also in Scandinavia, Southern Europe and Central & Eastern Europe. Individual countries have a diverse spread of asset managers, but with particular expertise and strength in specific areas: private equity and real assets in France; private equity in Germany; hedge funds in Switzerland; private equity and hedge funds in Sweden etc.

In summary, all the evidence points to Europe maintaining a dynamic and successful alternative assets industry, fully equipped and ready to participate in the near-doubling of global alternatives AUM that Preqin forecasts for the next four years (please see our **Future of Alternatives**[1] publication), and with centres of excellence spread throughout the region. Although Preqin is a global business, our home is in Europe, and we are honoured to be the industry's partner, providing the very best data and information to assist our customers – investors, fund managers, advisors and service providers – in making the best decisions and developing their businesses successfully. Preqin will continue to invest heavily to maintain, expand and improve our services to the industry.

[1] *www.preqin.com/future*

Generating Value through Real and Private Assets

Pedro Arias
Global Head of Real & Alternative Assets, Amundi Asset Management

In a world of low to negative interest rates (nearly 0% over 10 years for German Govies) and a sluggish growth outlook (1% expected this year in the eurozone), investors continue to consider private markets and real assets. In this environment, it is reasonable to expect those asset classes to see record activity in the coming years. Preqin recently projected that alternative assets under management will hit $14tn in the next 4-5 years. Investors show a strong appetite for investment strategies that deliver an illiquidity premium, in addition to potentially enhanced income returns. However, investors know that crises and corrections exist in the alternatives world, and that the choice of private markets and real assets is not just a matter of absolute performance (Fig. 1.1). Investing in such asset classes provides the opportunity to capture added value in a portfolio in terms of diversification and robustness.

Value beyond Illiquidity Premium

Amundi believes that investors should pay more attention to the ability of alternative assets managers to generate value when considering both the current price of listed equities – especially after the recent rally – and the level of dry powder in private markets (Europe-focused private capital dry powder stands at $411bn according to Preqin).

For example, the **private debt** asset class captures multiple sources of premium vs. listed bonds thanks to a stringent legal package of guarantees. Asset managers can negotiate and design tailor-made portfolios with higher protection for investors – which is not possible with public bonds. This advantage would be pivotal to protect investors in the event of a default. This is why, despite its relative illiquidity, we anticipate an acceleration in demand for this asset class in the coming years.

Fig. 1.1: Alternative Asset Class Profiles

Asset Class	Participation in Economic Growth	Generation of Stable Revenues	Protection Against Certain Risks	Control of Asset	Illiquidity Premium	Decorrelation vs. Listed Assets
Private Equity	Strong	No	No	Yes	Yes	Yes
Real Estate	Moderate	Significant	Moderate	Yes	-	Moderate
Infrastructure	Significant	Moderate	Moderate	Yes	-	Yes
Private Debt	Moderate	Significant	Yes	No	Yes	Yes
Hedge Funds	Moderate	Moderate	Yes	Moderate	Yes	Moderate

Source: Amundi January 2019

The situation is comparable with **private equity**: GPs can help corporates grow and become stronger in areas such as strategic plan, business operations, international development, business network, financial organization, governance etc. An active GP builds the future value of the firm and anticipates exit conditions as soon as possible. However, investors could question value creation when the same firm has been acquired and sold several times after multiple LBOs.

In real assets, value creation can be assessed in a different way as it is a linked to every single asset. For example, in **real estate**, expected returns raise the question of asset managers' ability to move up the value chain on the underlying asset itself through the leasing-up, renovation or total refurbishment of properties. In the **infrastructure** area, it could be more complex, as GPs have to demonstrate a capacity to control industrial and technological risks.

With that in mind, some innovative solutions have been launched in recent years by a few asset managers based on specific partnerships with industrials. The key advantage is to benefit from their robust pipeline in order to secure high-quality deal flow, as well as a smoother management of industrial and technological risks. To cope with any potential conflicts of interest, such partnerships are organized with clearly identified responsibilities. Amundi is a supporter of those partnerships and believes that our integrated platform of real and alternative assets, in combination with the financial strength of a powerful banking group, has the resources to achieve deals through different angles (equities, debt financing, co-investment).

Fee Structures Should Not Erode Potential Returns

Value creation is also driven by fee structure. Needless to say, locking up capital for more than 10 years is a tough liquidity constraint for investors. Their concerns regarding fee structures are understandable as high fees could erode potential return. Investors have the right to know from the beginning if they are paying fees on the capital they commit or on the capital being invested. No-one wants to pay management fees on capital that is languishing in a bank account. At Amundi, we believe in fair pricing structures where fees are applied only on capital having been deployed. On a global scale, this trend is gaining traction and it should become standard practice in the private and real assets industries.

Alternative Assets Can Help Transform the Real World for the Better

Finally, we see investors giving greater consideration to value creation over the long term. They want sustainability in their investments. This sustainability is made possible thanks to the right ESG approach, which can be another strategy to mitigate investment risks. At a time when most institutional investors are implementing ambitious SRI policies, real asset and private market industries are natural areas to do so, due to the ability to properly assess the non-financial impact of those assets.

For European and US listed equities, Amundi Quantitative Research[1] confirms that ESG integration generates a tangible impact on financial performance. By favouring a best-in-class ESG-SRI approach, investors benefit from an investment strategy that improves the long-term performance of their portfolios. Due to the lack of homogeneous data in the private and real assets world, it is quite challenging to jump to such a conclusion. However, the idiosyncratic features of alternative investments provide investors with the opportunity of gaining more visibility through adequate 'look-through' reporting on how finance is transforming the real world for the better.

Amundi Asset Management

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10 globally.[2] Following the integration of Pioneer Investments, it now manages over €1,476bn of assets across six investment hubs based in 37 countries. In 2016, Amundi launched a platform dedicated to real and alternative assets to provide easier access to unlisted investments. Bringing together capabilities in real estate, private debt, private equity and infrastructure (green energy), this platform has a headcount of 200 people for AUM of €45bn, and offers solutions through funds, club deals and multi-management funds, including two innovative and ambitious partnerships with EDF and CEA.

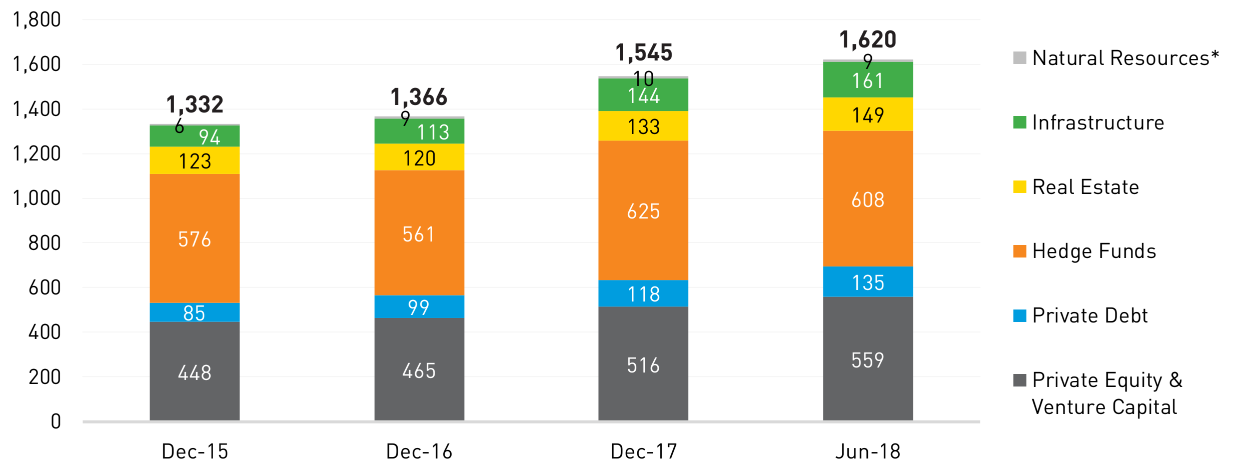
www.amundi.com

[1] *Amundi, How ESG Investing Has Impacted the Asset Pricing in the Equity Market.*

[2] *Source: IPE "Top 400 asset managers" published in June 2018 and based on AUM as of end December 2017.*

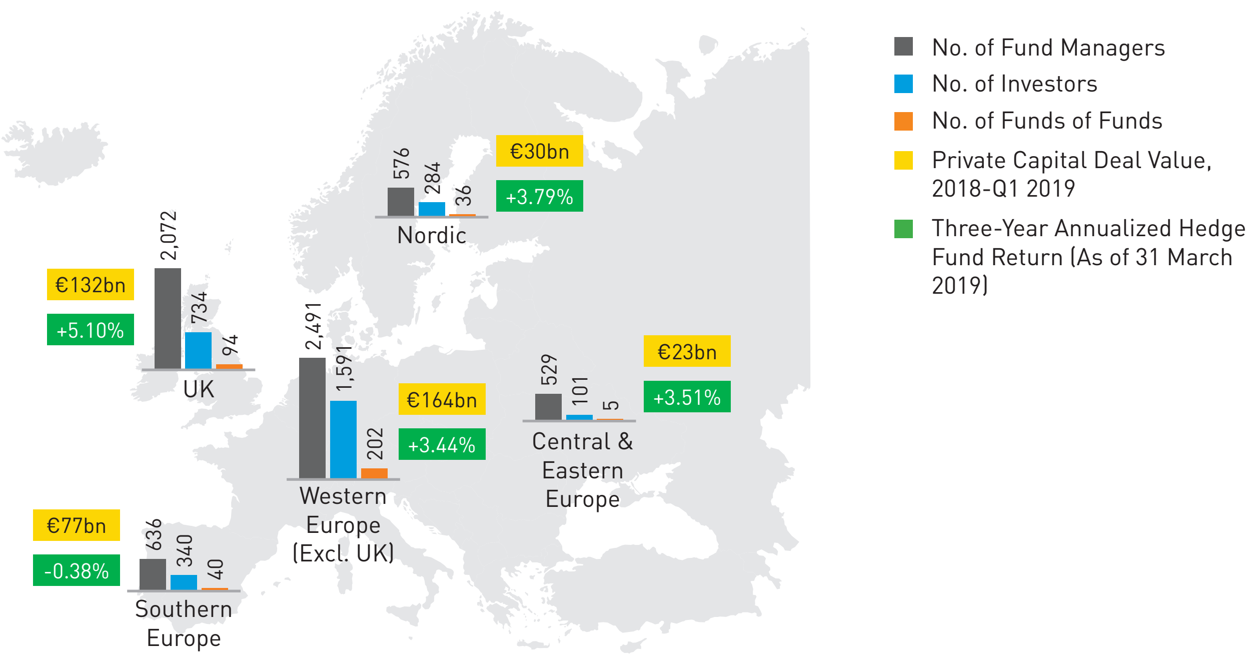
Alternatives in Europe: Key Charts

Fig. 1.2: Europe-Based Alternative Assets under Management (€bn) by Asset Class, 2015 - 2018



Source: Preqin Pro

Fig. 1.3: Alternative Assets in Europe by Sub-Region



Source: Preqin Pro

*Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.

2.
ALTERNATIVES IN EUROPE

- Challenges and Growth: Alternative Assets in Europe
- The Truth Lies in the Exit – *Steve Roberts, PwC Germany*

Challenges and Growth: Alternative Assets in Europe

The ecosystem of alternative assets in Europe is increasingly rich and diverse, with over 6,300 fund managers and 3,000 institutional investors located in Europe active across private capital and hedge fund asset classes. As the industry evolves on social, political and regulatory fronts, the market continues to attract participants from around the globe. At €1.62tn, the European alternative assets market is the second largest in the world, behind only North America (€5.25tn) and ahead of the growing Asian industry (€966bn).

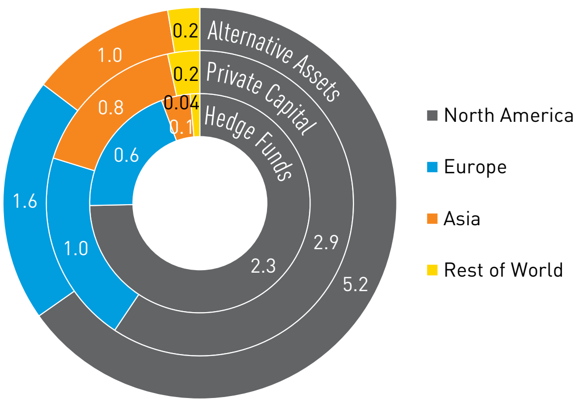
Constituting 38% of the region's assets, the hedge fund industry represents the largest alternatives market in Europe, standing at €608bn as of June 2018 (the latest available figure for alternative assets AUM, Fig. 2.1). Last year, however, was a troubled year for hedge funds. Stock markets across Europe were impacted by concerns surrounding geopolitical uncertainty and Chinese economic growth, and Europe-based hedge fund AUM decreased by 8.7% over 2018 to stand at €570bn as of December 2018 (page 34).

Other alternative asset classes, though, are moving from strength to strength across Europe. At a size of €559bn, the European private equity market has grown by 25% since December 2015, which compares with growth of only 6% seen in the hedge fund industry over the same period (Fig. 2.2). Record venture capital and growth fundraising, combined with all-time highs in buyout and venture capital deal value, belie the political challenges that have rocked Europe since 2016, with high distributions and attractive returns ensuring a consistent flow of capital into the market.

Infrastructure is currently the third-largest alternatives industry in Europe, having almost doubled in size since 2015 as investors have looked to increase their exposure to European infrastructure projects.

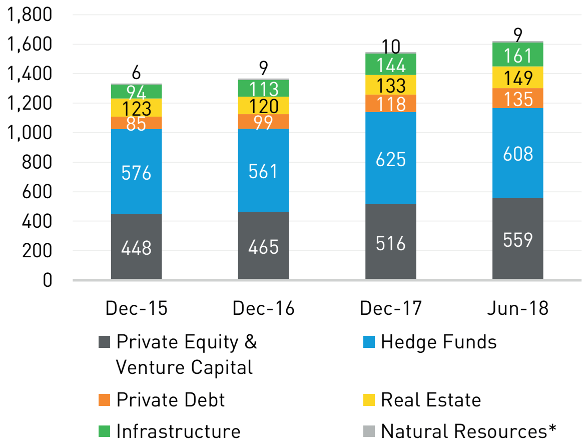
Strong fundraising has been a key driver in the growth of alternatives in Europe. In private capital terms, the number of funds closed and amount of capital secured by funds targeting investment in Europe increased annually from 2010 to reach record levels in 2017

Fig. 2.1: Alternative Assets under Management (€tn) by Region



Source: Preqin Pro. Data as of June 2018

Fig. 2.2: Europe-Based Alternative Assets under Management (€bn) by Asset Class, 2015 - 2018



Source: Preqin Pro

*Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.

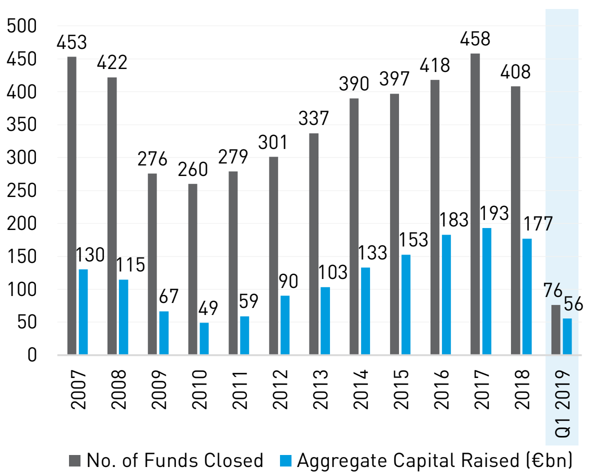
(Fig. 2.3). Although 2018 could not sustain this level of activity, a not insubstantial €177bn was raised for European investment, and the €56bn secured in Q1 2019 puts us on course for a record year.

In the period surrounding the Brexit vote, private investment in Europe dropped as uncertainty and volatility in stock, currency and real estate markets drove investors to re-evaluate their exposure. Since 2016, however, Preqin data shows confidence returning to the European market with a record €374bn in private capital deals recorded in 2018 (Fig. 2.4). Over €100bn was deployed in each of the private equity-backed buyout, private equity real estate (PERE) and unlisted infrastructure markets during the year.

While the repercussions of Brexit in the European market are far from over, more participants are entering the market and demand for European exposure is on the rise. Leading the way, private equity and real estate are each targeted by 80% of Europe-focused investors (Fig. 2.5), but the range of investment opportunities in the various markets provide an array of risk/return profiles for investors active in the region.

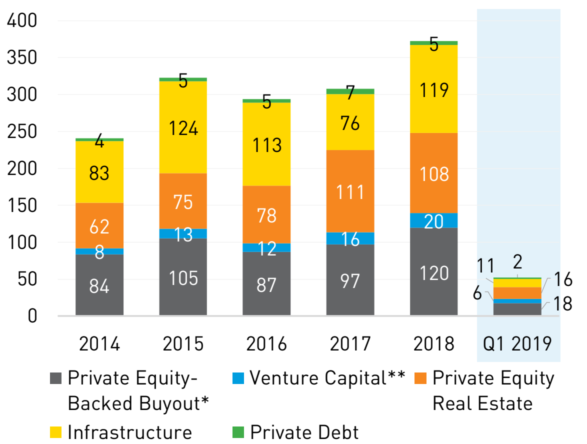
Amid such demand, the dynamics of the industry are continuously evolving: asset prices have increased, new markets have been explored and record activity has been seen in various countries. With capital flowing into both developed and emerging markets, we project a future of continued growth for alternative assets in Europe.

Fig. 2.3: Annual Europe-Focused Private Capital Fundraising, 2007 - Q1 2019



Source: Preqin Pro

Fig. 2.4: Aggregate Value (€bn) of Private Capital Deals in Europe by Asset Class, 2014 - Q1 2019



Source: Preqin Pro

Fig. 2.5: Proportion of Europe-Focused Investors Targeting Each Asset Class

Asset Class	Proportion of Investors
Private Equity	80%
Hedge Funds	59%
Real Estate	80%
Infrastructure	46%
Private Debt	49%
Natural Resources	46%

Source: Preqin Pro

Fig. 2.6: Location of Europe-Focused Investors in Alternative Assets

Location	No. of Investors	Proportion of Investors
North America	2,964	48%
Europe	2,323	38%
Asia	445	7%
Australasia	161	3%
Middle East	135	2%
Latin America & Caribbean	48	1%
Africa	36	1%

Source: Preqin Pro

*Includes announced and completed private equity-backed buyout deals.
**Figures exclude add-ons, grants, mergers, secondary stock purchases and venture debt.

The Truth Lies in the Exit

With the backdrop of a year in 2018 where global and European deal volumes reached an all-time high, valuations rose to exceed pre-crisis levels and the amount of dry powder continued to grow seemingly indefinitely, it is worth standing back from the euphoria and taking stock of the underlying fundamentals and dynamics of this industry whose progress appears relentless.

As the consistently best performing asset class, it is not surprising that private equity continues to attract fresh capital. In the low interest environment, LPs are seeking to deploy their funds at even higher levels within the industry, both through higher commitments as well as increasing direct co-investments on a deal-by-deal basis. With increasing competition in the market and a scarcity of assets to invest in, the market environment for GPs is getting tougher, calling for new measures for value creation to keep up the promised IRRs.

Following the classic textbook approach, private equity funds create value through three pillars: (1) use of leverage, (2) multiple arbitrage and (3) operational improvement also known as private equity alpha.

Funding, including leveraged finance, is reaching record levels, enabling private equity firms to refinance on highly favourable terms and build up plenty of ammunition for acquisitions. But the easy access to leverage has to be offset against higher purchase price multiples.

Besides being benchmarked against an IRR level of up to 20%, going forwards private equity funds face the challenge of how to accomplish a more balanced outcome among the main three IRR drivers. As a result, operational improvement capabilities have become, and will continue to be, far more important for a private equity fund's success.

Steve Roberts
Private Equity Leader, PwC Germany

Holding Periods

Another trend that has become the new norm is the constant increase in the length of holding periods of portfolio companies. While in 2006 the average holding period for portfolio companies in Europe was 4.4 years, we have witnessed a 22% increase since then – bringing the average up to 5.4 years in 2019 YTD. This is mainly a result of the increased competition and the supply of quality assets failing to match demand. Buyers are, therefore, paying premium prices to acquire target companies, which they need to compensate by the third factor driving IRR – private equity alpha. This factor on the other hand needs more time to be implemented and generate returns before the exit can be considered.

On a European level, if the long-term trend in holding period would be linearly extrapolated it would approach six years by 2023. Although average multiples have increased by almost 20% from 9.1x in 2015 to 10.9x in 2018, a similar extrapolation to 2023 would imply these only reaching 10x, below current peaks. This implies that prices may stabilize; however, with such fierce competition for assets this is unlikely to be the case. The higher the prices, the deeper and longer the value creation needs to be and therefore holding periods will almost certainly increase, possibly to beyond six years.

The reasons behind this development are diverse – for one, one may argue that the good economic climate and safe-haven status of the region have led to an increased interest in assets, thus spurring deal-making and earlier exits of portfolio companies. The steady increase in average purchase price multiples within the same period has surely additionally supported the readiness of GPs to exit portfolio companies quicker – taking advantage of multiple arbitrage. The high levels of dry powder and need to deploy this capital has also fuelled secondary and tertiary deals, making private equity ready buyers for these assets. However, if the development of this trend is to be linearly projected forwards in time, average holding periods are to exceed six years. Average multiples for Europe have increased from 9.1x EBITDA in 2015 to 10.9x in 2018 – representing a 20% boost. The projection following a linear trend is much more flat in comparison, with multiples slightly exceeding 10x EBITDA.

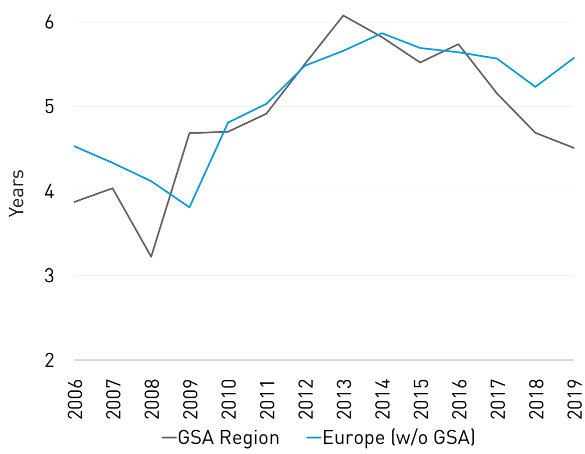
Average Multiple Arbitrage

When taking a closer look at the development of purchase price multiples coupled with average holding periods, we observe that in the past the private equity industry has benefitted from multiple expansion, which accounted for a major part of their realized IRR. With the exception of exits in the years 2012 and 2013, which were mainly assets that were acquired in the highly priced year of 2007, all other years up to 2019 show a positive multiple arbitrage effect in Europe – ranging between 0.1 (exits in 2008) to 2.4 (exits in 2018).

Looking forwards, however, this effect is bound to turn. If the average current multiple (9.8x) and holding period (5.4 years) remain at these levels for the period 2019-2023, then the exits within these years will see a multiple contraction due to the higher entry multiples paid. For exits in 2020 (acquired in 2015) the multiple effect is still positive at 0.7x; however, the 2016-2018 vintage would experience a contraction of 0.3x in 2021 rising to 1.2x in 2023. This clearly assumes no reduction of multiples or prolongation of holding periods, which would further exacerbate this projected trend. Even if multiples continue on the aforementioned linear increase, it would only avoid the contraction scenario until the 2018 vintage comes to exit.

This historical development and future outlook calls for a further strengthening of focus on the creation of 'PE Alpha,' which GPs now have to work harder for

Fig. 2.7: Average Holding Periods in Europe vs. GSA Region



Source: PwC

and be dedicated to achieve in order to maintain the current high level of expected IRRs. Fund managers will, therefore, have to further diversify, upskill as well as increase the headcount of their deals professionals, another challenge in a fast-maturing market which is adapting to the impact of digital and AI to name just two major recent influences on investment decisions. The signs of weakness in Europe's growth, the UK's withdrawal from the EU, deceleration in China – which Germany, one of the world's leading exporters, has close trading ties with – as well as a creeping scepticism and fear of a pending correction, are all factors that will make equity stories more challenging to realize.

To maintain and further achieve the overperformance of public markets, the private equity industry will need to continue to adapt, to drive deep value creation through their portfolio companies in highly focused and continuingly innovative ways, while still finding time and capacity to deploy capital on new deals.

In conclusion, the fundamentals of the private equity market not only remain intact but also continue to evolve. Private equity has always proved resilient in adapting to an ever-changing world, with the aforementioned factors continuing in the face of an asset scarcity driving further competition. The challenges are clear; however, the track record of both performance and adaptability bodes well for further successful years ahead.

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3. ASSET CLASSES

- Private Equity & Venture Capital
- Private Debt
- Hedge Funds
- Real Estate
- Real Assets

Records and Challenges in the Private Equity Capital Cycle

The private equity & venture capital market goes from strength to strength in Europe and represents the largest private capital asset class in the region. LPs have ensured a consistent flow of capital into the industry over the past decade, encouraged by strong returns and high distributions.

Europe-based private equity AUM stands at a record €559bn as of June 2018. A measure of the industry's recent success, fundraising in the venture capital and growth markets hit new annual records in 2018. Annual aggregate deal value also reached all-time highs in both the private equity-backed buyout (€120bn) and venture capital (€20bn) markets last year, and LPs have registered annual distributions of €100bn or more since 2015 (with 2018 also on course to surpass this milestone, see Fig. 3.4).

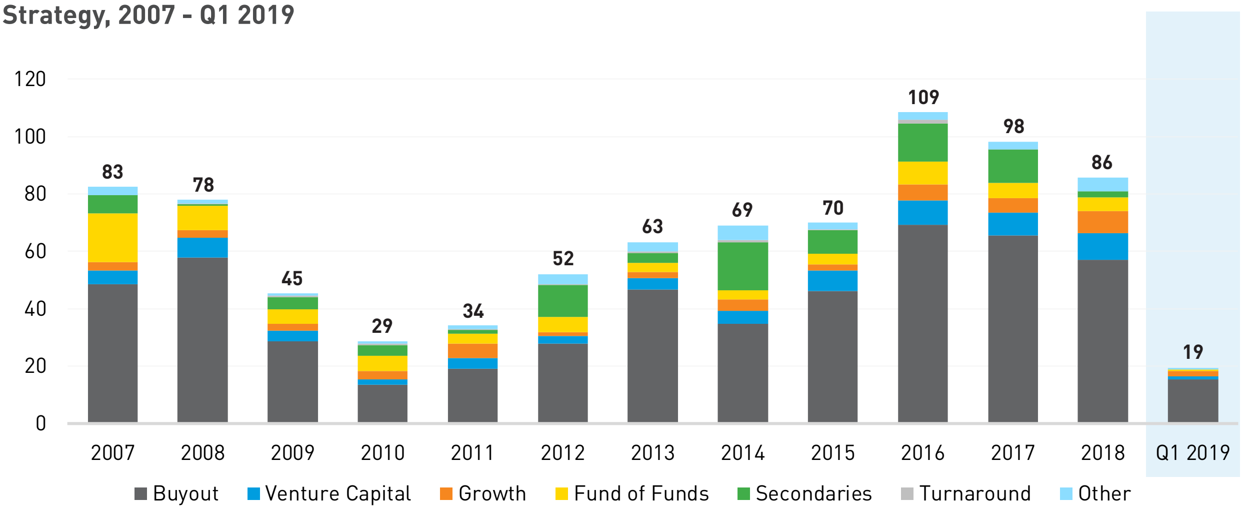
However, with increasing demand and available capital come challenges.

Raising Capital

In search of the returns seen in the private equity space in recent years, investors continue to deploy capital into European private equity. In spite of the challenging political climate, 2016 holds the annual record for Europe-focused private equity & venture capital fundraising (Fig. 3.1), a year in which five such funds secured over €5bn, compared with two in each of 2017 and 2018. Where the number of large funds entering the market and total capital raised have since been on a downward slope, fundraising remains strong, and records have been set elsewhere. Europe-focused venture capital fundraising reached a peak of €9.4bn in annual commitments in 2018, while growth funds secured a record €7.6bn. With more and more European markets boasting huge venture capital success stories (page 57), it appears more investors are targeting exposure to this market.

After years of successfully navigating the volatility in public markets, Europe-focused private equity funds are flooded with capital and face a growing need to put

Fig. 3.1: Aggregate Capital Raised (€bn) by Europe-Focused Private Equity & Venture Capital Funds by Strategy, 2007 - Q1 2019



Source: Preqin Pro

greater amounts of money to work. Dry powder held by Europe-based managers stands at a high of €211bn as of June 2018 (the latest available data). As more participants enter the European market and managers are able to call upon a greater amount of available capital, the challenge of putting this capital to work effectively intensifies.

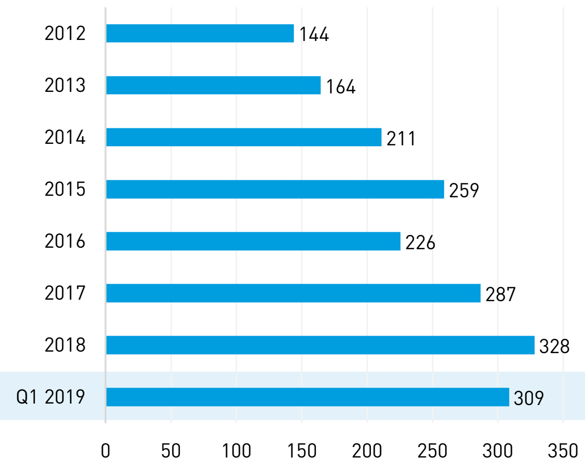
Deploying Capital

Dry powder in Europe has been rising in recent years, and so too has deal activity: an aggregate €100bn of private equity-backed buyout and venture capital deals were completed in each of the past five years. Dry powder stayed relatively level from 2014 to 2016, but has since accelerated and increasing demand, participants and capital in the market have driven asset prices to record levels. The average value of a European private equity-backed buyout deal in 2014 was €211mn; in 2018 this figure reached €328mn, highlighting the greater amount of capital required to remain competitive (Fig. 3.2). The story is similar in venture capital, with the average deal price increasing from €4.7mn to €7.8mn respectively over the same period (Fig. 3.3). Appetite for European companies appears unperturbed by these rising prices, as more deals for European private equity assets were completed in 2018 than ever before (1,901 buyout and 2,941 venture capital deals).

Returning Capital

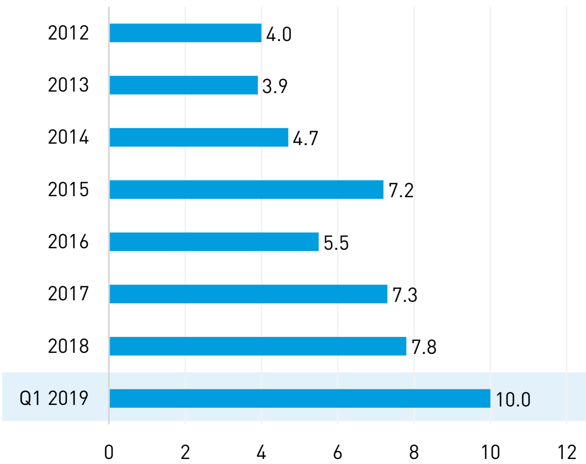
Net cash flow to investors from Europe-focused private equity investments has been positive in every year since 2013 (Fig. 3.4). The amount of capital called up by fund managers in 2017, the latest full year available, had almost doubled from 2016 (€53bn) to €92bn. In order to successfully compete in the European market and continue deploying funds, GPs are putting more capital to work than ever before. Recent full-year distributions have remained above the €100bn level, though, and so cash is still being returned amid record call-ups and deal activity.

Fig. 3.2: Average Size (€mn) of Buyout Deals in Europe, 2012 - Q1 2019



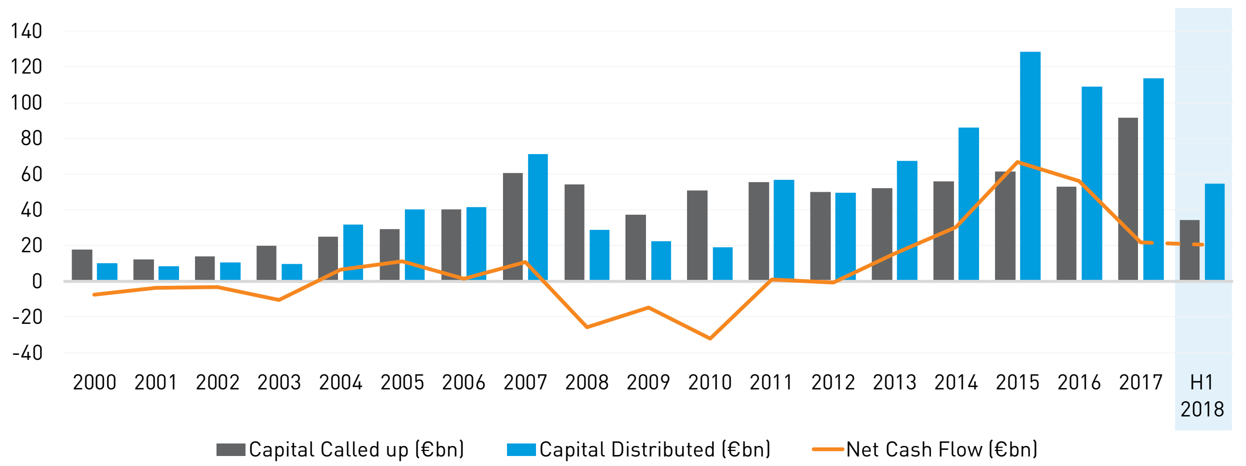
Source: Preqin Pro

Fig. 3.3: Average Size (€mn) of Venture Capital Deals* in Europe, 2012 - Q1 2019



Source: Preqin Pro

Fig. 3.4: Europe-Focused Private Equity: Annual Capital Called up, Distributed and Net Cash Flow, 2000 - H1 2018

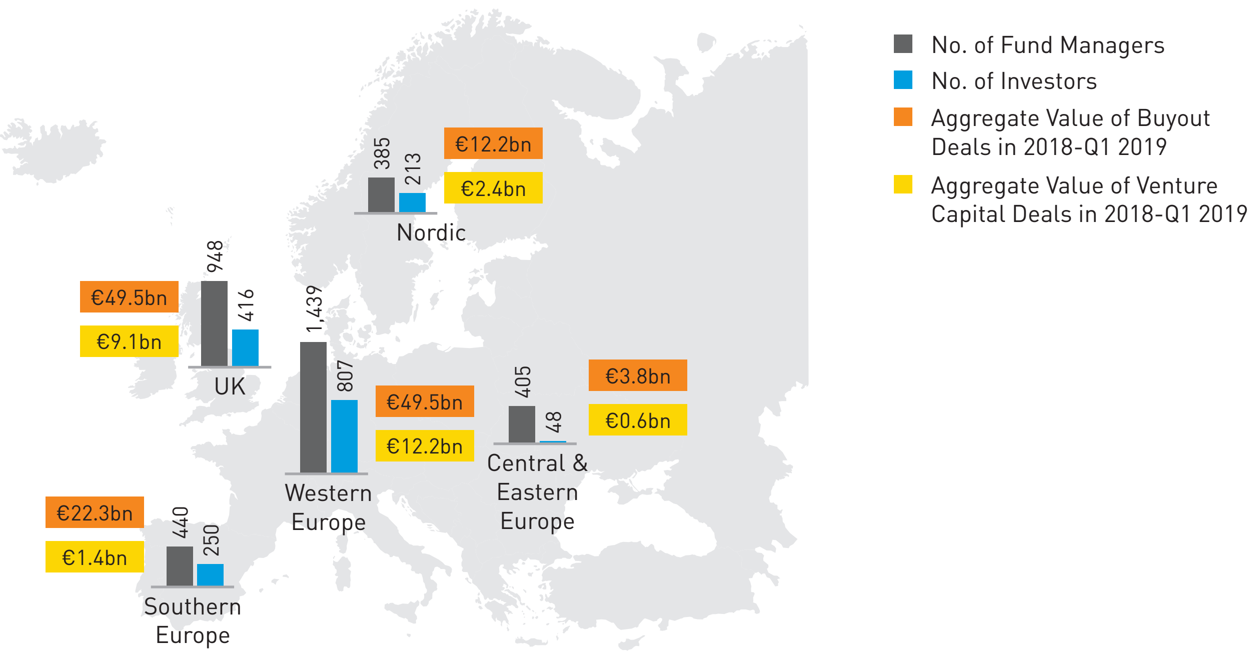


Source: Preqin Pro

**Excludes add-ons, grants, mergers, venture debt and secondary stock purchases.*

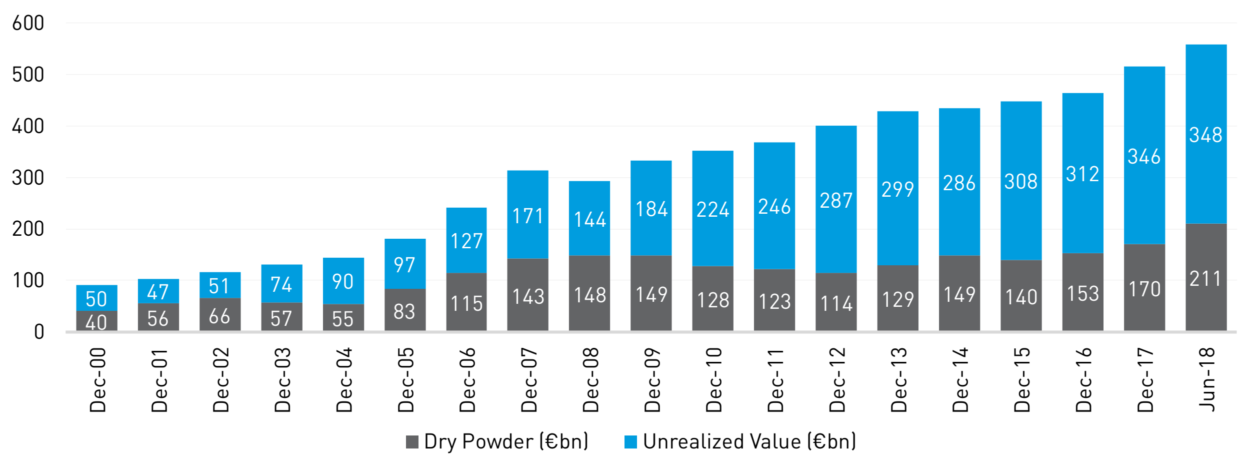
Private Equity & Venture Capital: Key Charts

Fig. 3.5: Private Equity & Venture Capital in Europe



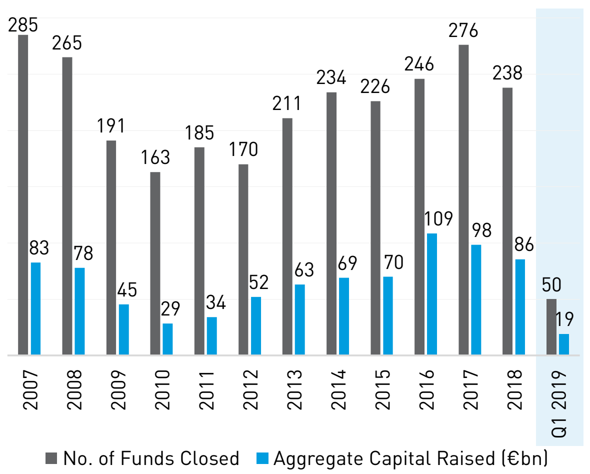
Source: Preqin Pro

Fig. 3.6: Europe-Based Private Equity & Venture Capital Assets under Management (€bn), 2000 - 2018



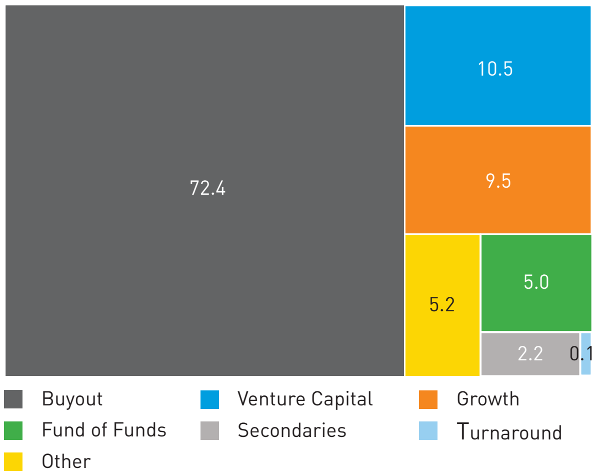
Source: Preqin Pro

Fig. 3.7: Annual Europe-Focused Private Equity & Venture Capital Fundraising, 2007 - Q1 2019



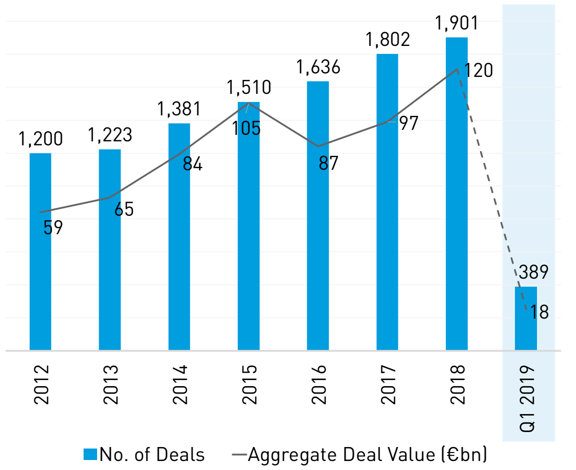
Source: Preqin Pro

Fig. 3.8: Aggregate Capital Raised (€bn) by Europe-Focused Private Equity & Venture Capital Funds Closed in 2018-Q1 2019 by Fund Type



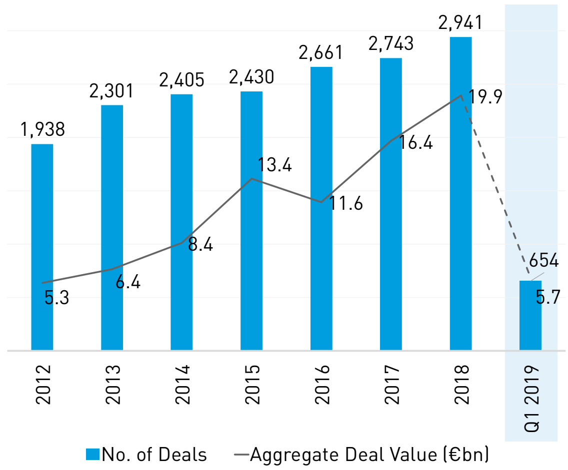
Source: Preqin Pro

Fig. 3.9: Private Equity-Backed Buyout Deals in Europe, 2012 - Q1 2019



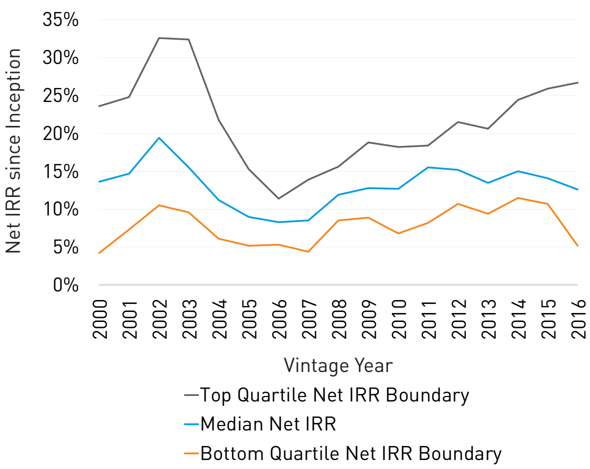
Source: Preqin Pro

Fig. 3.10: Venture Capital Deals* in Europe, 2012 - Q1 2019



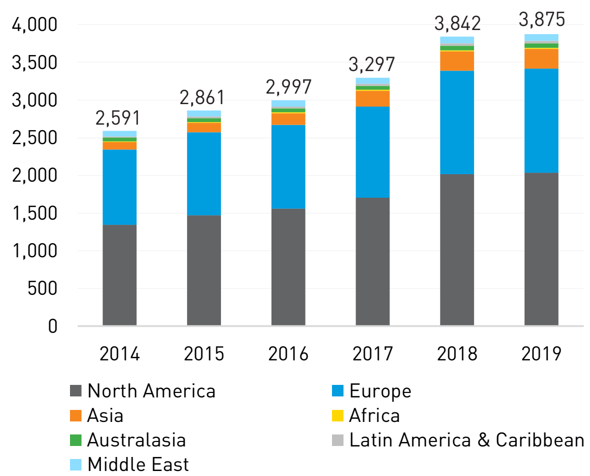
Source: Preqin Pro

Fig. 3.11: Europe-Focused Private Equity & Venture Capital: Median Net IRRs and Quartile Boundaries by Vintage Year



Source: Preqin Pro. Most Up-to-Date Data

Fig. 3.12: Number of Europe-Focused Private Equity & Venture Capital Investors by Location, 2014 - 2019



Source: Preqin Pro

**Excludes add-ons, grants, mergers, venture debt and secondary stock purchases.*

Private Debt: Behind the Enthusiasm, a Need for Discerning Selection

The attraction of institutional investors to private debt showed no signs of tapering off in 2018 – quite the contrary. While the multiple benefits of this asset class make its attractiveness quite real, the economic and financial context is also a factor in its favour. However, the interest it arouses, combined with a glut of liquidity, can change market practices and contribute to an easing of credit conditions in some market segments. For Thierry Vallière, Global Head of Private Debt Group at Amundi Asset Management, the quality and depth of sourcing as well as the analysis of both risk and the structure of transactions themselves are more necessary than ever as key components of investment strategy.

Thierry Vallière
Global Head of Private Debt Group, Amundi Asset Management

2018 certainly confirmed investors' enthusiasm for private debt. What explains this success?
First and foremost, the growth of the private debt market reflects its intrinsic qualities. The asset class combines attractive risk-adjusted return objectives, diversification, low volatility and a relative decorrelation with other types of assets. Furthermore, it enjoys a favourable regulatory status, particularly as concerns insurers. That explains among other reasons its popularity with institutional investors.

Asset managers continued to raise money in private debt in 2018, with a significant concentration of fundraising towards the largest and most mature players in the sector. Allocations to this asset class by institutional clients increased, as did the size of private debt funds. At Amundi, for instance, our first-generation private debt funds were 2-3x smaller than third- and fourth-generation funds. Last year, we raised almost €900mn for a private debt fund dedicated to SME financing, with a portfolio target of 35 transactions, whereas previous funds had stood at 25.

To what extent is the size of these fundraising campaigns due to increased liquidity from capital inflows?
Actually, we are seeing the effects of excess liquidity across all asset classes, not just private debt. This is attributable notably to the unconventional monetary policies of central banks, which are massively injecting liquidity into the markets and banks with extremely low and sometimes negative interest rates. The returns on certain asset classes have suffered commensurately; just 23% of European bonds produce yields that exceed inflation, and barely 15% offer returns greater than 2%.[1] Investors are consequently adjusting their allocations in pursuit of higher returns to serve their long-term liabilities.

Beyond the size of funds, what impact does this inflow of capital have on private debt?
As asset managers, we must take into account a number of different phenomena. For one thing, the low interest rate environment drives investors to converge on the same markets and asset classes, inflating prices. The outcome is highly concentrated portfolios, and new correlations emerging between sources of returns or among portfolios. All this leads to reduced liquidity and volatility.

[1] *Source: Bloomberg as of 31 March 2019.*

For another thing, the massive influx of cash in the alternatives market gradually introduces a loosening of credit requirements on certain market segments. Aggressive structuring is becoming more common, as are acquisitions with very high multiples, because assets are so expensive.

On the equity side, leverage is increasing in the attempt to protect returns, with transaction structures that are very different to what was seen before the 2008 crisis. Today, for the most part, these structures comprise exclusively fines and mostly senior debt, whereas previously, risk might have been divided into tranches with an amortizing profile thus reducing refinancing risk.

And lastly, liquidity inflows result in looser commitments and undertakings from borrowers. Documentation is becoming increasingly permissive, particularly as to additional debt capacity, the ability to make large acquisitions and the ability to pay dividends or upstream cash, for instance. In a context of inflated prices and multiples, the risks of refinancing are substantial in certain segments, while controls are simultaneously weaker during the life of the credit.

Private debt combines attractive risk-adjusted return objectives, diversification, low volatility and a relative decorrelation with other types of assets

Given the prevailing context, what is your strategy for investing in private debt?
In addition to these elements, we also take into account the uncertainties weighing on the international context – Brexit, the European elections, the trade war and so on – and the advanced credit cycle in Europe, although still behind the US.

All this leads us, at Amundi, to focus on investments in the least risky portion of the market, at the top of the capital structure. We are investing in traditional senior debt and steering clear of sophisticated engineering, particularly anything based on first-in-second-out structures, synthetic mixes of senior and junior risk or structures that present as senior but reintroduce risk through contractual subordination.

To make the strategy work, you absolutely need to have diversified and in-depth sourcing to maintain high selectivity, and to conduct comprehensive due diligence for each and every transaction.

How does this strategy shape your transaction selection process?
Risk management is key to our selection process. Last quarter, for instance, this led us to step away from a transaction in the pharma sector. The company's business model was very attractive, and backed by the management we offered a structure with a 4.0x senior leverage, combined with relevant control mechanisms and two half-yearly financial covenants. In the end, the transaction was completed under the leadership of a private equity sponsor with a different player, on a structure with a 5.5x senior leverage (i.e. almost 40% more debt), a single yearly covenant and more permissive documentation. That pretty much illustrates our level of appetite for risk, which is without a doubt one of our most important selection criteria when it comes to transactions.

We also pay attention to shifts in market practice. Lately, we have seen methods designed for the realm of large-cap, broadly syndicated leveraged loans applied to small-scale transactions. However, the specificity of such large-cap leveraged loans is the ability to create a structure where lesser control over documentation is offset by the liquidity offered by an active secondary market. However, this type of financing is not actually appropriate for transactions involving smaller, higher-risk entities, despite the current proliferation. Under these conditions, we tend to turn away a large number of operations. Other players are attempting to introduce this model for financing assets such as infrastructure and real estate. Again, we stay well away.

Our strategy contributes to making Amundi Private Debt one of the most active but selective players on the market. Our hit ratio is one of the lowest in the industry.

Do these practices pose a risk to the market?
Not at the moment, as the entire system is still highly liquid and so refinancing opportunities are available if needed but at a certain price. Also, the default rate for companies remains historically low. Any significant

reversal might indeed sow doubt. No such scenario is anticipated over the next 18-24 months, particularly as central banks are expected to continue providing liquidity notably through the TLTROs (targeted long-term refinancing operations).

What importance do you place on ESG criteria in your transaction analysis?
ESG has been one of the four pillars of investment at Amundi since its creation in 2010. Respect for environmental, social and governance criteria are increasingly requested by investors. As concerns private debt, they are taken into account in our role as a lender, which does not give the same weight or power as that of shareholders. We have therefore adapted our practices to the asset class since its inception. Practically speaking, ESG aspects are specifically investigated in the due diligence phase, as they are by nature likely to reduce or increase risk. A lack of consideration of these factors by a company can also lead us to walk away from certain transactions. That happened, for instance, last quarter with a company whose financials and business were sound, but whose products, which involved petroleum derivatives, posed a potential health risk for users according to some studies.

We also insist that companies sign a side letter in which they commit to supplying a number of indicators while our teams keep them informed of the best practices in their sector. That said, this approach is not coercive – our position as lenders does not allow us to enforce compliance.

What results is it reasonable to expect from the asset class?
Some funds launch with a target return for senior debt between 7% and 9%, whereas the performance of the market is tracking closer to 5% or 7%. That means they are either looser in terms of documentation or positioned on higher-risk segments.

In addition, certain funds can find it difficult to quickly deploy the full amount raised.

In our case, our credibility and visibility due to our large size and track record as well as the partnerships we maintain with some fifteen financial institutions give us access to a large number of diversified transactions across Europe. In our latest fund of €900mn, our highly effective sourcing means we have no trouble meeting our investment targets. We should fulfil our commitment of 35 portfolio holdings within two years, while maintaining an attractive risk-adjusted return profile.

At Amundi, we believe that private debt yield should be considered relative to returns on other asset classes. As a full-service firm, our first priority is to demonstrate to our clients that a recommended investment provides added value and offers diversification potential.

Amundi

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10 globally.[2] Following the integration of Pioneer Investments, it now manages over €1,476bn of assets[3] across six investment hubs based in 37 countries. In 2016, Amundi launched a platform dedicated to real and alternative assets to provide easier access to unlisted investments. Bringing together capabilities in real estate, private debt, private equity and infrastructure (green energy), this platform has a headcount of 200 people for AUM of €45bn[3], and offers solutions through funds, club deals and multi-management funds, including two innovative and ambitious partnerships with EDF and CEA.

Thierry Vallière

Thierry Vallière is Global Head of Private Debt Group. He oversees all private debt activities and is co-chairman of the Investment Committee for the asset class.

Thierry joined Amundi in 2015 from Printemps, the leading French department store and real estate group, where he was deputy CFO. Prior to Printemps, Thierry was an Executive Director at the investment bank Rothschild & Cie, where he was involved in M&A situations, debt advisory and restructuring in Europe until 2010.

real-assets.amundi.com

[2] *Source: IPE "Top 400 asset managers" published in June 2018 and based on AUM as of end December 2017.*
[3] *Source: Amundi as of 31 March 2019.*

Private Debt-Backed Deals and the Impact of Uncertainty

The private debt market in Europe continues to evolve and mature, and significant amounts of capital have been raised for the asset class. Now that private debt is more established among the investment community, the challenge has shifted from explaining the benefits and nuances of the asset class to effectively deploying committed capital into a market with less experience of non-bank lending compared to the US.

Putting capital to work successfully in the European private debt market is a challenging endeavour. There are also concerns that managers are becoming price-takers, while at the same time covenant packages may be loosening. With this in mind, managers' origination and execution capabilities are more important than ever.

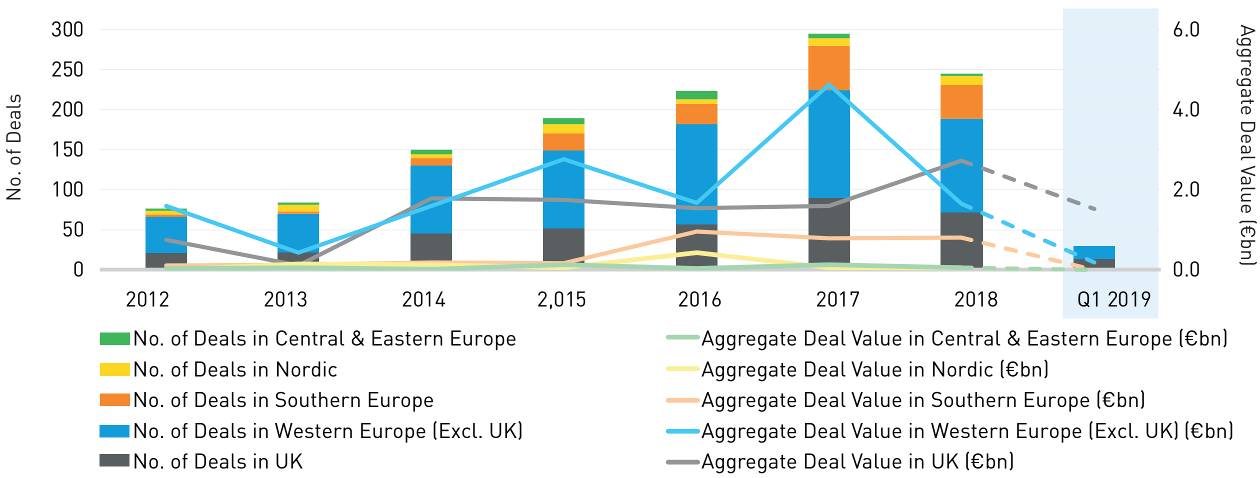
Changing of the Guard

Signalling the end of the upward trends observed in both the number of deals and the aggregate amount of capital being deployed in Europe each year, 2018 fell short of the record activity seen in 2017. While the €5.3bn of private debt deals indicates a healthy market, with events like Brexit looming large, market uncertainty could present difficulties for fund managers in sourcing attractive deals on a risk-adjusted basis and effectively deploying capital.

Preqin data suggests that debt markets outside the UK have seen the greatest drop in activity amid the challenging market conditions and political tension in Europe. By and large, continental Western Europe has been the largest market throughout the emergence of the private debt industry, recording the highest aggregate private debt-backed deal value each year from 2015 to 2017 (Fig. 3.13). Over this period an increasing number of large debt deals were completed in the region, including the 2017 transaction for CPA Global Limited, a developer of intellectual property software, a €2.4bn acquisition for which The Goldman Sachs Group provided €1.2bn of debt.

In 2018, however, Western Europe's share of annual aggregate private debt-backed deal value in Europe

Fig. 3.13: Private Debt-Backed Deals in Europe by Portfolio Company Location, 2012 - Q1 2019



Source: Preqin Pro

decreased to 31%. Meanwhile, deals in the UK reached a new peak of €2.7bn, representing over half (52%) of the European total – clearly there are still attractive opportunities in the UK, in spite of the dip in overall activity, and certain managers are successfully putting capital to work. Given that the UK's share of the number of deals completed in Europe in 2018 was relatively unchanged from 2017, the growth in UK deal value was driven by larger debt financings. The average size of a private debt-backed deal in the UK increased from €50mn in 2016 to €94mn in 2018; similarly, four of the five largest deals in Europe in 2018 involved UK-based portfolio companies, compared to just one of the five largest deals in 2017.

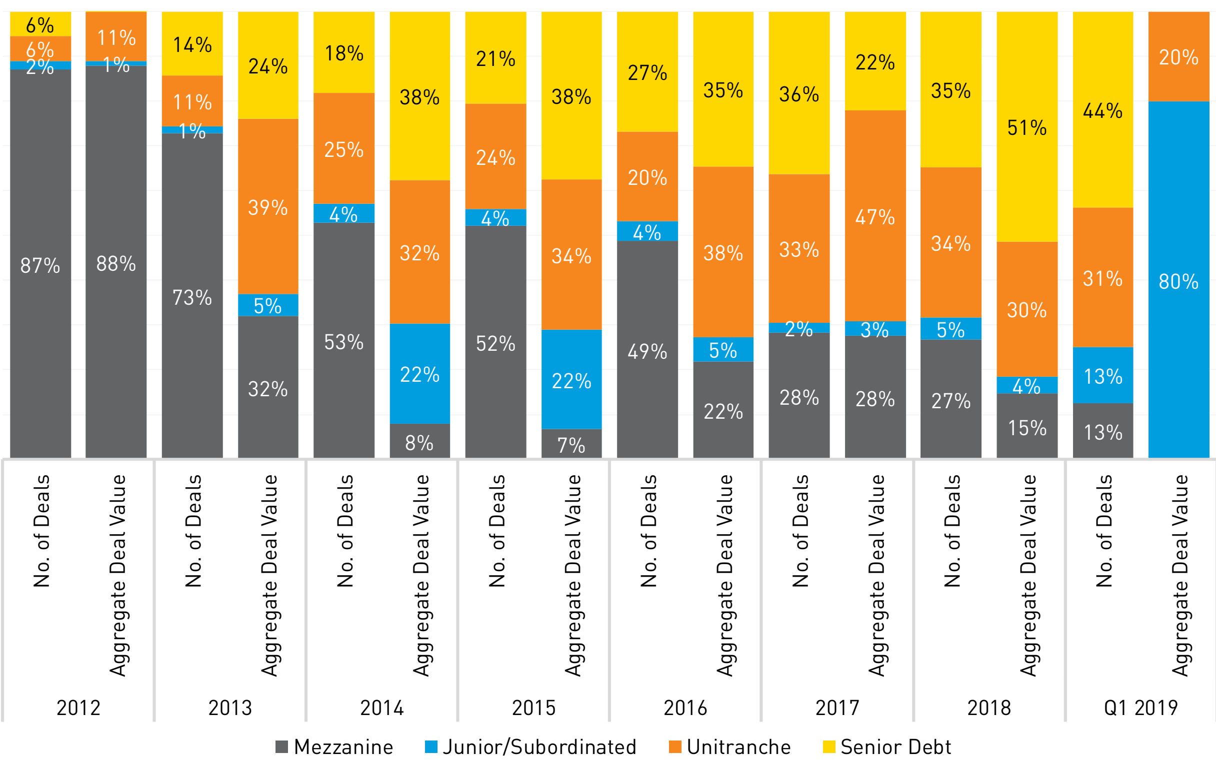
Recovery and Regrowth

Following in this vein, UK activity in 2019 got off to a strong start, with a £1bn debt facility to support the refinancing, growth and minority-stake acquisition of Daisy Group Limited, a UK-based IT infrastructure company, in Q1 2019. In a trend seen across private markets, it seems confidence in the UK's outlook is improving.

While discussions of where we are in the credit cycle persist, Preqin's recent surveys suggest that most players in the private debt space agree that we are late in the cycle. Therefore, with attention turning to a potential market correction/event and general market uncertainty caused by events such as Brexit, it is unsurprising to see a growing interest in unitranche and senior debt at the expense of riskier investments like mezzanine. Three-quarters of private debt deals completed in Q1 2019, and over two-thirds (68%) of deals in 2018, were for deals in unitranche and senior debt (Fig. 3.14). As managers look to place capital in areas with significant downside protection in the current market environment, we could see an even greater uptake in these types of debt investments going forwards.

> **Most players in the private debt space agree that we are late in the cycle**

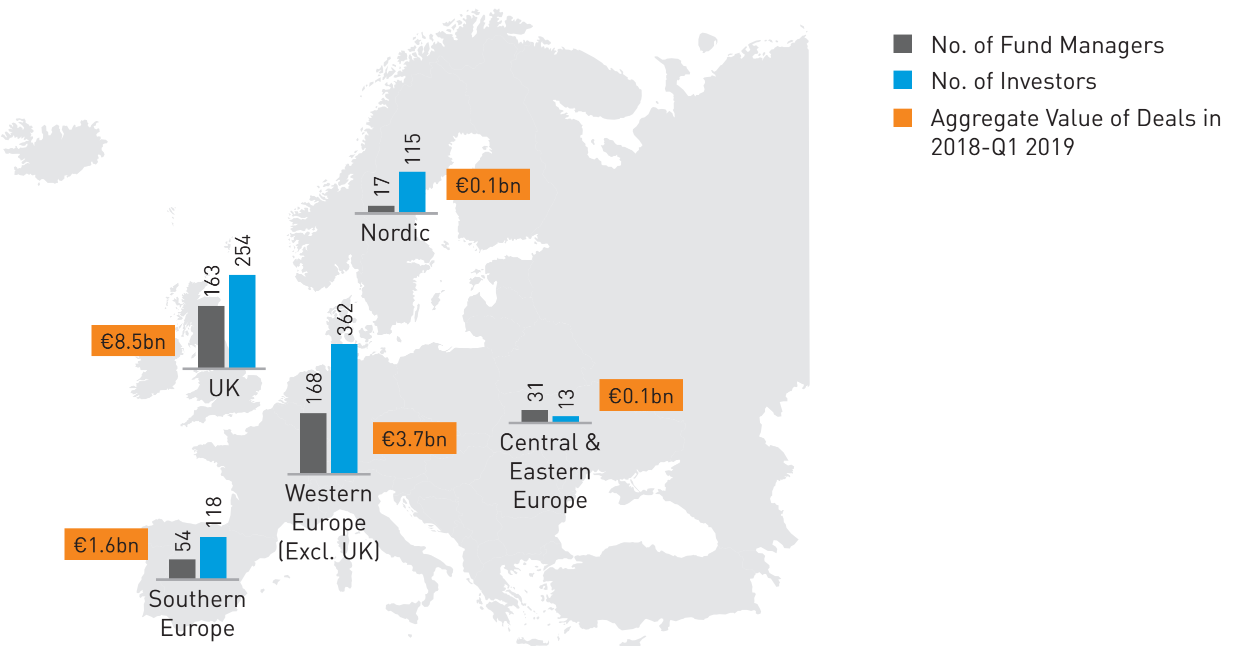
Fig. 3.14: Private Debt-Backed Deals in Europe by Debt Type, 2012 - Q1 2019



Source: Preqin Pro

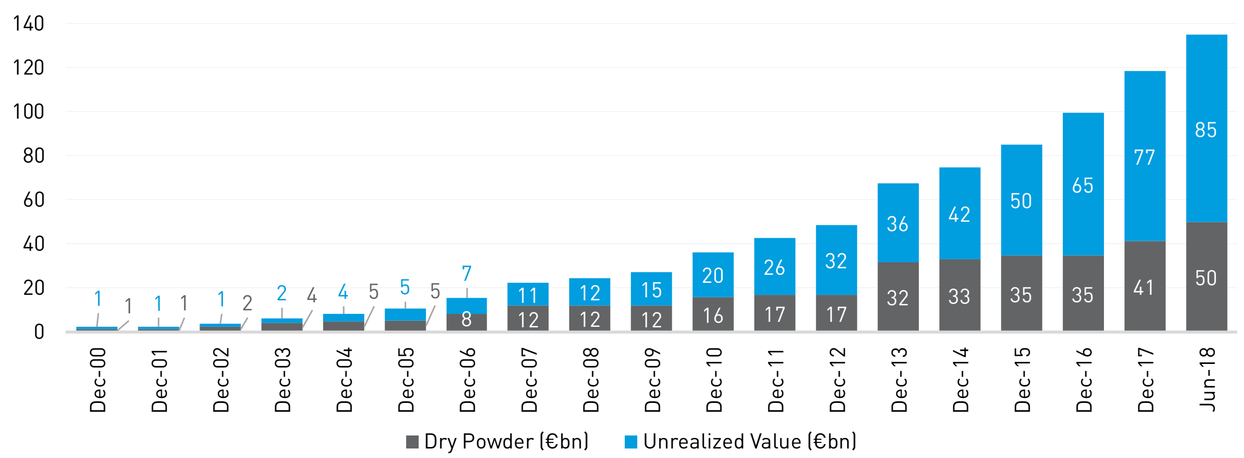
Private Debt: Key Charts

Fig. 3.15: Private Debt in Europe



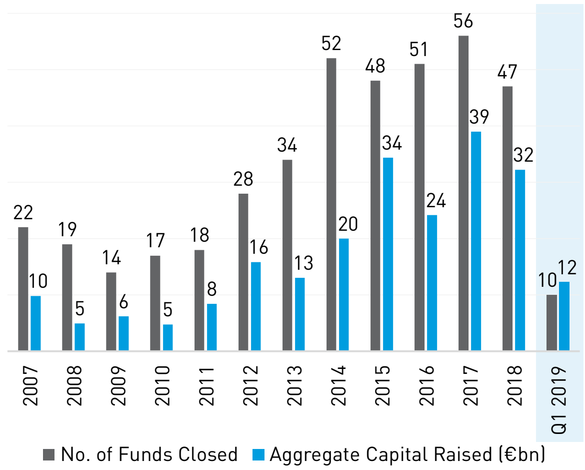
Source: Preqin Pro

Fig. 3.16: Europe-Based Private Debt Assets under Management (€bn), 2000 - 2018



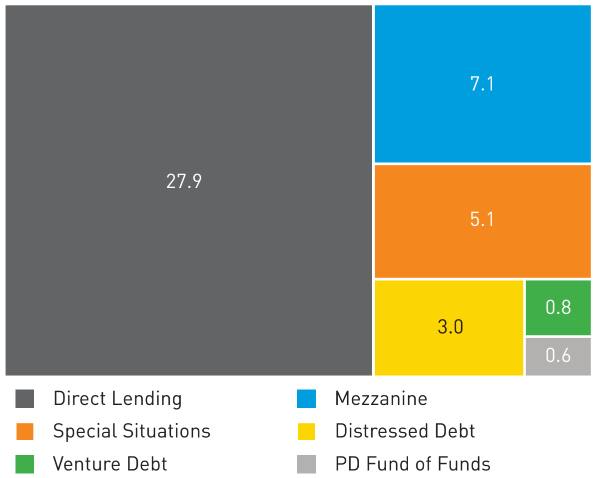
Source: Preqin Pro

Fig. 3.17: Annual Europe-Focused Private Debt Fundraising, 2007 - Q1 2019



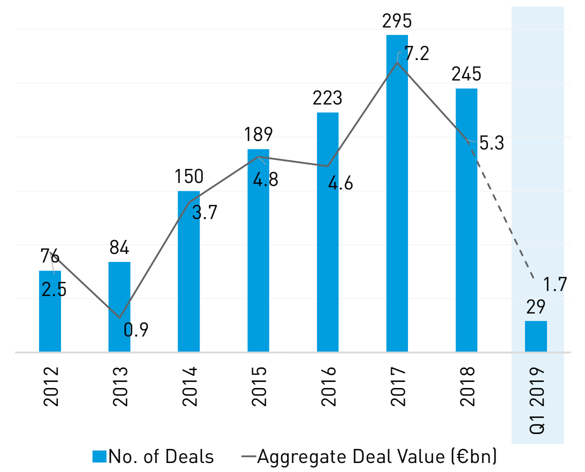
Source: Preqin Pro

Fig. 3.18: Aggregate Capital Raised (€bn) by Europe-Focused Private Debt Funds Closed in 2018-Q1 2019 by Fund Type



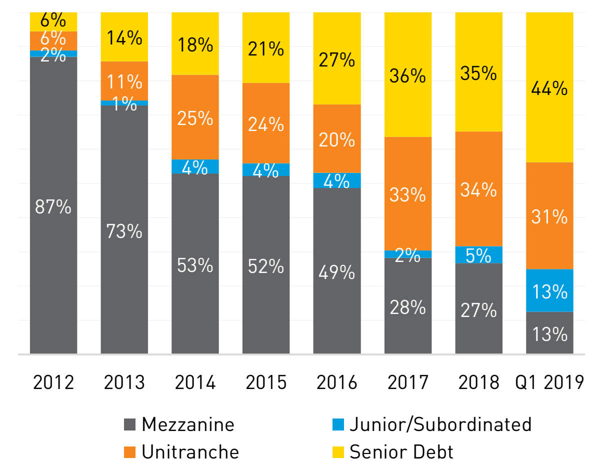
Source: Preqin Pro

Fig. 3.19: Private Debt-Backed Deals in Europe, 2012 - Q1 2019



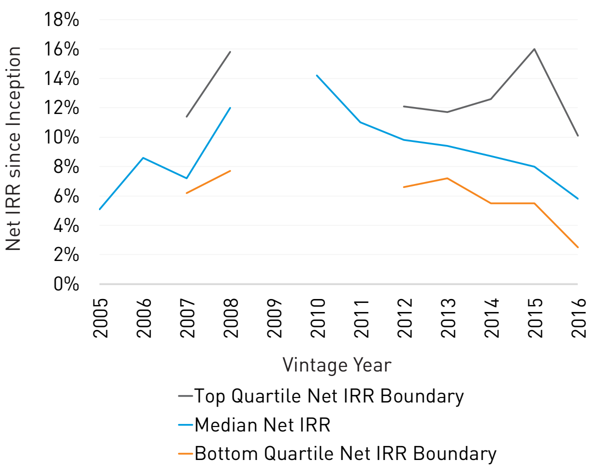
Source: Preqin Pro

Fig. 3.20: Private Debt-Backed Deals in Europe by Debt Type, 2012 - Q1 2019



Source: Preqin Pro

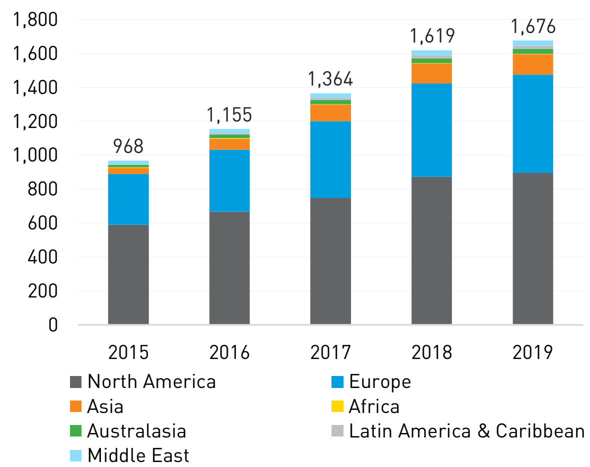
Fig. 3.21: Europe-Focused Private Debt: Median Net IRRs and Quartile Boundaries by Vintage Year*



Source: Preqin Pro. Most Up-to-Date Data

**Where data is unavailable no IRR is shown.*

Fig. 3.22: Number of Europe-Focused Private Debt Investors by Location, 2015 - 2019



Source: Preqin Pro

Credit: Late-Cycle Investing, Risks and Opportunities

Credit at its best is a fantastic asset class. You carefully analyze a company, decide where in the capital structure you want to be, determine when you would like your money back (maturity) and buy an instrument priced at 100%. Every year you receive a return, price volatility is low (unless something goes wrong), and at the end of your investment period you get all your money back.

What could go wrong? Well for the past 10 years nothing has, hence the massive growth in passive credit funds, ETFs and indices. No-one can blame the market as the risk/reward relationship and payback profile has lent itself very well to passive investments in credit.

We think the time is over for passive investments, and investors need to adopt an active approach given where we are in the economic and credit cycle.

Are We Late in the Credit Cycle?

In a word, yes.

Economic analysis, spread analysis and default analysis all point to the fact that we are entering a maturing 10-year positive credit cycle which was initially stimulated by massive central bank accommodation and has been perpetuated by fiscal and tax reforms in the US.

We at LNG argue that now is the time for an active approach to credit investing, and have detailed below the different parts of the credit cycle and how investors should position themselves.

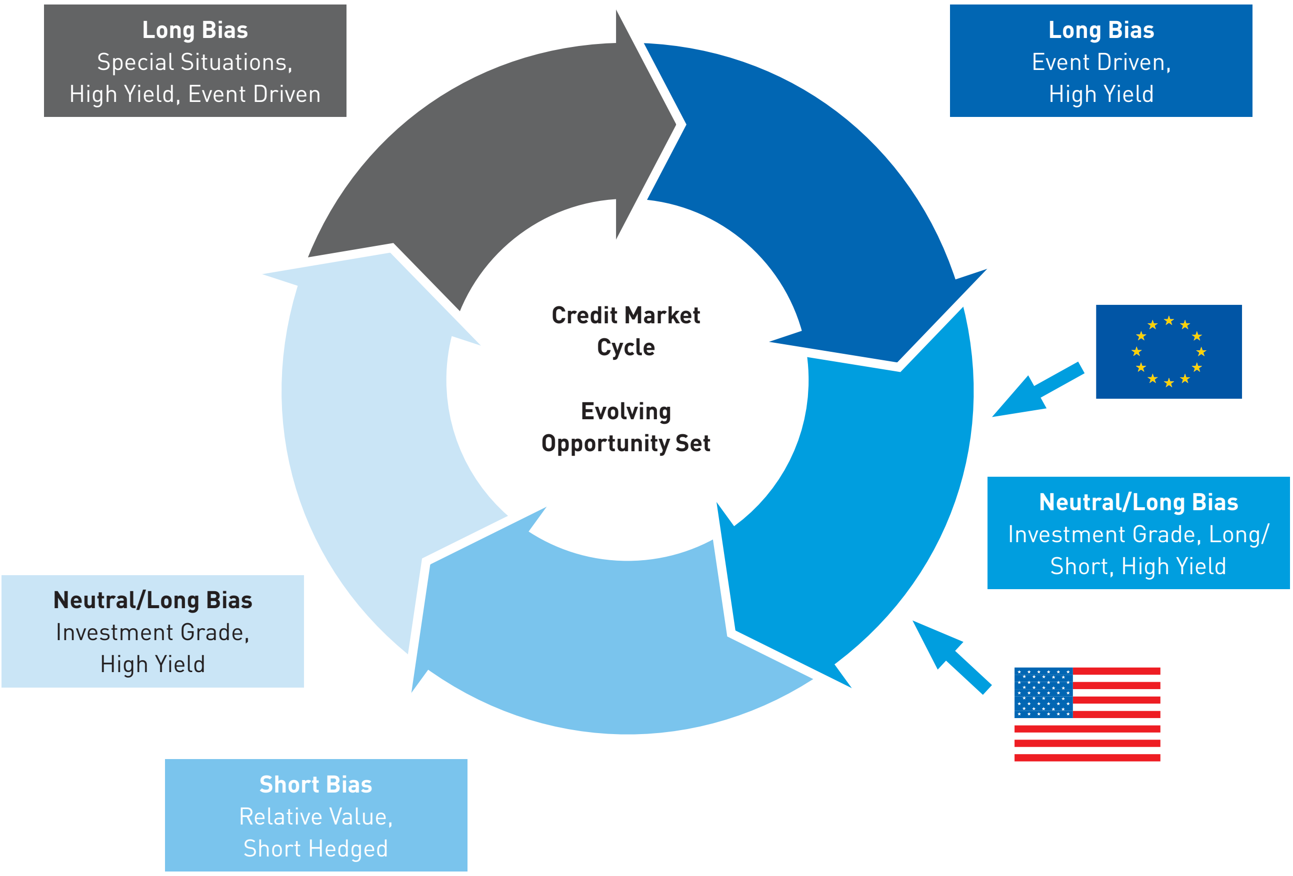
Positive credit cycle – factors to look for include low rates, low valuations, access to capital rapidly increasing, and most importantly defaults have just peaked as a result of recessionary trends and a dislocated environment. Investors want to have a long bias and they should be looking at high-beta assets such as high yield, event driven and special situations.

Louis Gargour
CIO, LNG Capital

Investors should be increasing risk without having to be concerned about hedging, or shorts.

Stressed cycle – defaults are low but access to capital is becoming more difficult. This is where we are currently. While we have not seen an increase in rates yet, we have seen access to capital begin to be restricted and become more difficult for certain borrowers. We think it is not about rates but the dispersion between good creditors and bad creditors. Investors at this point need to be cautious and adopt a more neutral bias positioning. This means increasing short exposure through an increase in the number of individual shorts in a portfolio: these should be individual idiosyncratic. The objective is to create beta on both the short and long side. As the stressed cycle evolves, investors need to begin to systemically hedge their portfolio, moving to neutral market exposure.

Distressed cycle – factors include increasing defaults, a deteriorating upgrade-to-downgrade ratio, equity buybacks by corporations financed by debt, and economic slowdown with consumer discretionary sectors doing badly. Typically these sectors include discretionary spend with large-ticket items, autos, white goods etc. being hit the hardest. This is the most difficult part of the cycle to call; however, positioning



is quite clear: you want to be short, you want to be hedged, and any exposure should be taken on a relative value basis.

End of distressed/beginning of positive cycle – upgrades outnumber downgrades; we see markets rally, tightening spreads, and most importantly we begin to see general optimism from both investors and corporations. Positioning at this point moves towards long bias away from neutral, and the types of instruments investors want to look at include investment grade, high yield and special situations. Removing systemic hedges, increasing portfolio exposure, and adopting a more directional long-bias approach are appropriate at this stage.

We Expect Capital to Become More Expensive and Difficult to Borrow, Which in Turn Will Hurt Credit

Global institutional investors have overweighed investment-grade and other high-quality credit. We think due to the longer duration of this part of the overall credit spectrum, high-quality names are more likely to be adversely affected by a rise in interest rates. Duration is not your friend. Investors need to consider generating returns not through duration, but through credit selection, names that generate yield because of the nature of the underlying company not the maturity.

> **This mismatch in liquidity we believe is the single biggest risk to the overall market**

High-yield, event driven and stressed credit are where investors should be focusing their attention.

Spreads Are Tight, Where Do I Invest?

There are three ways of getting paid in credit: 1) extend maturity, 2) reduce rating, 3) invest in more illiquid bonds (direct lending, private debt). In an effort to increase returns, investors have done all three of the above: institutional pension and insurance portfolios have extended duration significantly, we have seen a tightening of investment grade and high yield due to overwhelming investor demand, and most importantly we now believe that the illiquidity premium paid to investors for locking up their money in illiquid investments, private debt, direct lending and other illiquid fixed income investments does not adequately compensate them for the lack of liquidity and the risk they are taking. The graph on the previous page demonstrates that the vast proportion of available credit investments produce very low yields.

Is the Market Liquid?

The liquidity profile of the fixed income markets has fundamentally changed over the past credit cycle. The role of banks as the buyers of last resort, and the involvement of a large number of market participants acting on a proprietary basis, has been vastly reduced. Regulatory changes including Glass-Steagall have curtailed proprietary activity by the banks, who now act in a brokerage capacity on the vast majority of financial instruments.

The development of passive investment vehicles, principally ETFs (exchange-traded funds), has enabled a large majority of investors to buy a proxy for the fixed income market on a direct basis, thereby bypassing active fund management altogether. The growth of the ETF sector has caused imbalances between the liquidity being offered to investors and the underlying liquidity of the instruments and the overall market. This mismatch in liquidity we believe is the single biggest risk to the overall market. In the event of a sell-off, there will be a significant dislocation between prices quoted and the actual sale price of securities, causing gap risk. Behavioural science and past cycle analysis lead us to believe that any dislocation between prices quoted and sale prices will cause further selling, thereby exacerbating the dislocation and further reducing liquidity.

Is a Recession on the Horizon?

A recession is certainly a strong possibility, if for no other reason than economic cycles tend to repeat themselves (on a 7- to 12-year basis) and it has been 10 years since the last recession. We question whether or not a recession is necessarily a global phenomenon, and we see nascent growth in Europe, inflationary pressures in the US and recessionary pressures in emerging markets. The trade wars and other frictional increases in the sale of goods and services leads us to believe that inflationary pressures will rise before recessionary ones do.

In a recessionary investment environment, bonds will outperform equities due to the seniority of your claim, but more importantly equities are predicated upon growth in order to generate your return, i.e. price appreciation dividends, while fixed income instruments for companies with stable or slightly decreasing earnings can be very attractive investments.

Conclusion

We are late in the cycle, we expect rates will rise and spreads are tight relative to where they have historically been, as well as relative to the liquidity and risks you are taking. Furthermore, liquidity in the market has reduced significantly, but the size of the market and the number of retail investors has increased dramatically.

Our view is that investors should begin to seek managers who can utilize shorts, hedges and relative value strategies, and move away from passive long-only solutions in credit.

Louis Gargour, CIO, LNG Capital

Louis runs the investment management team at LNG, leading idea generation across credit markets. As CIO, Louis oversees investment and directs the organization's investment management decisions. He has over 30 years' investment experience with expertise in government bonds, investment-grade, high-yield, distressed and special situations. As a result of his strong performance Louis and his team have been nominated for numerous awards and honourable mentions from Euro hedge, Investhedge, HFR, Hedge and others. Besides his duties as CIO, Louis is active in the financial policy and reform debate as a frequent contributor to Financial Times, Wall Street Journal, Barron's, Reuters and Bloomberg. He regularly speaks at major industry conferences, as well as CNBC and Bloomberg television. Louis founded LNG in 2007. Previously he was Head of Fixed Income at RAB Capital, a London-based £7bn AUM hedge fund. He had overall responsibility for fixed income research trading and investments. Prior to his role at RAB, Louis held senior positions at Goldman Sachs London and J.P. Morgan London, and began his career on Wall Street as a graduate of the highly acclaimed Salomon Brothers international management training program. Louis holds dual majors BS Finance\International Management from Georgetown University Washington DC, Exchange Masters Programme at Boccioni University Milan, and holds an MBA from London Business School with distinction. Louis's hobbies include car restoration, extreme skiing, scuba diving, sailing and motorsport. Louis is married with three children and speaks English, French, Italian and German.

www.lngcapital.com

Hedge Funds: Performing in Europe

The performance of Europe-focused hedge funds and the conditions in the European market have a huge impact on the global landscape. The European market represents 20% of global hedge fund AUM and is home to some of the largest hedge fund industries in the world.

2018 was a challenging year for Europe-focused hedge funds. Stock markets across Europe were rocked by geopolitical uncertainty, currency volatility and a slowdown in international market growth. The top-level figures illustrate the difficulty of navigating European markets in 2018: Europe-focused hedge funds posted a loss of 4.22% in 2018, Europe-based AUM decreased by 8.7% to €570bn and investors withdrew a net €33bn from Europe-based hedge funds.

The performance of some markets across Europe, though, shows that not all struggled to withstand the difficult conditions of 2018.

Macro and Credit Strategies Return in 2018

Global equities declined significantly in the fourth quarter of 2018. Trade tensions, slower Chinese growth and Brexit created a difficult environment, impacting the annual returns of many strategies. Hedge funds with generally lower exposure to the volatile European equity markets were able to successfully record gains in 2018. Europe-focused credit and macro strategies generated positive net returns for their investors over the year, recording +2.57% and +1.94% respectively. Credit strategies generated monthly gains for the first 10 months of the year – a positive streak stretching back over two years to July 2016 – and were up 4.37% for the year as of October 2018 before negative returns in November and December brought the benchmark down. Macro strategies were more volatile, producing seven positive months, and were up 4.42% as of July 2018 before similarly tailing off towards the end of the year.

Long-Term Gain

Since investors typically hold hedge funds for a number of years, longer-term performance is a key consideration. Over the three-year period to March 2019, each Europe-focused top-level benchmark has delivered a positive return. In the aftermath of the Brexit vote, Europe-focused equity and event driven strategies unsurprisingly recorded heavy losses of 3.23% and 3.06% respectively in June 2016. However, this drop was not as sharp as for the public EUROSTOXX 50, which lost 6.49% in the month (Fig. 3.24), and these strategies quickly rebounded, enjoying a period of positive performance over the following two years.

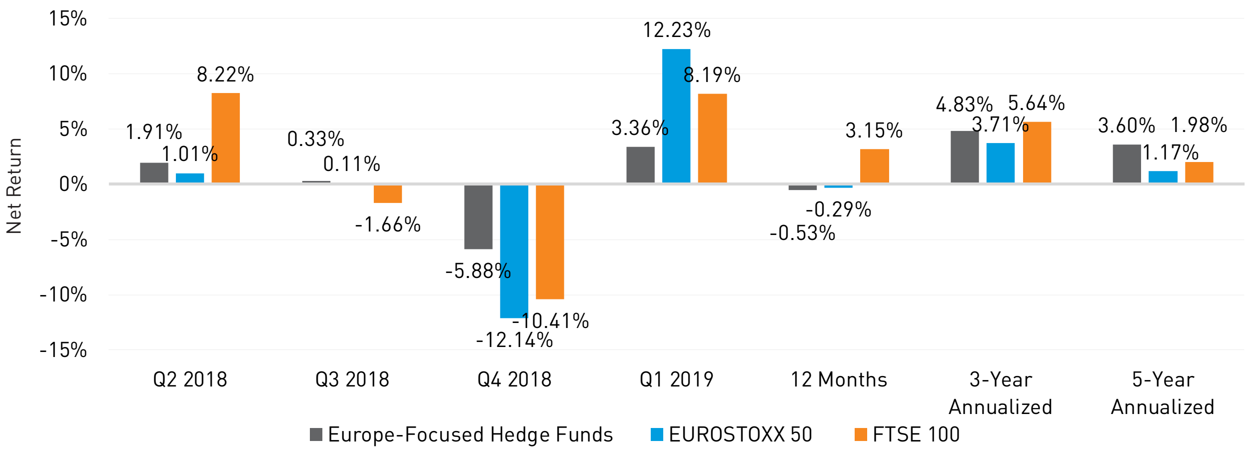
Credit strategies were the most consistent performing funds and were one of three strategies to deliver cumulative net returns over 20% (+21.56%) over the three-year period analyzed, the others being macro (+21.42%) and event driven (+20.69%) strategies, whose strong performance in 2017 was enough to offset the losses in 2018 (Fig. 3.25).

Public Market Outperformance

The positive performance seen across the board of top-level Europe-focused hedge fund strategies translates into outperformance on quoted markets. The three-year cumulative return posted by Europe-focused hedge funds (+15.19%) is greater than that of the EUROSTOXX 50 (+11.54%), although both were outperformed by the FTSE 100 (+17.88%) – only the three strategies mentioned above, delivering 20%+ since April 2016, posted a higher return. While the FTSE 100 outperformed some hedge fund strategies over this three-year period, volatility is far higher than that of Europe-focused hedge funds.

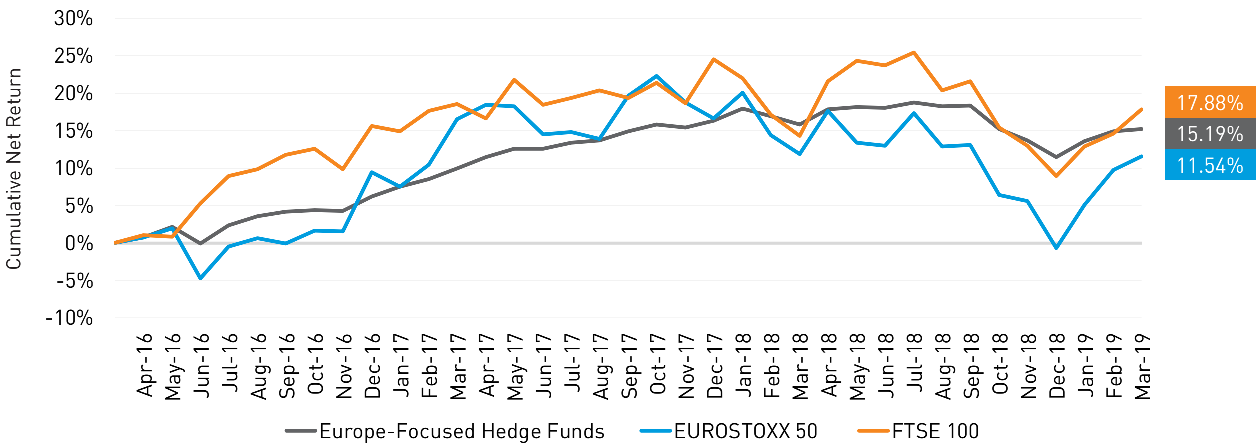
Investors value downside protection as well as risk-adjusted returns. With Europe-focused hedge funds demonstrating far steadier performance in times of public market volatility – towards the end of 2018 for example – the value of hedge funds continues to extend beyond returns.

Fig. 3.23: Performance of Europe-Focused Hedge Funds vs. EUROSTOXX 50 and FTSE 100



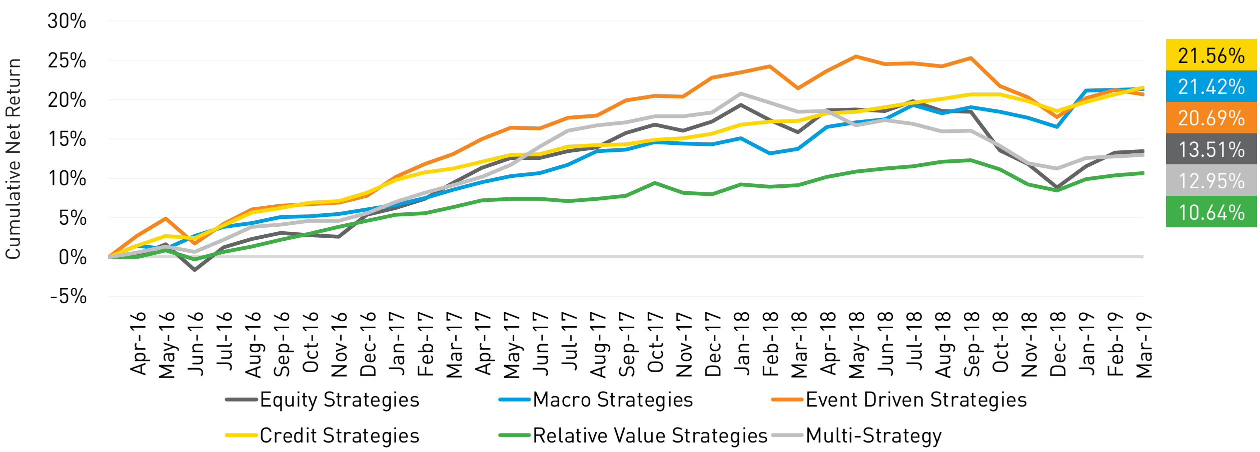
Source: Preqin Pro. Data as of March 2019

Fig. 3.24: Cumulative Performance of Europe-Focused Hedge Funds vs. EUROSTOXX 50 and FTSE 100, 2016 - 2019



Source: Preqin Pro. Data as of March 2019

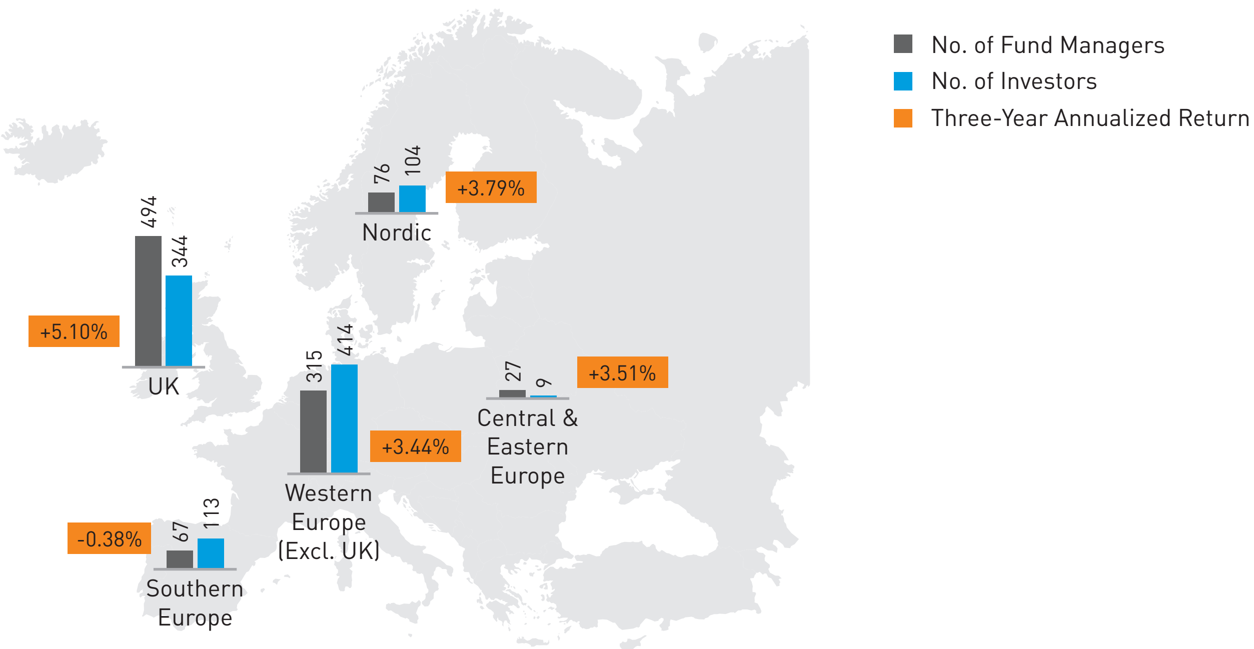
Fig. 3.25: Cumulative Performance of Europe-Focused Hedge Funds by Top-Level Strategy, 2016 - 2019



Source: Preqin Pro. Data as of March 2019

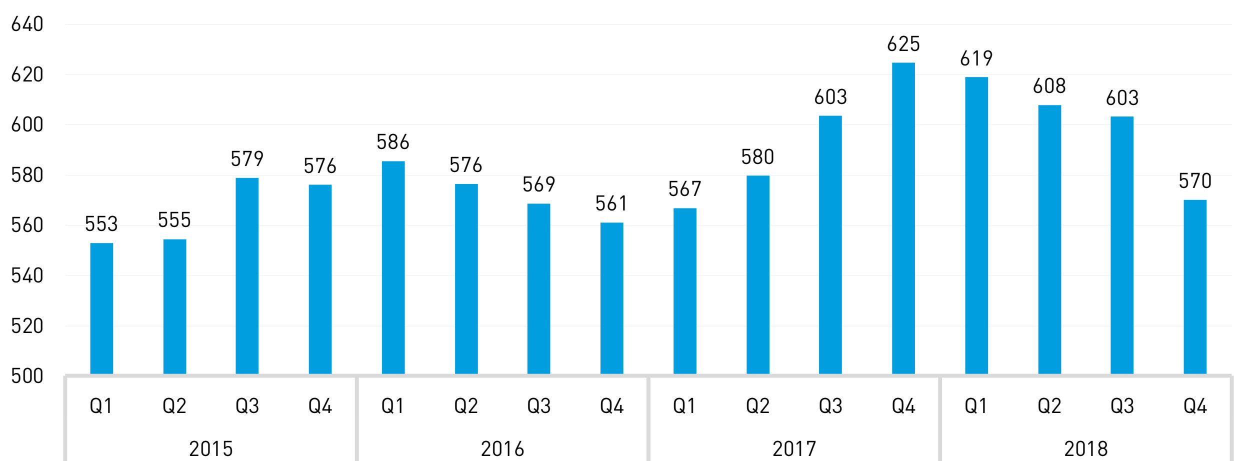
Hedge Funds: Key Charts

Fig. 3.26: Hedge Funds in Europe



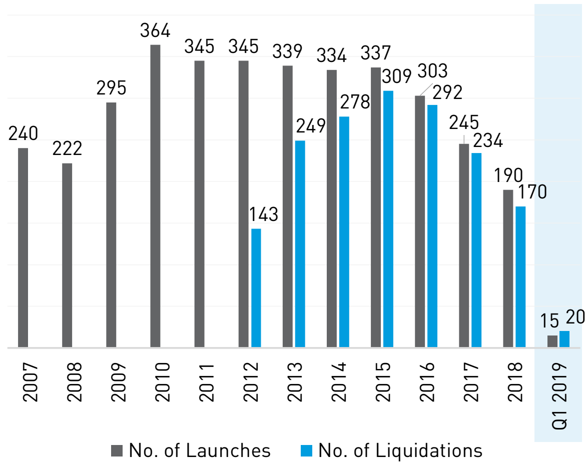
Source: Preqin Pro

Fig. 3.27: Europe-Based Hedge Fund Assets under Management (€bn), Q1 2015 - Q4 2018



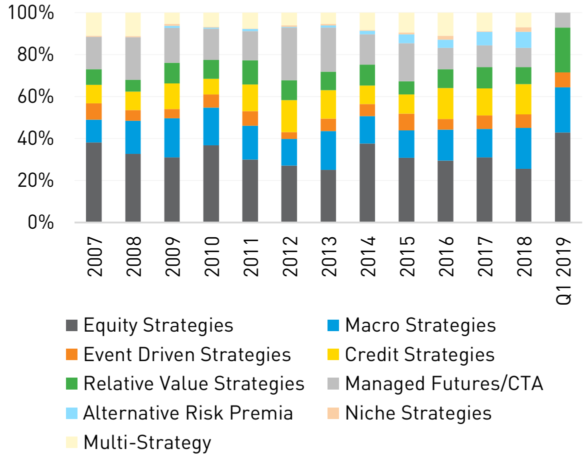
Source: Preqin Pro

Fig. 3.28: Europe-Based Hedge Fund Launches and Liquidations, 2007 - Q1 2019



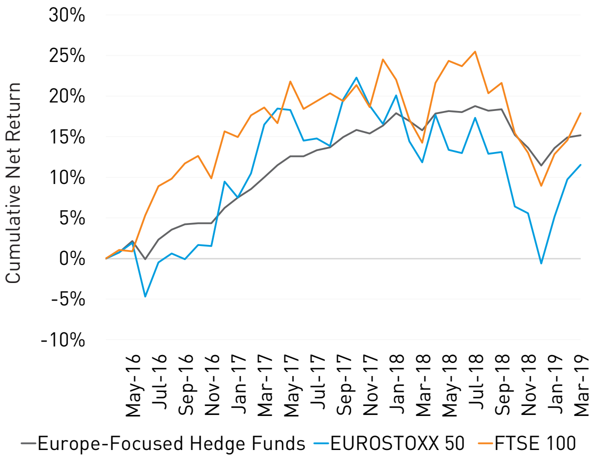
Source: Preqin Pro

Fig. 3.29: Europe-Based Hedge Fund Launches by Top-Level Strategy, 2007 - Q1 2019



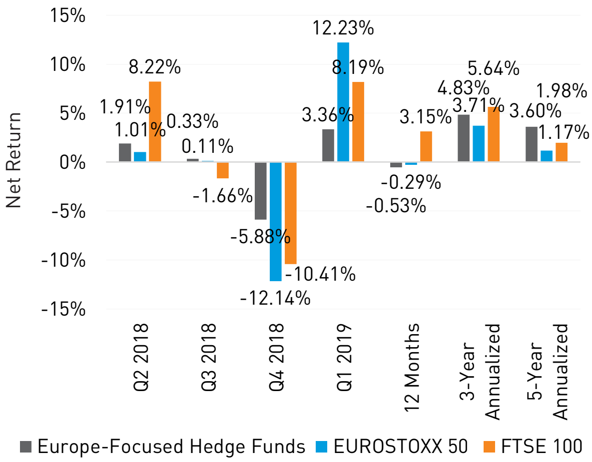
Source: Preqin Pro

Fig. 3.30: Cumulative Performance of Europe-Focused Hedge Funds vs. EUROSTOXX 50 and FTSE 100, 2016 - 2019



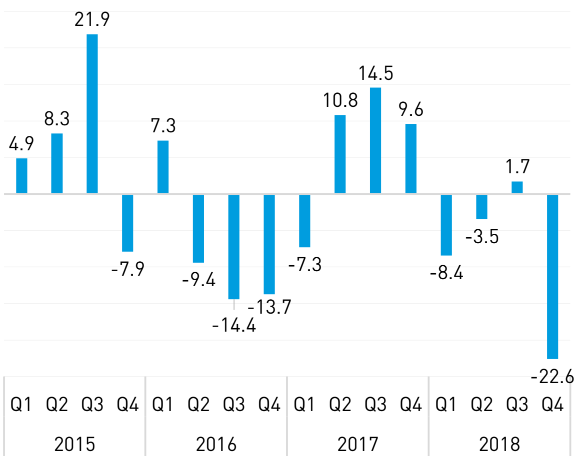
Source: Preqin Pro. Data as of March 2019

Fig. 3.31: Performance of Europe-Focused Hedge Funds vs. EUROSTOXX 50 and FTSE 100



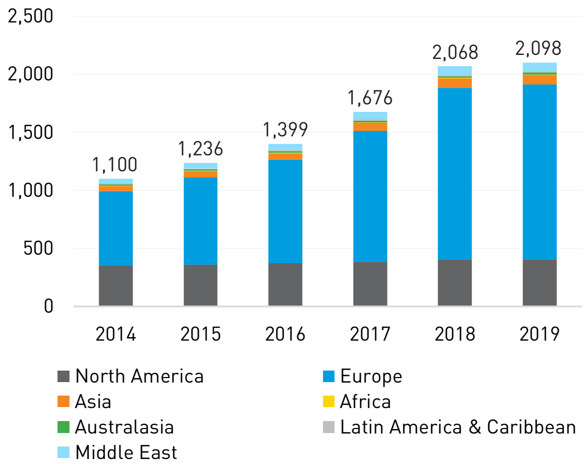
Source: Preqin Pro. Data as of March 2019

Fig. 3.32: Quarterly Europe-Based Hedge Fund Asset Flows (€bn), Q1 2015 - Q4 2018



Source: Preqin Pro

Fig. 3.33: Number of Europe-Focused Hedge Fund Investors by Location, 2014 - 2019



Source: Preqin Pro

From Management to Usage: Innovations Are Shaking up Real Estate

Increasing focus on ESG criteria, new technologies, innovative services: opportunities to improve the performance of real estate assets abound. Today, financial advantages and cost savings go hand in hand with new experiences in terms of use and comfort for occupants. These are very real opportunities, which Amundi Real Estate leverages fully; nonetheless, their proliferation calls for rigorous selection and screening processes, according to Jean-Marc Coly, CEO of Amundi Real Estate.

Jean-Marc Coly
CEO, Amundi Real Estate

Amundi Real Estate signed a Responsible Investment Charter in late 2018; does this signal a recent turn towards ESG concerns?
These are by no means recent preoccupations for us. This was, in fact, an update of our earlier Responsible Investment Charter of 2012. The charter governs how we apply ESG criteria to managing our buildings; our funds, with their €32bn of AUM; and our asset management company, Amundi Real Estate.

You might say that it embodies our societal commitment: our certainty that conduct in line with ESG is absolutely essential to a sustainable future. Our charter also reflects an idea we have long held, namely that taking environmental factors into account when investing has economic benefits for both landlord and tenants. This 'green premium' has never been fully demonstrated, however, because such financial considerations were rapidly joined by environmental convictions and the concept of societal responsibilities and engagement, the same that are today enshrined in norms and regulations.

So, what does taking ESG criteria into account translate to in terms of your management?
We have developed a number of in-house tools for evaluating real estate assets according to a rating system. Scores are assigned primarily based on buildings' energy performance, a key issue for the real estate sector, but also take into consideration the comfort and wellbeing of occupants, along with social and governance criteria. As of the end of last year, these now include the commitments made by the French Government as part of the Paris Agreement. This means that we conduct a carbon audit for each asset, its compliance with a +2°C climate scenario, and its exposure to climate risks. We thus determine the carbon footprint for each building, and create emissions reduction targets with a 2030 horizon.

We have also established much more stringent ESG criteria within certain funds of ours. Take, for instance, Opcimmo: all assets bought and managed must achieve a minimum score to be accepted, short of which they are rejected, unless they can demonstrate their ability to achieve meaningful progress by a specific date.

Does that mean ESG has become an exclusion criterion for certain assets?
Actually, it is a management tool we use on a day-to-day basis and rely on to improve the performance of real estate assets and their potential for further positive progress. Sometimes, our assessment methodology reveals that an asset's room for improvement will not suffice to comply with the demands of the Paris Agreement, or the strategy of

our fund. In such cases we may conduct arbitrage, or consider changes to its usage. ESG sits in the mix alongside our other selection criteria, as much a fundamental component of the financial due diligence we complete during acquisition as it is of our day-to-day management activities.

There are increasing numbers of labels related to energy performance in the real estate sector – are they a guarantee of quality you rely on?
Within our property holdings, 80 of our buildings are already certified. The proliferation of labels and certifications, however, has a tendency to reduce transparency. There is a real desire to standardize labels at the European level, but nothing concrete is in place, and the focus remains narrowly centred on energy criteria. The existing variety leads us to seek different labels for our assets depending on the clientele involved, or on the characteristics of the building in question. Each country also favours somewhat different certifications.

At Amundi Real Estate, we have developed our own ESG mapping tool, in order to ensure a standardized view that allows us to compare our properties, whatever and wherever they may be. We also aspire to address the need for transparency in the market. To this end, we participated in a working group chaired by the ASPIM (Association française des Sociétés de Placement Immobilier), the French association for real estate investment companies, and AFG (Association Française de la Gestion Financière), with the goal of presenting a French SRI label for real estate funds. The project proposal has been accepted and should soon become a reality. Our hope is that this label will help foster recognition of French excellence in other countries.

Beyond labels and certifications, what concrete initiatives attest your commitment to ESG?
Our ESG commitment is integral to the entire Amundi Group. For instance, we have an impact-investing fund that invests a portion of the group's capital, as well as capital placed in thematic responsible investments. In terms of real estate, such investments include social housing, as well as housing stock dedicated to persons with disabilities or vulnerable populations, humane habitats and more.

We are currently considering the prospect of investing a portion of our retail real estate funds in these segments as well; however, their economic value must first be confirmed.

And finally, within our current property holdings, we work to facilitate ESG initiatives, particularly those that support the ecological transition. We implement green grids and living roofs, rooftop hives and more.

Our Responsible Investment Charter governs how we apply ESG criteria to managing our buildings, our funds and our asset management company

Generally speaking, we look for solutions that also contribute to the quality of our properties as well as the comfort of our tenants, who are, after all, just as much our clients as investors are.

Do new technologies have contributions to make in designing these solutions?
Yes, naturally, assuming, of course, a pragmatic approach that focuses on those technologies ready for application right now. In real estate, new technologies drive innovative solutions on four distinct segments: financing, construction, management and use. As investors and owners of a real estate portfolio, we must anticipate and incorporate new possibilities so we can implement them in our buildings for the benefit of owners and occupants alike.

What technology-driven transformations and innovations are the most visible in your sector?
We see these on each of the four segments I mentioned earlier. We design financial products, and consequently we seek to explore the changes underway in how real estate projects are funded. A good example is the emergence of crowdfunding. We are also attentive to trends in how such products are distributed, which challenge the traditional distribution via retail banking and highlight changing investor profiles. Broadly speaking, we are interested in services that can reduce the cost of capital involved in making a real estate investment.

Turning to construction, innovations also serve to provide cost reductions, particularly thanks to prefab construction, which is useful outside of urban areas and for factories as a means of preventing cost overruns, delays and the risk of defects.

Digital modelling, known as BIM (for Building Information Modeling), also facilitates construction and maintenance. The latter is also experiencing improvements thanks to new types of services that provide both innovation and savings, along the lines of startup WeMaintain, which has 'Uberized' elevator maintenance. And lastly, usage is in the midst of change with the appearance of connected buildings that enable everything from management of energy consumption to online booking of office space.

In the end, whatever their domain of application, our policy with regard to such innovations is to consider only those that cater to genuine demand by addressing an existing need.

Are you considering developing these types of services in-house at Amundi?
It is not really our calling to develop these types of novel offerings ourselves, but we are determined to use and apply them in view to achieving both the savings and the improvements to comfort that they offer. Indeed, Amundi Real Estate has historically conducted its business from a place of partnership rather than integration in order to ensure greater speed and agility. This is a strategy we continue today with the startups appearing in the real estate sector.

We have, however, created an internal working group dedicated to innovation. We especially rely on Real Estech, an organization that builds bridges between large companies and startups operating in the real estate sector, as a source of information and contacts. Our working group is entrusted with several high-priority projects, one of which is developing an online community that brings together all the users of our property holdings. The group is also spearheading consideration of how to encourage young people to place their savings in real estate investment products. Startups can play a role in facilitating and supporting this type of evolution.

Basically, we seek, in compliance with current regulations, to improve the lives of our users and optimize the investments made by our investors, whether individuals or institutions. ESG, which is one of Amundi's founding principles and new technologies in real estate – real-techs – constitutes means at our disposal for achieving this.

Amundi

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10 globally.[1] Following the integration of Pioneer Investments, it now manages over €1,476bn of assets[2] across six investment hubs based in 37 countries. In 2016, Amundi launched a platform dedicated to real and alternative assets to provide easier access to unlisted investments. Bringing together capabilities in real estate, private debt, private equity and infrastructure (green energy), this platform has a headcount of 200 people for AUM of €45bn[2], and offers solutions through funds, club deals and multi-management funds, including two innovative and ambitious partnerships with EDF and CEA.

Jean-Marc Coly

Jean-Marc joined Amundi Real Estate in 2015 to manage real estate investments and assets as well as the structuration and distribution of retail and institutional funds. He was previously CEO of Alta Reim, the Altarea-Cogedim division dedicated to Real Estate Funds.

real-assets.amundi.com

[1] *Source: IPE "Top 400 asset managers" published in June 2018 and based on AUM as of end December 2017.*
[2] *Source: Amundi as of 31 March 2019.*

Changing Capital Flows in European Real Estate

The exploration for solid and stable returns continues to drive demand for European real estate. Following the European Central Bank's decision to end quantitative easing at the end of 2018, interest rates have been a consistent topic of concern among investors, while the current geopolitical landscape and rising interest rates solidify the need for secure, long-term income. In spite of these challenges, opportunities for European real estate remain strong.

As the European economy continues to grow, so too do the risk/return opportunities afforded by the diverse property markets within the region. At a top-level view, private equity real estate (PERE) investment in Europe has steadily increased over recent years. However, since 2015 the flow of capital into Europe has shifted around the continent as political volatility and uncertainty have pushed investors to alter their exposure to European real estate. Many smaller property markets, such as Spain and Italy, have recorded an uptick in activity over recent years. The most notable trend of the past four years, though, is the changing flow of capital between the UK and other parts of Western Europe.

The UK vs. Western Europe

Prior to the Brexit referendum, more deals were completed for UK-based assets at a greater aggregate value then the rest of Western Europe combined. However, the market uncertainty that followed the 2016 Brexit vote did much to change the landscape of European PERE investment: Preqin data recorded a reduction in UK deal flow and aggregate value in tandem with an uptick in other areas of Western Europe. In 2015, 228 more PERE deals were completed in the UK compared with Western Europe, at an aggregate value €13bn higher (Fig. 3.34). 2016, however, marked a shift in property investment: PERE activity in the UK decreased while the rest of Western Europe recorded an increase in both the number and aggregate value of property deals. Although confidence slowly recovered and more capital was deployed into

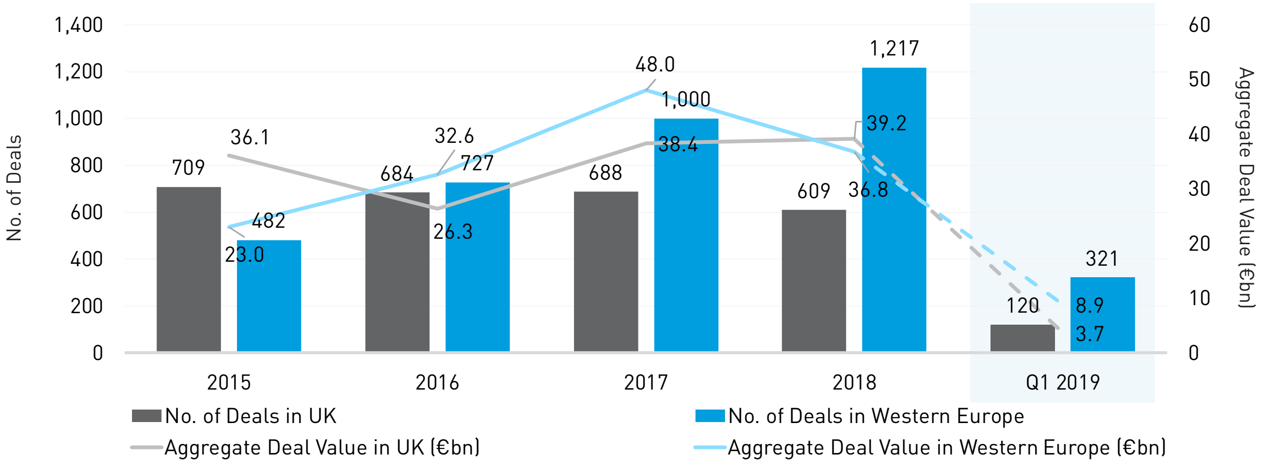
The market uncertainty that followed the Brexit vote changed the European PERE landscape

UK property in 2017 compared with 2016, Western Europe recorded a surge in activity, with markets such as France and Germany attracting increasing PERE investment.

While the aggregate value of deals in Western Europe surpassed that of the UK in both 2016 and 2017, relatively similar levels of capital were deployed in each region in 2018, accentuated by a drop-off in activity in Western Europe. Several high-value deals were completed by international firms for UK assets in 2018; each of the three single-asset deals for UK property listed in Fig. 3.35 were completed by investors outside the UK, helping to boost total deal value in the country.

On the whole, the outlook for the European real estate market is positive. The total number of PERE deals across both the UK and Western Europe combined has increased each year since 2015, and a record €86bn was deployed in 2017. Looking forwards, uncertainty will continue to grip the UK real estate market for as long as the Brexit process endures. Against such a backdrop, more investment may flow into other countries as investors shake up their European property portfolios.

Fig. 3.34: PERE Deals in the UK vs. Western Europe (Excl. UK), 2015 - Q1 2019



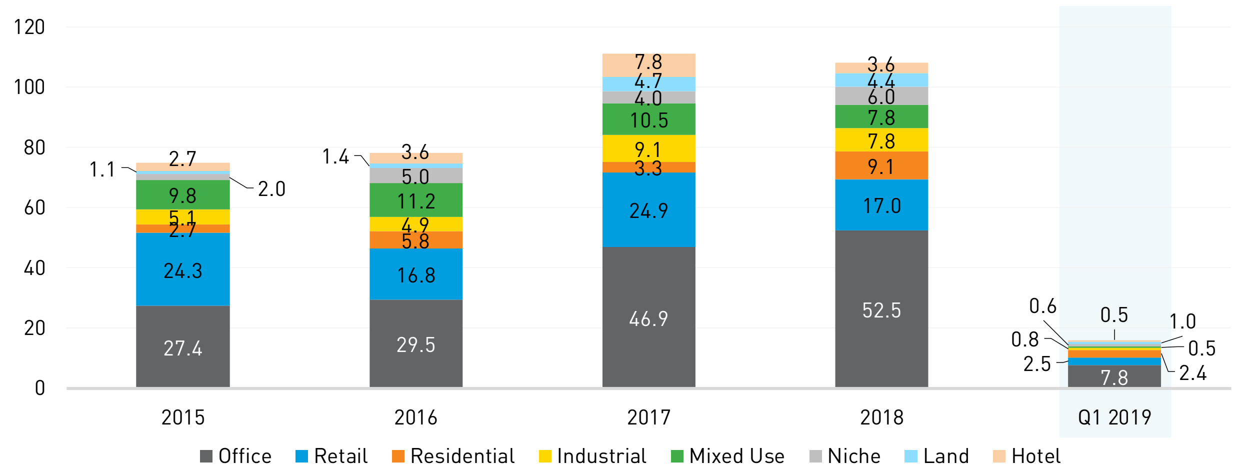
Source: Preqin Pro

Fig. 3.35: Largest PERE Deals in the UK and Western Europe in 2018

Asset	Deal Date	Deal Size (€bn)	Transaction Type	Location	Property Type	Buyer(s)	Seller(s)
Battersea Power Station	Jan-18	1.9	Single Asset	UK	Niche	Employees Provident Fund, Permodalan Nasional	Unidentified Seller(s)
UK, Retail Portfolio	Sep-18	1.7	Portfolio	UK	Retail	Telereal Trillium, Blackstone Group	Unidentified Seller(s)
Netherlands, Diversified Portfolio	Jun-18	1.5	Portfolio	Netherlands	Residential	Vesteda Group	NN Group
Plumtree Court	Aug-18	1.4	Single Asset	UK	Office	LaSalle Investment Management, National Pension Service	Goldman Sachs Asset Management Private Real Estate
5 Broadgate	Jun-18	1.1	Single Asset	UK	Office	CK Asset Holdings	British Land, GIC
The Century Portfolio	Aug-18	1.0	Portfolio	Germany	Residential	PFA Pension	Industria Wohnen

Source: Preqin Pro

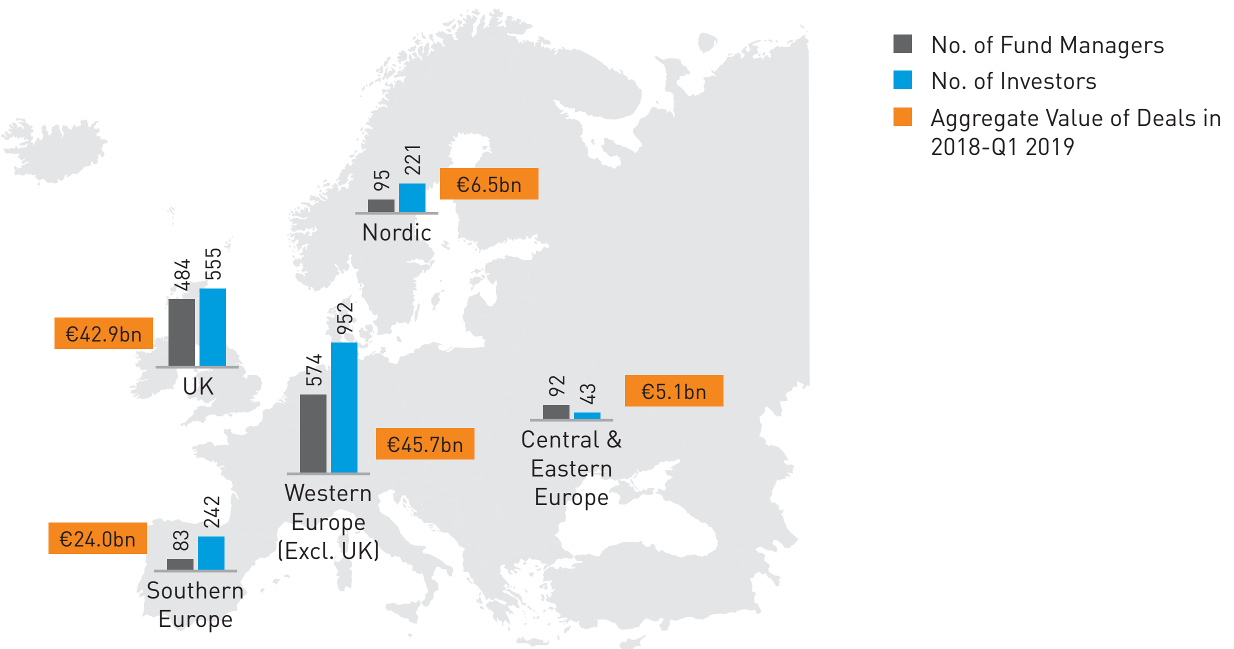
Fig. 3.36: Aggregate Value (€bn) of PERE Deals in Europe by Property Type, 2015 - Q1 2019



Source: Preqin Pro

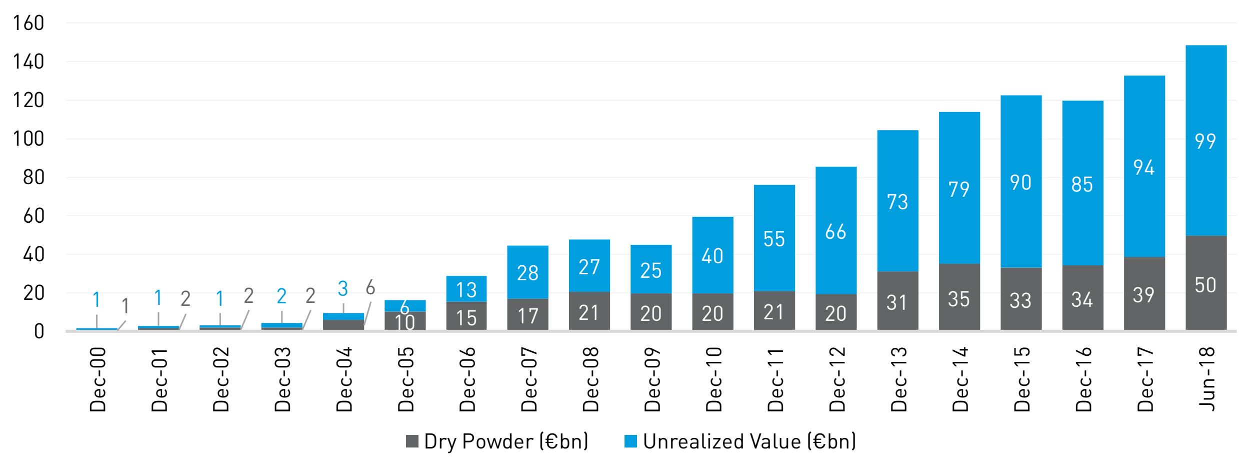
Real Estate: Key Charts

Fig. 3.37: Private Real Estate in Europe



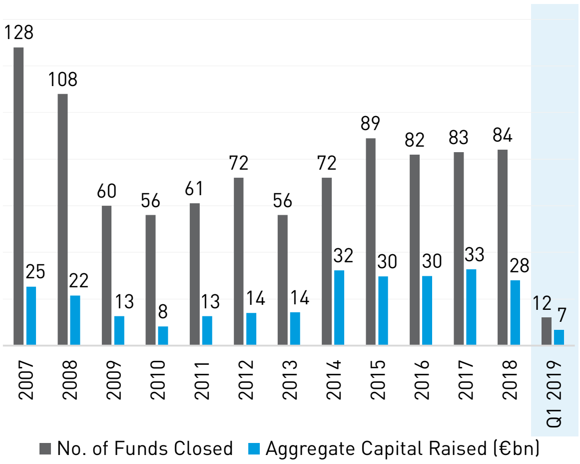
Source: Preqin Pro

Fig. 3.38: Europe-Based Private Real Estate Assets under Management (€bn), 2000 - 2018



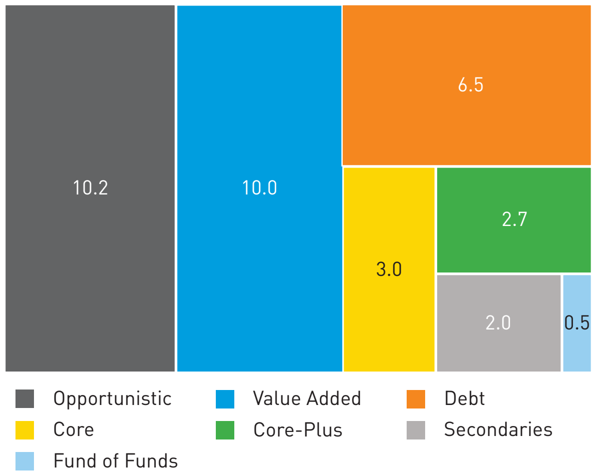
Source: Preqin Pro

Fig. 3.39: Annual Europe-Focused Private Real Estate Fundraising, 2007 - Q1 2019



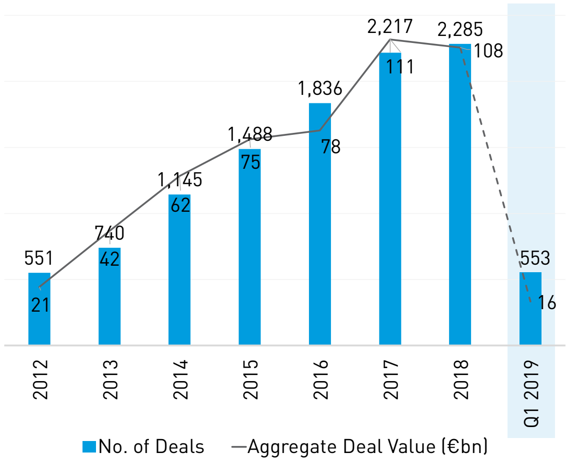
Source: Preqin Pro

Fig. 3.40: Aggregate Capital Raised (€bn) by Europe-Focused Private Real Estate Funds Closed in 2018-Q1 2019 by Strategy



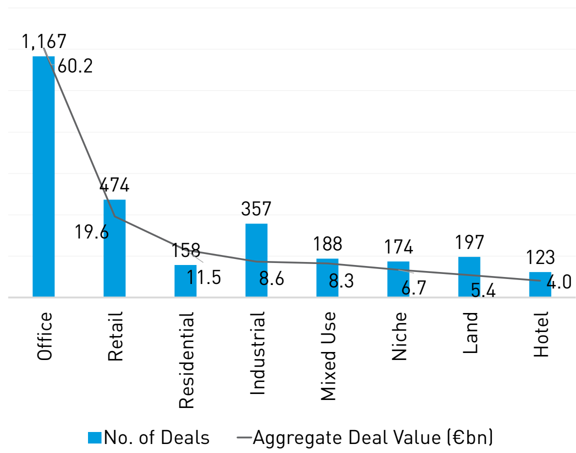
Source: Preqin Pro

Fig. 3.41: PERE Deals in Europe, 2012 - Q1 2019



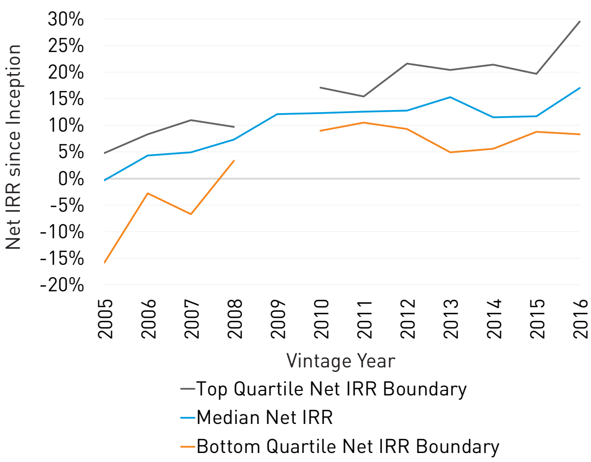
Source: Preqin Pro

Fig. 3.42: PERE Deals in Europe in 2018-Q1 2019 by Primary Property Type



Source: Preqin Pro

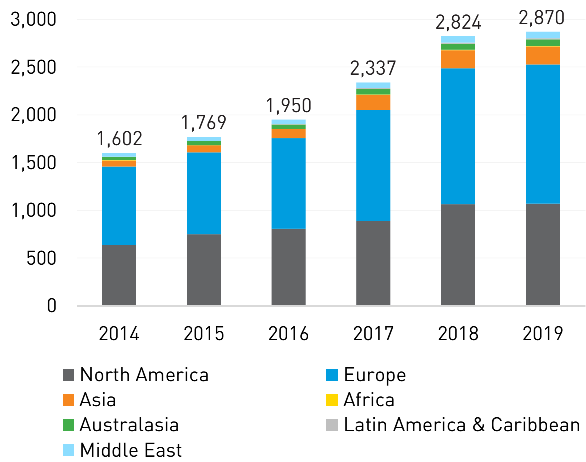
Fig. 3.43: Europe-Focused Private Real Estate: Median Net IRRs and Quartile Boundaries by Vintage Year*



Source: Preqin Pro. Most Up-to-Date Data

**Where data is unavailable no IRR is shown.*

Fig. 3.44: Number of Europe-Focused Real Estate Investors by Location, 2014 - 2019



Source: Preqin Pro

Mega Deals Drive Record Infrastructure Investment

Unlisted infrastructure investment in Europe surpassed €100bn in annual deal value for the third time in 2018, with a reported total of €119bn invested, 58% more than in 2017 but just short of the 2015 record (€124bn). Although there were nine deals valued at €3bn or more, the total number of deals (948) completed in 2018 was down 26% compared with 2017, with investible assets in short supply. Indeed, transactions valued at €1bn or more represented 13% of the European deal market in 2018, the greatest proportion since 2012. The inflated valuations produced by a highly competitive market were evidently a barrier for some managers.

Fundraising has been frothy in recent years: a record €31bn was raised for European infrastructure in 2018, and €18bn has already been secured in Q1 2019. The number of funds closed has also continued its climb of recent years, with a record 38 vehicles reaching a final close in the year. It is unlikely that the heated market will cool any time soon, with €63bn in dry powder among Europe-based infrastructure funds signalling further competition ahead.

A Renewable Commitment

The renewable energy sector remains the activity hub of the European infrastructure market. Indeed, the proportion of total deals in Europe represented by renewable energy transactions rose to its highest ever level (68%) in 2018 (Fig. 3.45), emphasizing its importance to the region. A sign of the continued maturation of the market, several large deals were completed for renewable energy assets, including the largest ever investment in a greenfield renewable energy project: Global Infrastructure Partner's €5bn investment in the 1.2 GW offshore wind farm Hornsea One.

The EU's consistent commitment to transitioning towards clean energy is very much the driver behind this activity, reaffirmed by an update to the EU's Renewable Energy Directive that commits the bloc to generating a new target of 32% of its energy from renewable sources. This will likely accelerate the transition and fuel greater investment opportunity in this sector in the coming years.

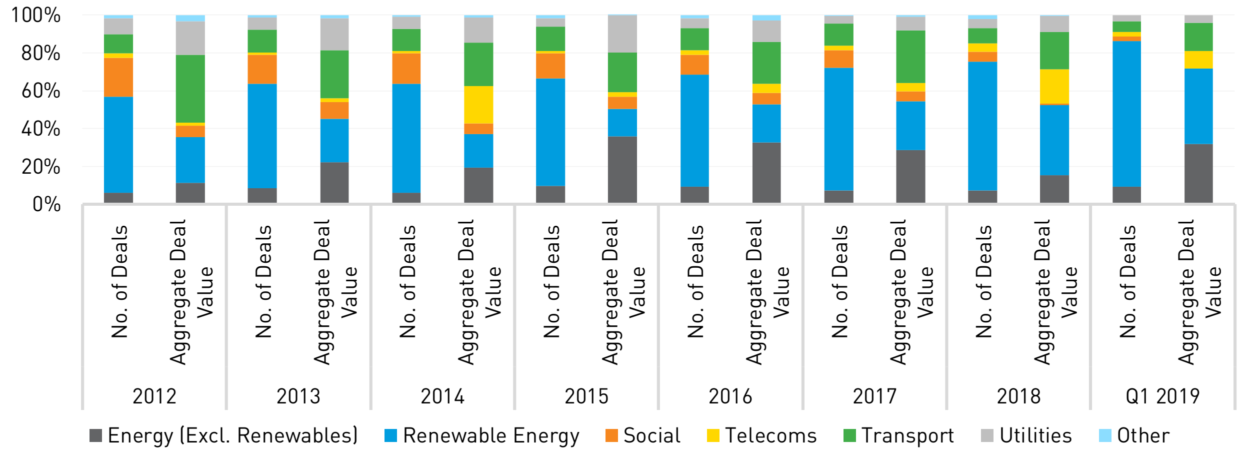
Instability in the UK Market

While the UK affirmed its position as the single biggest contributor to infrastructure activity in Europe in 2018, there are signs that this position may be challenged. Only 16% of European infrastructure deals completed in Q1 2019 have taken place in the UK, which compares with 31% in 2018 and 32% in 2017 (Fig. 3.46). UK Chancellor Phillip Hammond abolished the use of Private Finance Initiative contracts last year following a wave of negativity towards private sector participation in infrastructure. Although the prospect of future private participation in infrastructure projects is by no means off the table, the lack of a defined model to facilitate this will be of concern to investors, as will Labour Party threats to renationalize utilities and transportation companies. It seems the current political uncertainty within the UK remains an ever-increasing concern for investors.

Demand Outstripping Supply

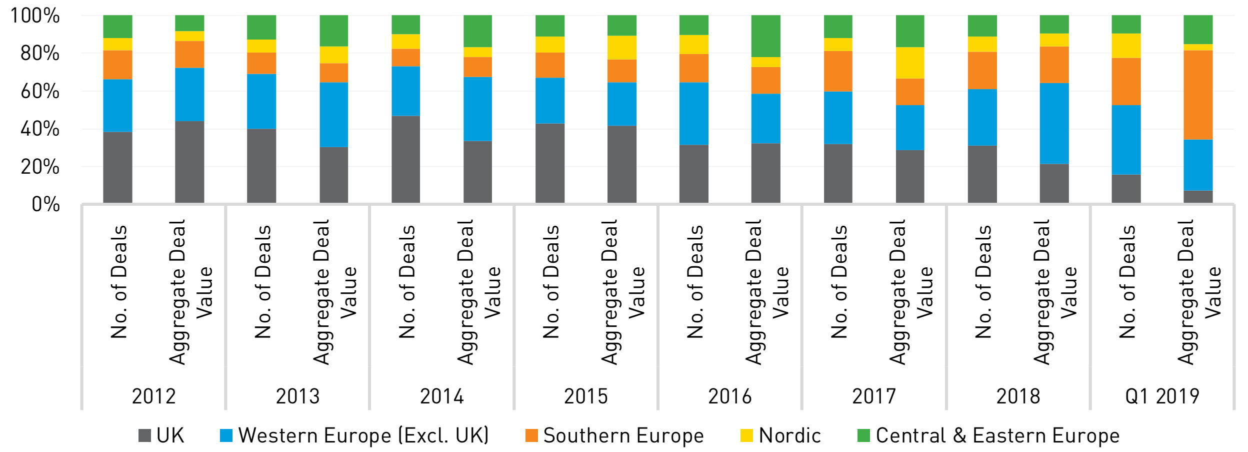
The size of the funding gap in European infrastructure investments is substantial – both for new infrastructure and upgrading and maintaining existing infrastructure. This is unlikely to be fulfilled without private participation: there is a significant amount of committed institutional investor capital seeking a home in European infrastructure and there are clear signs that demand is greater than supply. To unlock this potential and increase the size of the investible universe for investors, political and regulatory conditions will need to be conducive. In the meantime, decarbonization represents a huge investment opportunity in Europe in the near and long term and we would expect this market to continue to grow.

Fig. 3.45: Infrastructure Deals in Europe by Industry, 2012 - Q1 2019



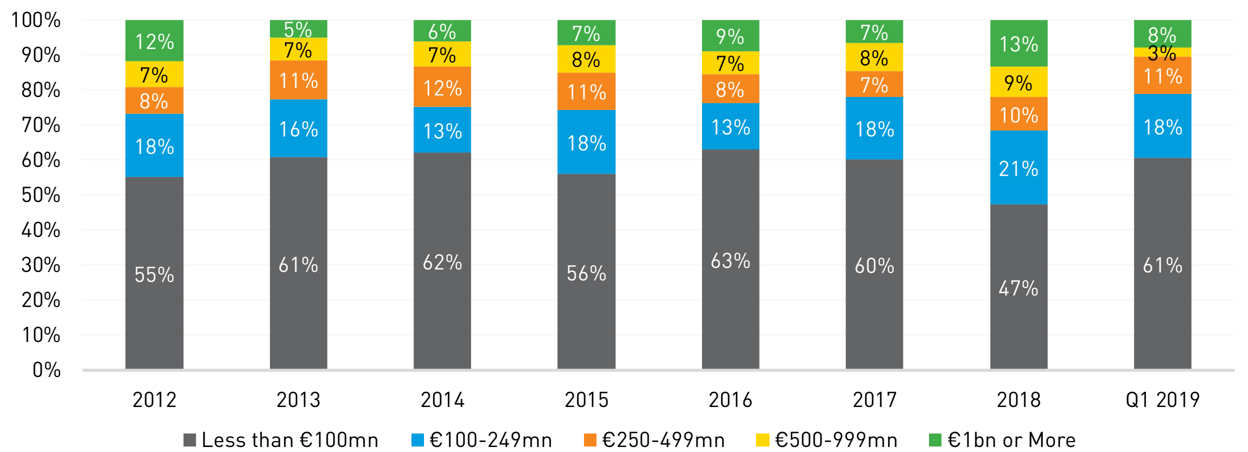
Source: Preqin Pro

Fig. 3.46: Infrastructure Deals in Europe by Location, 2012 - Q1 2019



Source: Preqin Pro

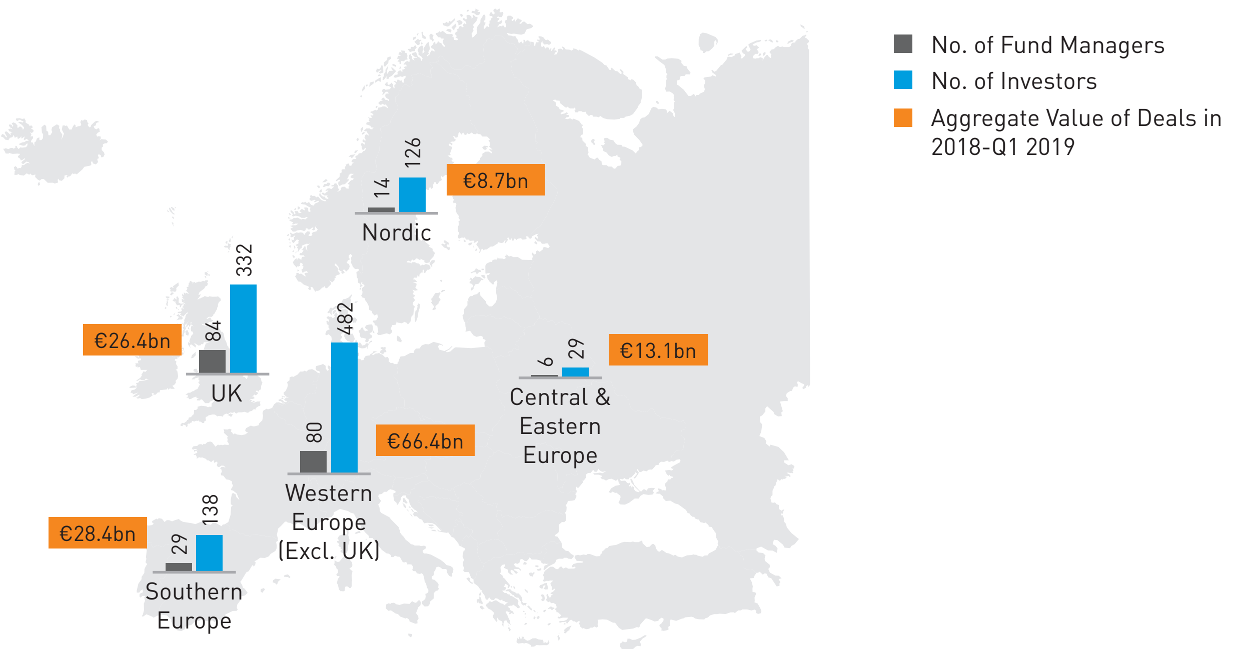
Fig. 3.47: Number of Infrastructure Deals in Europe by Value, 2012 - Q1 2019



Source: Preqin Pro

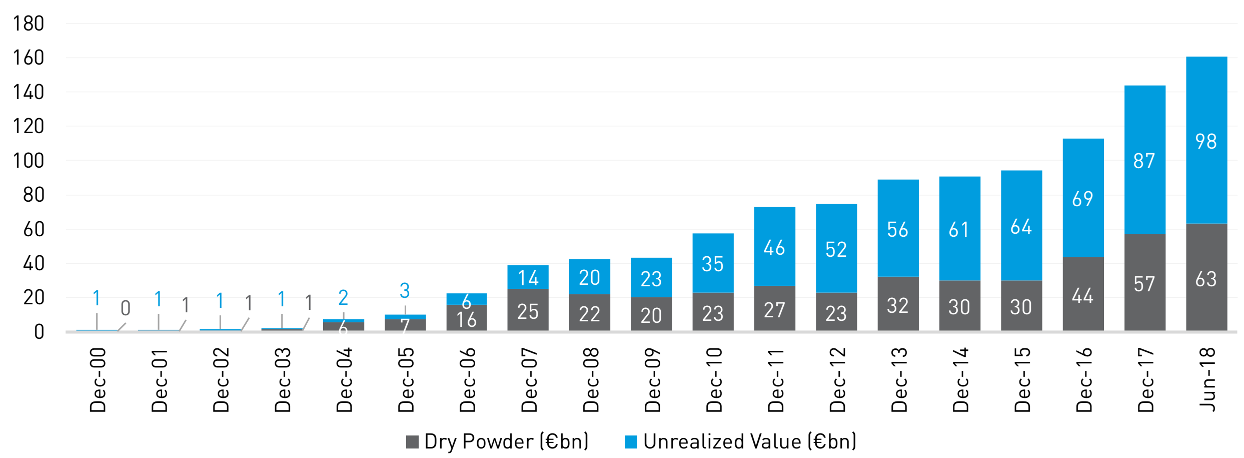
Infrastructure: Key Charts

Fig. 3.48: Infrastructure in Europe



Source: Preqin Pro

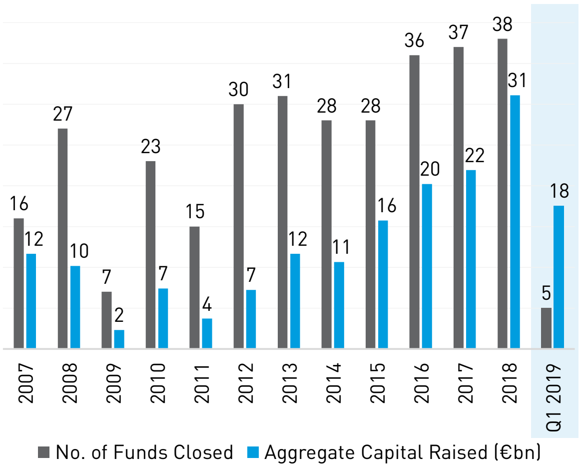
Fig. 3.49: Europe-Based Unlisted Infrastructure Assets under Management (€bn), 2000 - 2018



	Dec-00	Dec-01	Dec-02	Dec-03	Dec-04	Dec-05	Dec-06	Dec-07	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Jun-18
Dry Powder (€bn)	0	1	1	1	6	7	16	25	22	20	23	27	23	32	30	30	44	57	63
Unrealized Value (€bn)	1	1	1	1	2	3	6	14	20	23	35	46	52	56	61	64	69	87	98

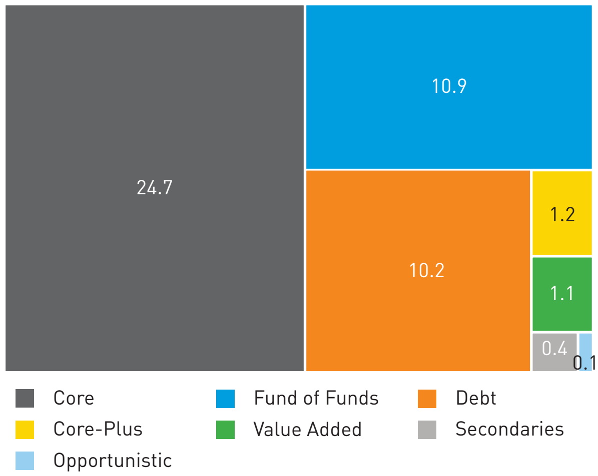
Source: Preqin Pro

Fig. 3.50: Annual Europe-Focused Unlisted Infrastructure Fundraising, 2007 - Q1 2019



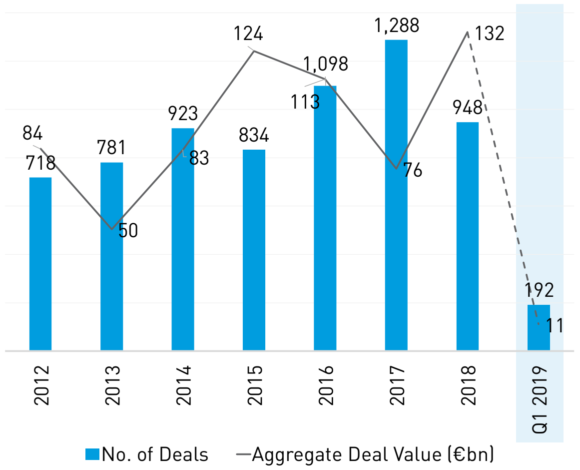
Source: Preqin Pro

Fig. 3.51: Aggregate Capital Raised (€bn) by Europe-Focused Unlisted Infrastructure Funds Closed in 2018-Q1 2019 by Strategy



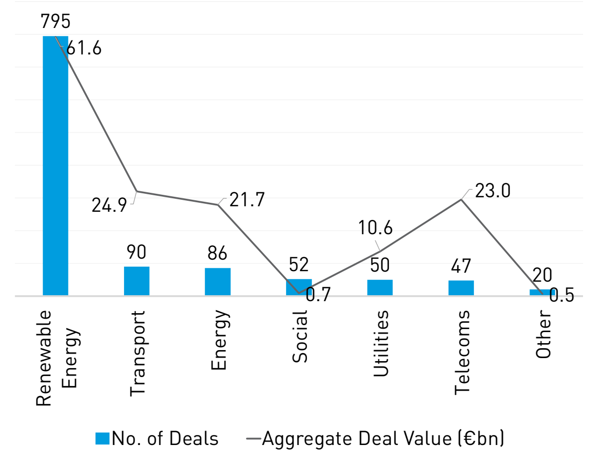
Source: Preqin Pro

Fig. 3.52: Infrastructure Deals in Europe, 2012 - Q1 2019



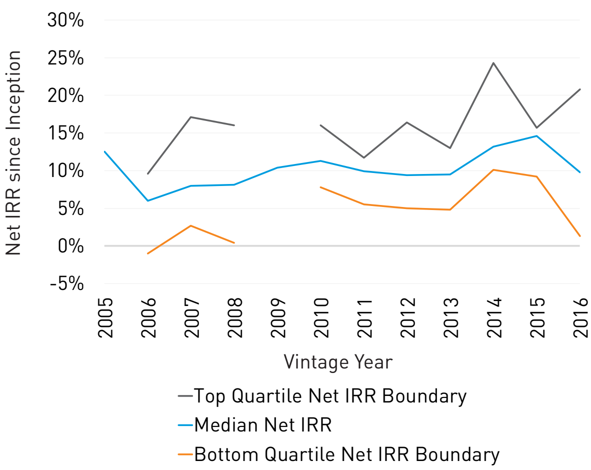
Source: Preqin Pro

Fig. 3.53: Infrastructure Deals in Europe in 2018-Q1 2019 by Industry



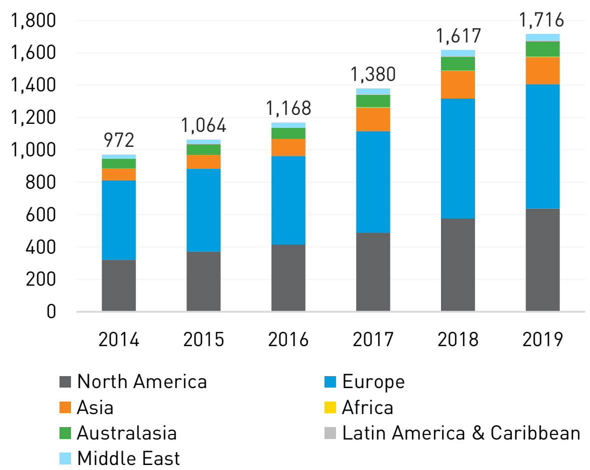
Source: Preqin Pro

Fig. 3.54: Europe-Focused Unlisted Infrastructure: Median Net IRRs and Quartile Boundaries by Vintage Year*



Source: Preqin Pro. Most Up-to-Date Data

Fig. 3.55: Number of Europe-Focused Infrastructure Investors by Location, 2014 - 2019

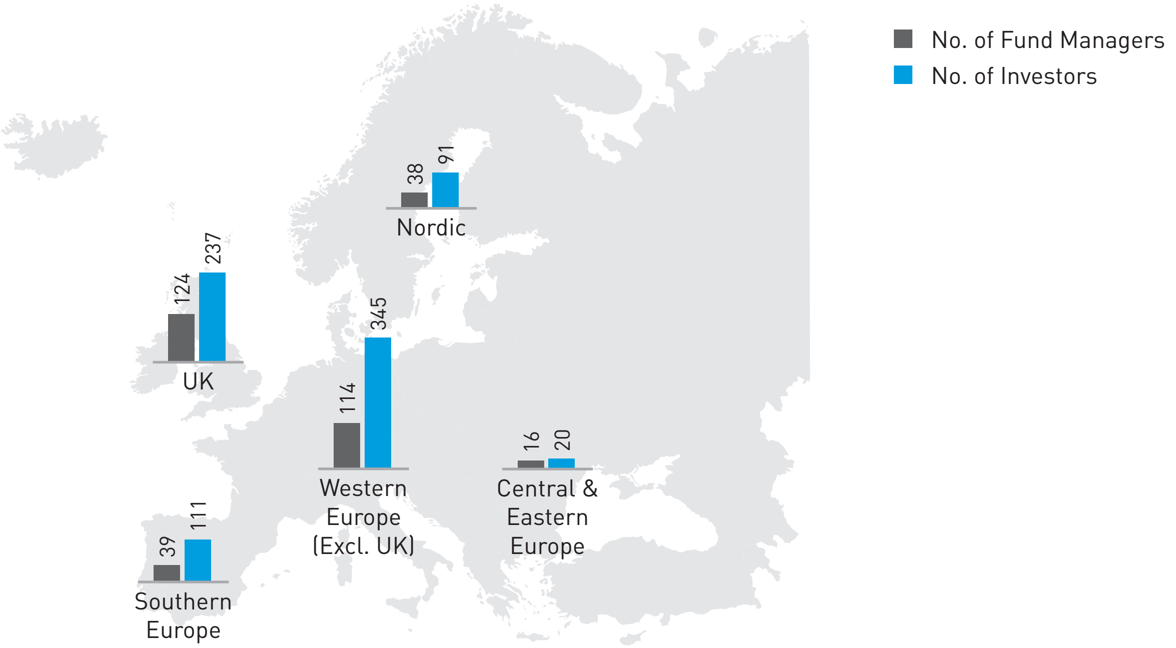


Source: Preqin Pro

**Where data is unavailable no IRR is shown.*

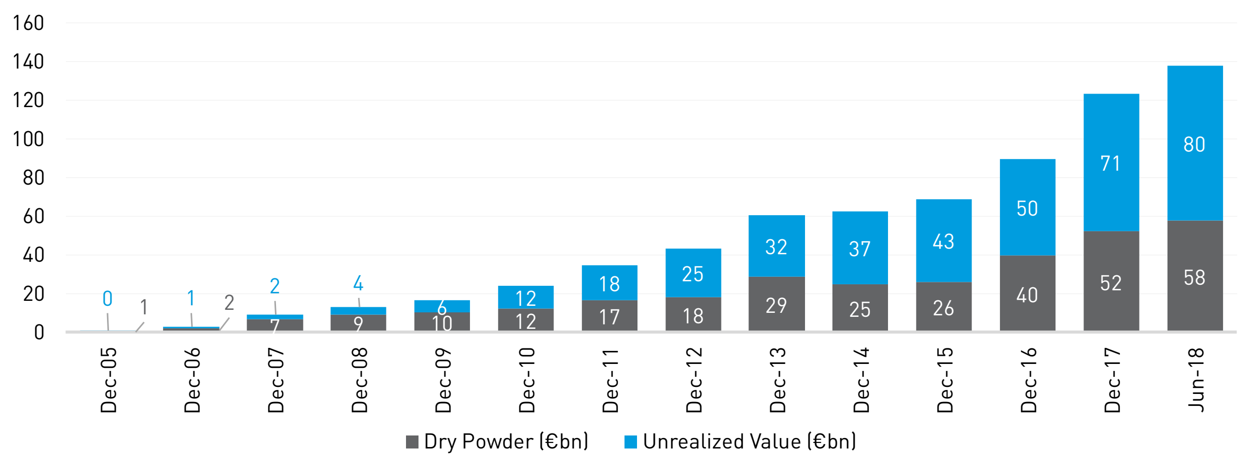
Natural Resources: Key Charts

Fig. 3.56: Natural Resources in Europe



Source: Preqin Pro

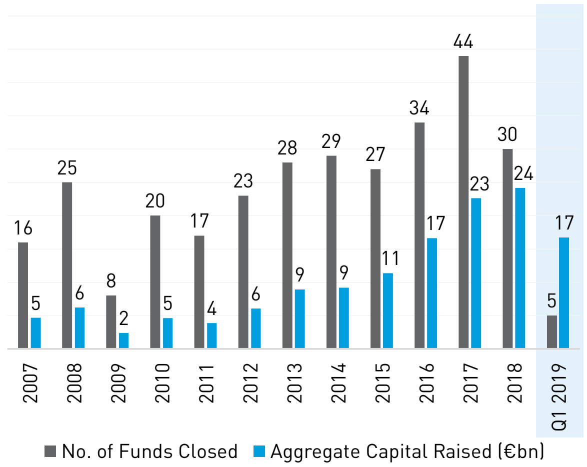
Fig. 3.57: Europe-Based Unlisted Natural Resources Assets under Management (€bn), 2005 - 2018*



Source: Preqin Pro

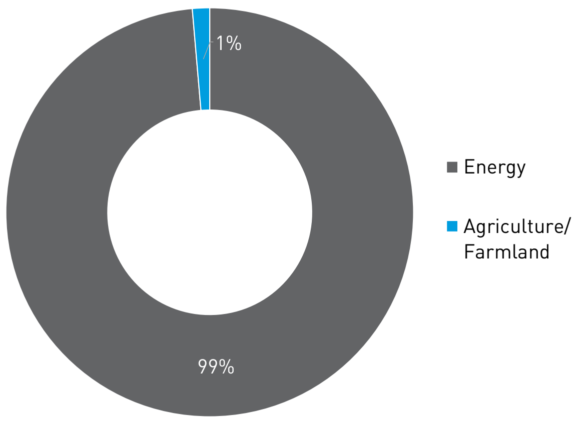
* Figures denote entire natural resources industry including buyout and infrastructure funds targeting natural resources opportunities.

Fig. 3.58: Annual Europe-Focused Unlisted Natural Resources Fundraising, 2007 - Q1 2019



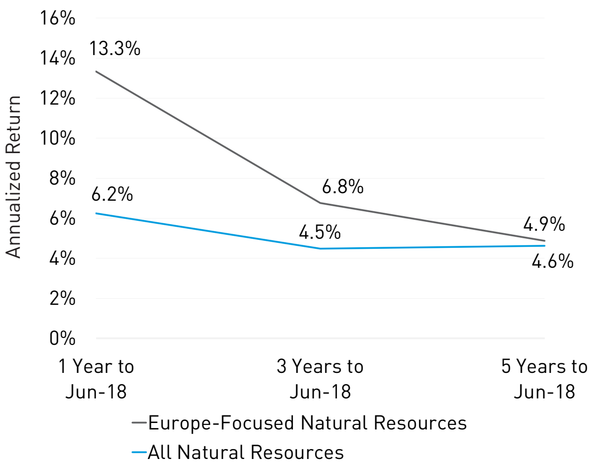
Source: Preqin Pro

Fig. 3.59: Aggregate Capital Raised by Europe-Focused Unlisted Natural Resources Funds in 2018-Q1 2019 by Strategy



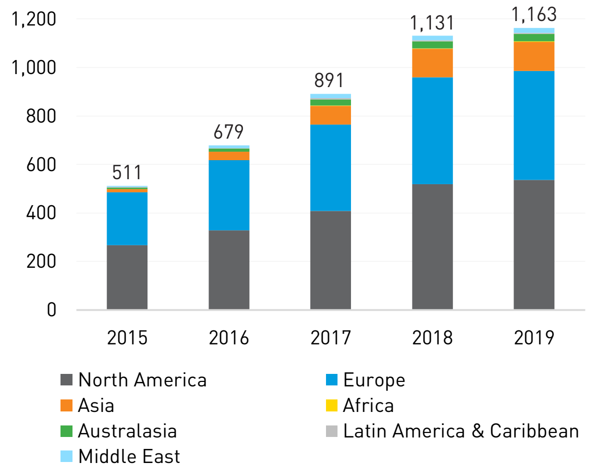
Source: Preqin Pro

Fig. 3.60: Horizon IRRs of Europe-Focused Natural Resources Funds



Source: Preqin Pro

Fig. 3.61: Number of Europe-Focused Natural Resources Investors by Location, 2015 - 2019



Source: Preqin Pro

4.

MARKETS OF EUROPE

- UK
- France
- Germany
- Switzerland
- Sweden
- Netherlands
- Italy
- Luxembourg
- Spain
- Denmark
- Norway

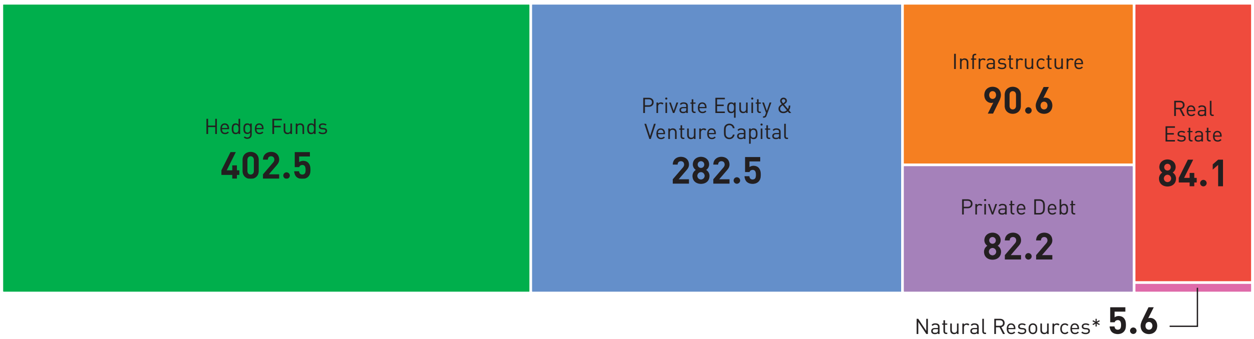
Please note: All venture capital deals exclude add-ons, grants, mergers, venture debt and secondary stock purchases.

UK: Record Recovery

UK-Based Assets under Management

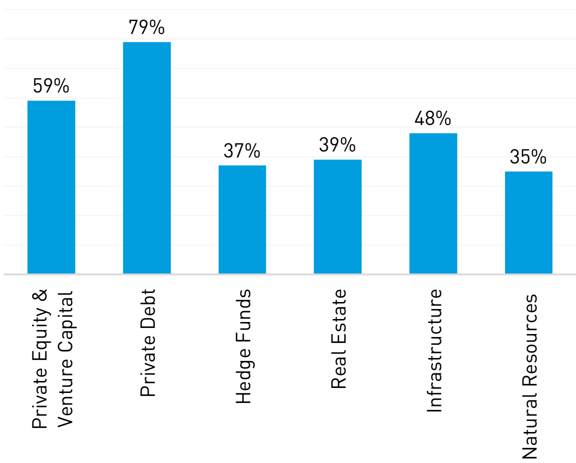
€948bn

Fig. 4.1: UK-Based Assets under Management (€bn) by Asset Class



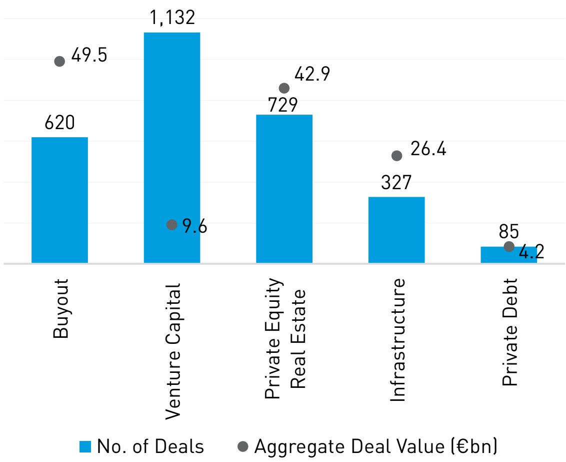
Source: Preqin Pro. Data as of June 2018

Fig. 4.2: UK-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.3: Private Capital Deals in the UK, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

The UK's alternative assets market is the largest and most active across the continent. At almost €1tn, the UK represents over half (54%) of all European assets and sees more investment flow into its private markets than anywhere else in the region. London is unsurprisingly the destination for most investment in the country; with a world-leading financial sector, large tourism industry and a diverse and growing population, the opportunity afforded by the UK capital continues to attract investors. That being said, the UK alternatives market has been plagued by uncertainty in the past four years.

In the period following the Brexit vote in 2016, the level of private investment in the UK decreased. The aggregate value of private capital deals in 2016 declined 28%, or €33bn in real terms, from 2015, with the value of private equity-backed deals and PERE deals down 35% and 27% respectively.

Recovering Strength

Since then, however, the UK has witnessed strong annual growth in private market activity, and 2018 marked a return to the record levels seen in 2015. The buyout, venture capital, PERE and private debt markets all recorded peak levels of annual investment; infrastructure was the only asset class not to set a new record.

The private equity-backed buyout market represents the largest sector of private investment in the UK; the aggregate €45bn of deals recorded in 2018 accounted for 37% of total private capital deal value in the year. Driving much of this total was the €15.2bn acquisition of Refinitiv by a Blackstone Group-led consortium in January 2018. This mega deal aside, buyout activity in the UK would still have been relatively level with the 2017 total (€31bn).

In the PERE market, several Asia-based investors have completed €1bn+ deals for UK assets over the past 2-3 years, helping to drive activity in the market to pre-Brexit levels. Hong Kong-based investor CC Land acquired the Leadenhall Building in the City of London for €1.3bn in March 2017; Permodalan National and Employees Provident Fund, both located in Malaysia, acquired Battersea Power Station for €1.9bn in January 2018; and in August 2018, South Korea-based National Pension Service acquired Plumtree Court, Goldman Sachs' European Headquarters, via LaSalle Asset Management for €1.4bn.

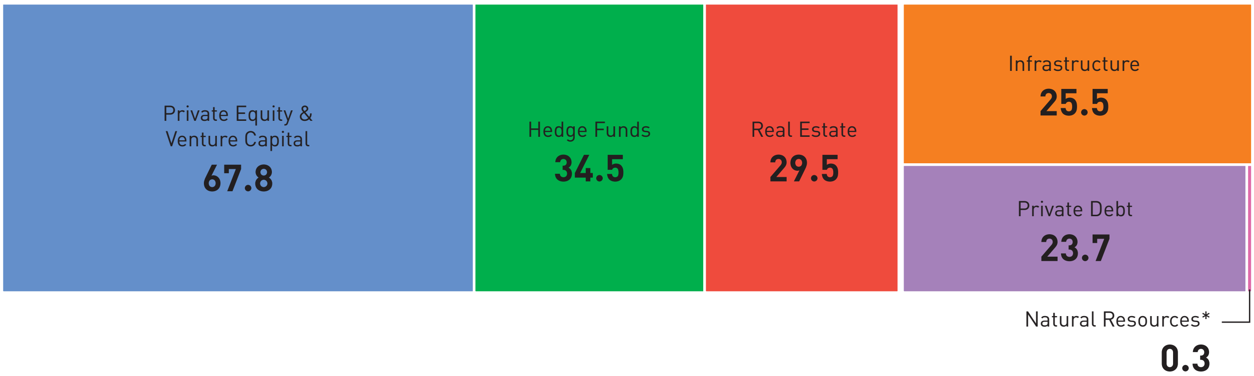
Despite the challenges posed by Brexit, the UK has seen strong levels of investment across private markets as investor confidence returns. The UK is home to one of the most sophisticated alternative assets ecosystems in the world and is likely to remain the centre of activity in Europe.

France: Assets in Demand

France-Based Assets under Management

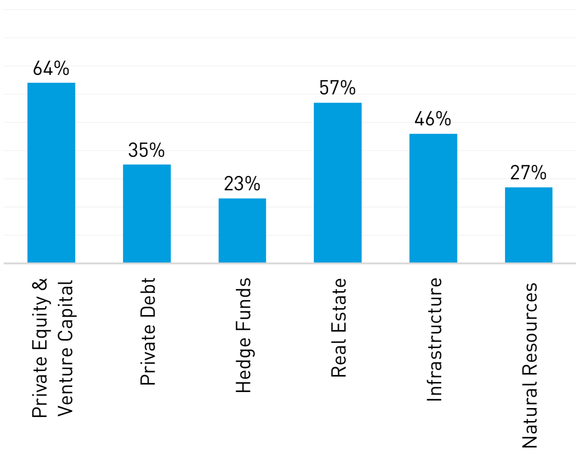
€181bn

Fig. 4.4: France-Based Assets under Management (€bn) by Asset Class



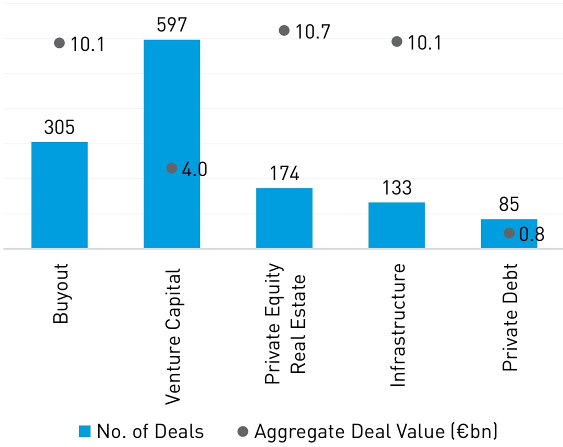
Source: Preqin Pro. Data as of June 2018

Fig. 4.5: France-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.6: Private Capital Deals in France, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

> **Alternative investments in France benefit from a perfect ecosystem for value creation with a deep market of unlisted SMEs, an attractive property market and infrastructure assets renowned for their quality**
>
> – Pedro Arias
> *Amundi Asset Management*

France represents the most developed alternative assets market in mainland Europe. Over €180bn of alternatives AUM resides in France, and Paris is home to a number of market-leading fund managers. Ardian is the second-largest fund manager in Europe by capital raised over the past 10 years for private equity investment (€87bn). Amundi has invested more than €30bn in private real estate over the past 10 years in Europe, including €13.8bn of institutional money – €1bn more than any other Europe-based manager – while La Française Global Investment Solutions operates over €13bn in single-manager hedge fund AUM (as of January 2019). Demand for French assets has led to growth and records across the country's alternative assets market. Venture capital deals reached a record €2.9bn in value in 2018, while private equity-backed buyout deals have surpassed €15bn in two of the past four years: 17 deals have completed for €1bn or more since 2015. Five deals for infrastructure assets were completed for €1bn or more in 2018, which is more than the previous two years combined (one in 2017 and two in 2016), led by KKR's acquisition of a 49.99% stake in tower company SFR TowerCo for €1.799bn in June.

On Track for a Property Record

In the French PERE market, the total value of completed transactions has been on an upward trend so far in 2019. While aggregate annual deal value had fallen from 2017 (€9.0bn) to 2018 (€7.5bn), the €3.2bn of PERE deals recorded in the first quarter of 2019 has set the course for a record year for French property. Portfolio deals have been driving these capital inflows: Swiss Life REIM (France) and Fortress Investment Group have each completed portfolio deals in 2019, a €1.7bn office and €500mn retail portfolio respectively.

Germany: Unicorn Sightings on the Rise

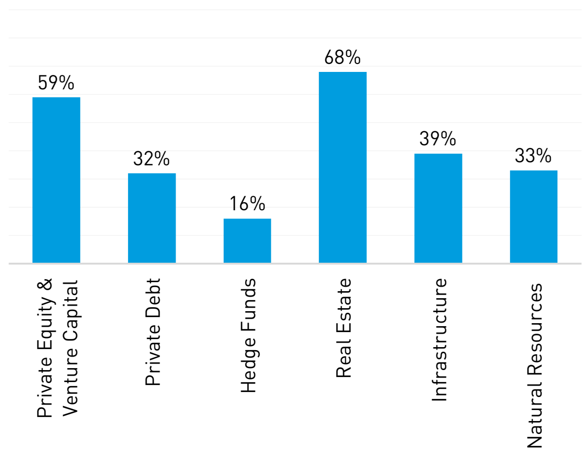
Germany-Based Assets under Management

€57bn

Fig. 4.7: Germany-Based Assets under Management (€bn) by Asset Class

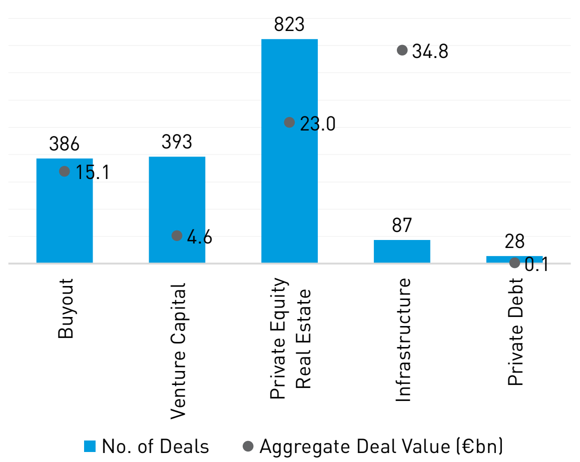
Source: Preqin Pro. Data as of June 2018

Fig. 4.8: Germany-Based Investors Active in Each Asset Class

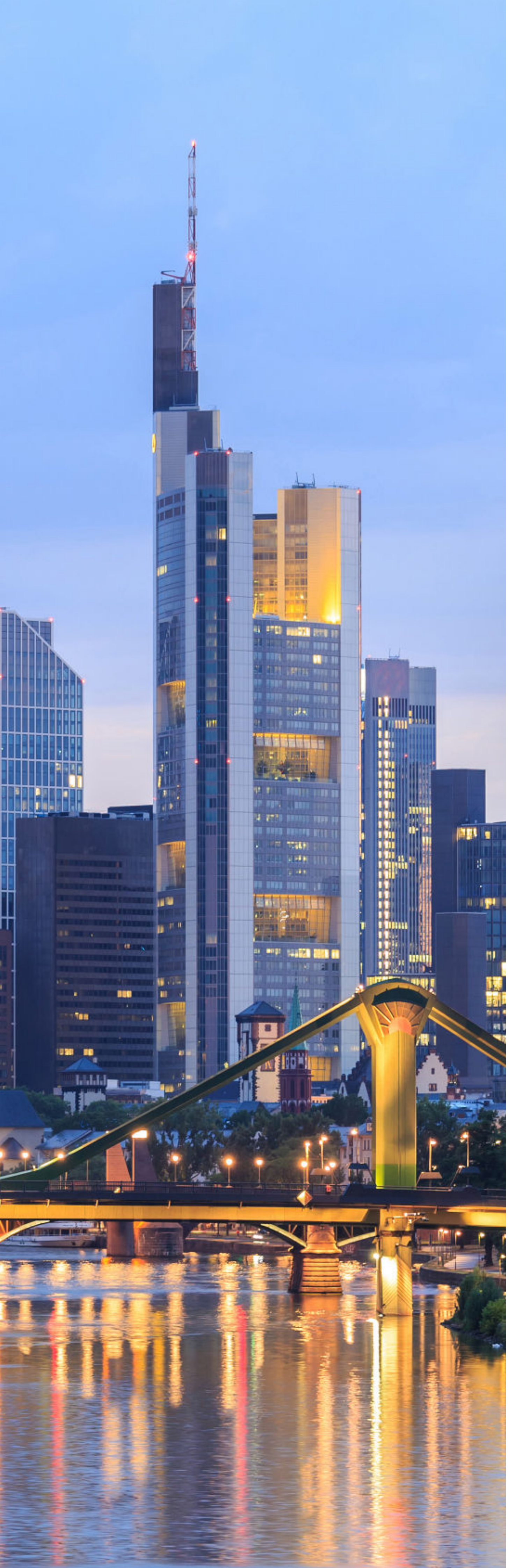


Source: Preqin Pro

Fig. 4.9: Private Capital Deals in Germany, 2018 - Q1 2019



Source: Preqin Pro



Germany is one of the largest economies in the world, and as such boasts a strong alternatives assets market both in terms of private investment in Germany-based assets and as a home to key players active in the industry. Just over €23bn is held in AUM by Germany-based private equity & venture capital fund managers, making it the largest alternatives market in the country. Germany has emerged as a global venture capital hub in recent years, with only the UK market recording more venture capital deals in Europe since the start of 2018.

Looking to be a part of the next German venture capital success story, there is much demand for startup investment amid a growing universe of fund managers and investors. Activity in Germany has more than trebled since 2014, when €1.1bn of venture capital deals were completed, to record €3.7bn of deals in 2018. As in the global venture capital market, valuations have been on the rise: the increase in aggregate deal value since 2014 was accompanied by relatively flat annual deal numbers.

Tech Unicorns Abound

Unlike the rest of Europe, the technology industry in Germany attributes its strength to the decentralization of the startup market, with active regional hubs in Munich, Hamburg and Frankfurt cultivating a healthy amount of 'unicorns' across the country – privately held startup companies valued at over $1bn. Hamburg-based XING, a European career-oriented social networking site that enables a small-world network for professionals, became a unicorn company in 2015. Munich-based Scout24 listed on the Frankfurt Stock Exchange in 2015 and in 2018 was admitted to the MDAX, making it one of the 60 largest companies below the DAX.

While there are success stories across Germany, Berlin remains the undisputed tech capital. In this new age of mega-tech companies, mass adoption of digitalization and investments in AI, Berlin has recorded increased investment and activity in a range of sectors. Berlin-based unicorns exist in online retail (Zalando and Home24), food distribution (Delivery Hero and Hello Fresh), online marketplaces (Auto1 Group) and other industries.

Not only is Berlin the destination of choice for tech investment, but Berlin-based investors are crucial to the global industry. Rocket Internet is one such investor active in the global tech market, with a company portfolio that includes some of the aforementioned unicorns.

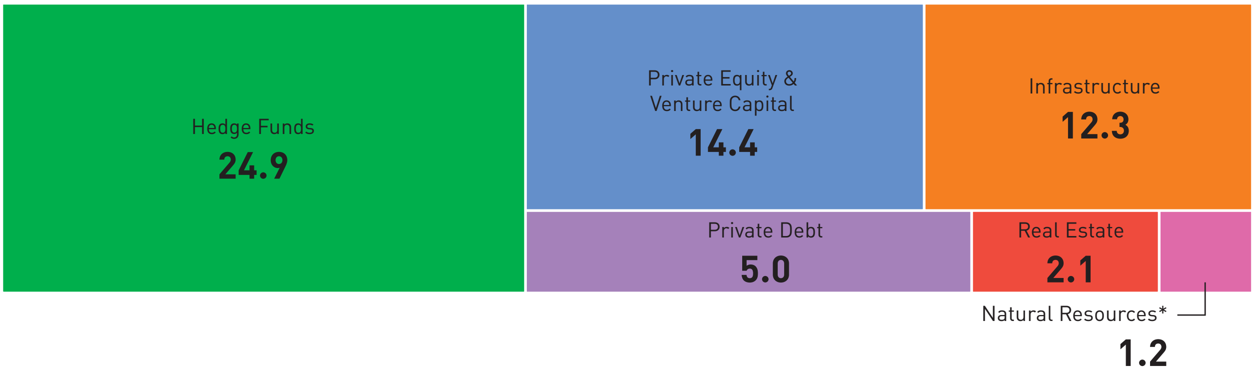
Germany continues to make its mark as a global venture capital hub and, as more success stories are seen in the industry, investors will continue to seek exposure to this growing market.

Switzerland: Capital Attraction

Switzerland-Based Assets under Management

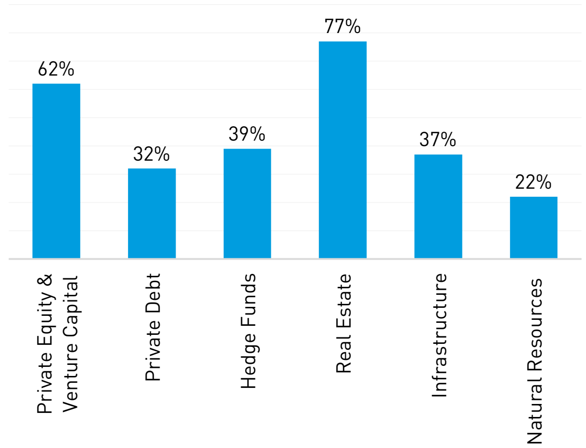
€60bn

Fig. 4.10: Switzerland-Based Assets under Management (€bn) by Asset Class



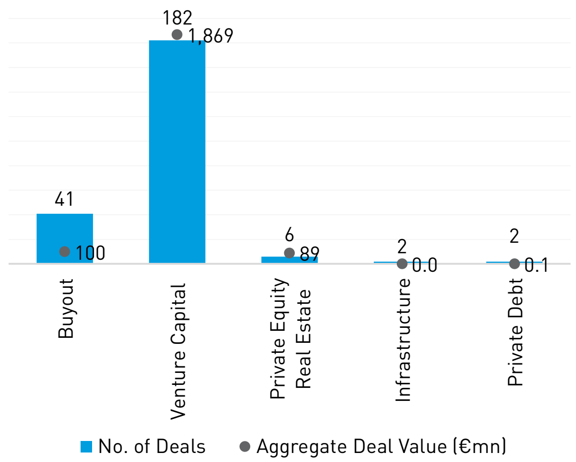
Source: Preqin Pro. Data as of June 2018

Fig. 4.11: Switzerland-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.12: Private Capital Deals in Switzerland, 2018 - Q1 2019



Source: Preqin Pro

*Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.

Switzerland houses the fourth-largest alternative assets industry within Europe. The hedge fund market represents the largest alternatives industry within Switzerland (€25bn), followed by private equity & venture capital (€14bn) and infrastructure (€12bn). As is the case with Sweden, Switzerland's market is important in that it houses many key players in alternatives and attracts significant investor capital, and less so for its deal-making activity.

Market-Leaders

Geneva is home to three of the five largest single-manager hedge funds located in Switzerland. These include the country's largest manager, Pictet Asset Management, which operates €8bn in AUM (as of March 2018). Switzerland is also home to a market-leading fund of hedge funds sector, with four of the 10 largest Europe-based fund of hedge funds managers by AUM located in the country:

- Pictet Alternative Advisors, €10.7bn (as of December 2018)
- UBP Alternative Investments, €8.8bn (as of December 2018)
- LGT Capital Partners, €6.8bn (as of December 2018)
- LumX Asset Management, €6.4bn (as of September 2018)

Pfäffikon-based LGT Capital Partners tops the league table in Switzerland's private capital markets, having raised €15.1bn for investment in private equity & venture capital over the past 10 years, followed closely by Baar-Zug-based Partners Group (€14.9bn). While these firms are the largest private equity fund managers in Switzerland, eight other Switzerland-based managers have raised over €1bn for investment in private equity & venture capital in the same time period.

Infrastructure Dominance

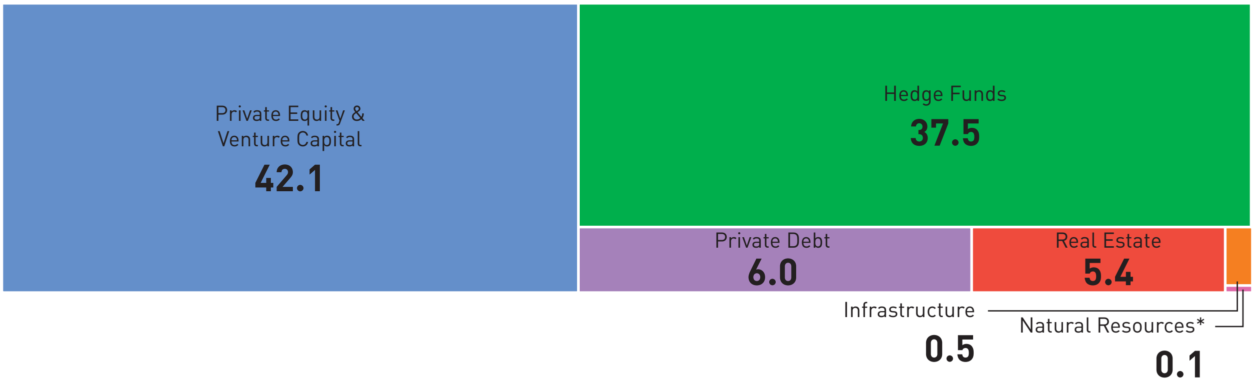
Switzerland is home to world-leading infrastructure: the World Economic Forum's 2018 Global Competitiveness Report ranked Switzerland third worldwide for infrastructure and first in Europe. Within alternatives, the infrastructure market represents over 20% of Switzerland-based AUM, a relatively large proportion compared to its standing in other large markets such as France (14%) and Germany (9%). Five Switzerland-based fund managers have raised €1bn or more for investment in infrastructure, with Partners Group (€5.0bn) again ranking highly followed by Zug-based Capital Dynamics (€3.0bn).

Sweden: A Hedge Fund Hub

Sweden-Based Assets under Management

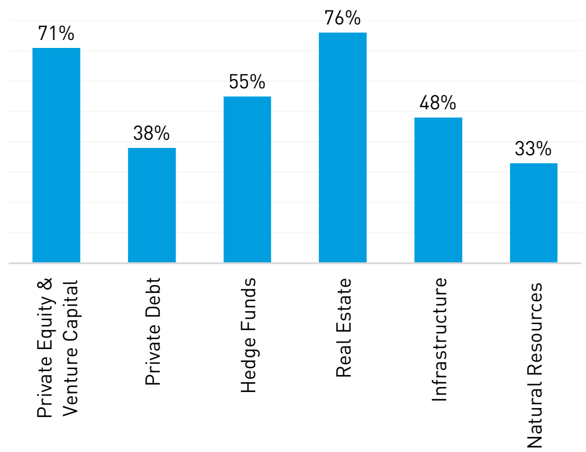
€92bn

Fig. 4.13: Sweden-Based Assets under Management (€bn) by Asset Class



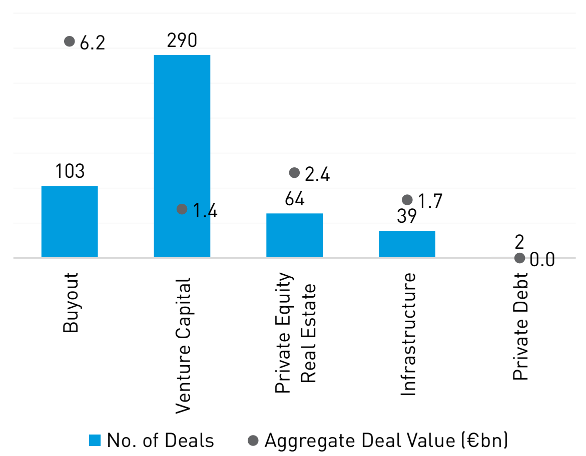
Source: Preqin Pro. Data as of June 2018

Fig. 4.14: Sweden-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.15: Private Capital Deals in Sweden, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

Sweden's alternatives market centres around housing some of the largest fund managers in Europe, rather than attracting capital investments in the form of private capital deals. The €92bn of assets managed by Sweden-based fund managers makes it the third-largest industry in Europe; in contrast, the €12bn of capital invested in Sweden-based assets since the beginning of 2018 ranks seventh among the countries analyzed in this report.

The Swedish alternatives industry is dominated by the private equity & venture capital and hedge fund markets, which together represent €80bn of AUM (or 87% of the national alternatives market). Despite private debt's relative youth as an alternative asset class, Sweden boasts a €6.0bn industry, larger than that of Switzerland (€5.0bn) and Germany (€2.9bn). While Sweden houses many healthy private capital markets, the hedge fund industry is the standout sector.

Mainland Hedge Fund Hub

At €38bn, Sweden's hedge fund industry is the second largest European market, representing 6.6% of total European assets. Stockholm is the hub and is home to nearly nine of every 10 Sweden-based hedge fund managers. Although the UK is the largest hedge fund market in Europe, the presence of large managers in Sweden such as Cevian Capital (€11.5bn) and Brummer & Partners (€11.1bn) has helped to build the fifth-largest hedge fund industry in the world.

Cevian Capital represents the only non-UK-based hedge fund manager to feature among the 10 largest Europe-based hedge fund managers in Preqin's 2019 League Tables. Cevian Capital II Ltd. holds €10.4bn of the Stockholm-based hedge fund manager's assets; the fund primarily invests in public companies in Northern Europe and the UK where long-term value can be enhanced through active ownership. It follows an event driven strategy with a special focus on operations, corporate strategy/organizational structure, financial management and corporate governance changes.

The second-best performing hedge fund strategy in Europe over the past three years, credit strategies make up 13% of Sweden-based hedge funds. Atlant Fonder's Atlant Opportunity fund is one such fund which focuses on equity, interest rate and derivative strategies. Atlant Opportunity generated a three-year annualized return of +5.80% to March 2019, 134bps above the average Europe-based fund return. Unsurprisingly, equity strategies represent the largest proportion (33%) of Sweden-based hedge funds, followed by relative value strategies (15%) and managed futures/CTAs (14%).

Netherlands: A Leading Infrastructure Market

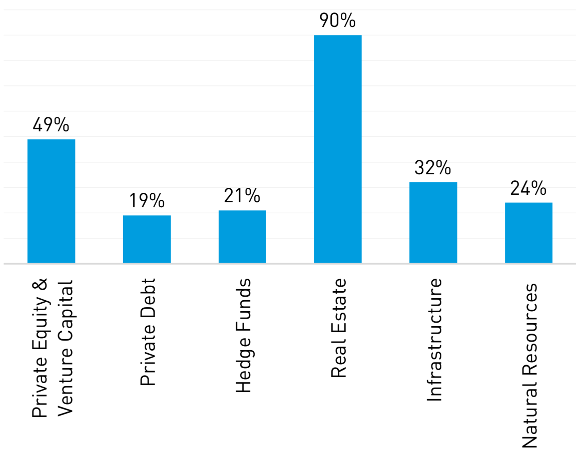
Netherlands-Based Assets under Management

€36bn

Fig. 4.16: Netherlands-Based Assets under Management (€bn) by Asset Class

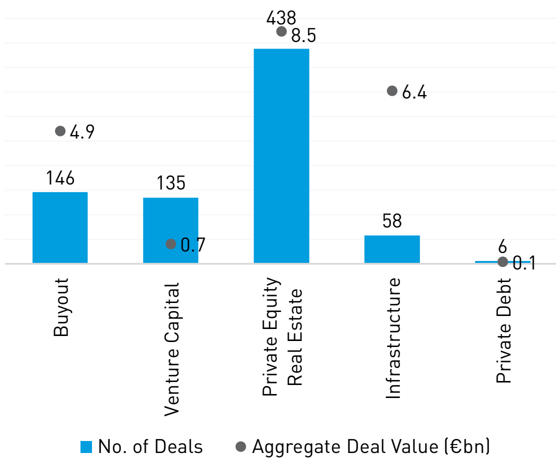
Source: Preqin Pro. Data as of June 2018

Fig. 4.17: Netherlands-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.18: Private Capital Deals in the Netherlands, 2018 - Q1 2019



Source: Preqin Pro

Alternatives activity in the Netherlands has increased steadily in recent years. The total value of deals for private capital assets in the country has risen from €15bn in 2016 to €18bn in 2018.

The private equity & venture capital industry represents the largest alternative assets market in the Netherlands, with large managers such as Waterland Private Equity Investments and fund of funds manager AlpInvest Partners headquartered in Bussum and Amsterdam respectively. Almost two-thirds (61%) of the country's alternative assets are held in private equity & venture capital funds, but it is the infrastructure market of the Netherlands that is driving growth.

Top for Infrastructure

The Netherlands is a global leader in the infrastructure market, home to a world-class airport, top-ranked seaports and high-speed road, rail and broadband infrastructure. In the World Economic Forum's 2018 Global Competitiveness report, the Netherlands ranked fourth worldwide for infrastructure and second in Europe to Switzerland. It is unsurprising, then, that the unlisted infrastructure market in the Netherlands attracts significant capital, representing 31% of total private capital investment in the country since the beginning of 2018.

Infrastructure deal activity in the Netherlands has grown significantly over the past five years, with the €6.1bn of deals recorded in 2018 nearly 3x that seen in 2014 (€2.3bn), driven by a series of high-value deals. In 2017, KKR acquired car-park operator Q-Park for €2bn, while in 2018 KKR sold a majority stake in United Group, a leading cable and media operator in Southeastern Europe – the company was valued at €2.6bn at the time.

Not only does the Netherlands attract plentiful investment in its infrastructure market, but the country is also home to some key players on the bigger stage. DIF, located outside Amsterdam, is one of the largest Europe-based infrastructure fund managers and has raised over €5bn in infrastructure funds over the past 10 years. The latest fund in the DIF Infrastructure series, DIF Infrastructure V, targets renewable energy and PPP projects within the EU member states, but may consider opportunities in both North America (mainly Canada) and Australasia.

The outlook for the infrastructure market in the Netherlands looks positive with plans for large-scale public investment and a continued focus on renewable energy projects. As the Netherlands continues to emerge as an investment market of choice, particularly in the infrastructure sector, activity in the country's private markets looks set to continue.

Italy: Growth in Private Markets

Since 1986, AIFI – the Italian Private Equity, Venture Capital and Private Debt Association – has institutionally represented and promoted private capital activity in Italy. The Association comprises about 120 financial institutions, both domestic and international, that invest professionally in companies.

The Italian private equity & venture capital market is relatively small and new in comparison with other European countries; however, in recent years it has grown significantly, recording over €12bn of private equity-backed buyout and venture capital deals in 2018, the highest annual amount ever seen in Italy.

Even though it is relatively small and with fewer general partners than other countries, venture capital is experiencing an important positive trend, both in terms of the number of deals and amount invested, and it is supposed to grow further in the near future thanks to some public measures with the aim of fostering innovation. At the same time, the new private debt segment, which appeared in Italy in 2013, is now a well-established funding instrument for Italian companies, complementary to private equity.

Generally speaking, private capital in Italy is mostly focused on small and medium-sized companies, in line with the Italian economic structure, which is based almost entirely on these kinds of companies. However, every year we see also some large and mega deals made both in the buyout market and in the infrastructure sector, which have played a very important role in recent years. A large number of huge international funds are interested in investing in Italian companies, especially operating in the best-known Italian sectors, such as fashion, food and furniture. On the other hand, it is important to note that nontraditional industries – such as biotech, medical, energy and especially ICT – are becoming more and more important in the Italian private capital market and now represent the main target of investments.

Innocenzo Cipolletta
Chairman, AIFI – The Italian Private Equity, Venture Capital and Private Debt Association

In the world rankings, Italy is fifth for manufacturing trade balance thanks to a huge number of high-quality, innovative and export-oriented companies that represent the perfect context in which private capital can grow and develop.

AIFI

The Association was created in May 1986 in order to promote, develop and institutionally represent the venture capital and private equity activity in Italy. It is an organization composed of different entities which, through direct investment of their own funds or through the management and advisory of independent funds (closed-end funds), are private equity and venture capital investors with the objective of purchasing, managing and divesting in unquoted companies.

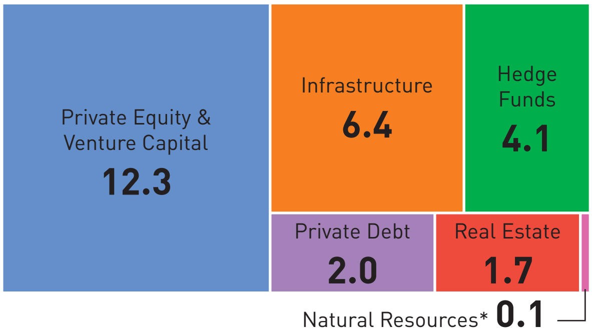
Since 2014, AIFI opened up the opportunity to join the Association also to private debt funds. Associated members are Italian and foreign associations as well as institutions and companies interested in the development of the private capital industry in Italy.

www.aifi.it

Italy-Based Assets under Management

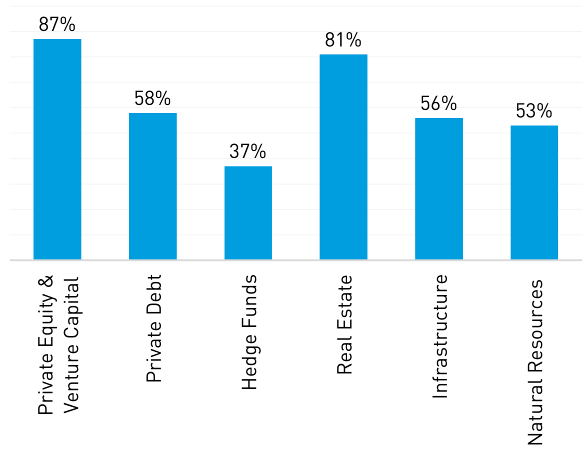
€27bn

Fig. 4.19: Italy-Based Assets under Management (€bn) by Asset Class



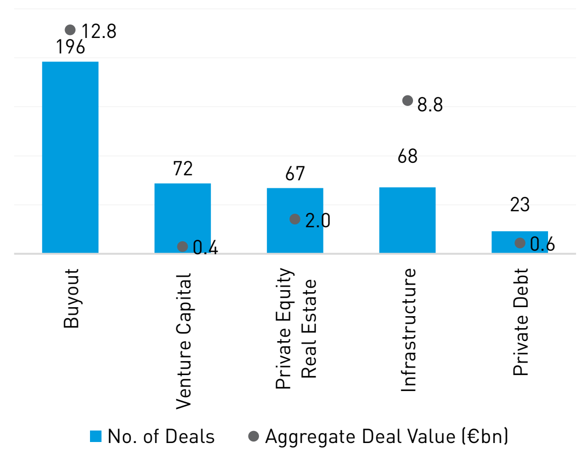
Source: Preqin Pro. Data as of June 2018

Fig. 4.20: Italy-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.21: Private Capital Deals in Italy, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

Luxembourg: A Magnet of Capital and Talent

Ilias Georgopoulos

Global Head of Relationship Management, Alter Domus

What led to the emergence of Luxembourg as a global financial centre?
IG: Since the mid-20th century, the focus of policy-makers in Luxembourg has centred on optimizing and supporting the financial sector. The focus was to maintain an international view, both inside and outside of Europe, to ensure that Luxembourg can provide best practice across various markets and jurisdictions, supporting a variety of instruments and investments. This approach had a snowball effect, attracting an expert international workforce from all aspects of the financial world and, in doing so, creating a world-leading financial servicing sector.

What has been driving the growth of Luxembourg's financial centre in recent years?
IG: When the 2008 Global Financial Crisis hit, we saw an increase in regulation and control. The industry naturally leaned on Luxembourg, and rightly so, as it was an established, globally recognized financial services leader and Luxembourg delivered what the market needed. This period is also linked to the growth of both private and real assets due to investors' needs to commit capital outside traditional financial asset classes to meet their liabilities and performance commitments. As more public capital entered these alternative investments, comparable transparency, unified reporting and enhanced investor protection became a must. The maturity of Luxembourg's financial centre and its combination of players, regulation, assets, structures and political desire to make it happen served to create a unique ecosystem. This led to the demand we now see. Not utilizing a Luxembourg structure can act as a deal-breaker in sourcing institutional capital for European asset-raising.

What do you see the future holding for Luxembourg?
IG: Brexit, which I personally still find unfortunate for Europe, has created uncertainty among local and global asset managers active in Europe from the UK. Luxembourg and Ireland, the two 'doors' to Europe, became the main beneficiaries of the situation in attracting most business and they are banking on further growth.

Luxembourg's usual speed-to-market for appropriate solutions in a rapidly evolving environment will also be an advantage for the future of the country, as we have seen with the recent substance requirement changes and new regulations. The depth and the diversity of the market also make technology an obvious evolutionary tool for Luxembourg, and the larger players will continue to heavily invest in innovation to gain efficiency and profitability for their back offices.

Alter Domus

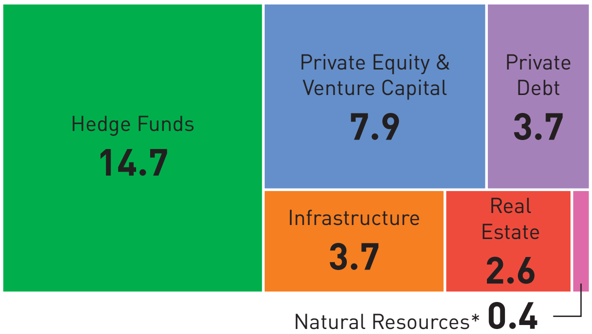
Luxembourg is an essential location for Alter Domus and after 15 years of specializing in alternatives and focusing on our clients, we're proud to be one of the country's largest fund administrators with 800 people locally. Globally, we service over €642bn AUA and we now count over 2,200 employees spread over 40 offices and desks, all with local operational capabilities.

www.alterdomus.com

Luxembourg-Based Assets under Management

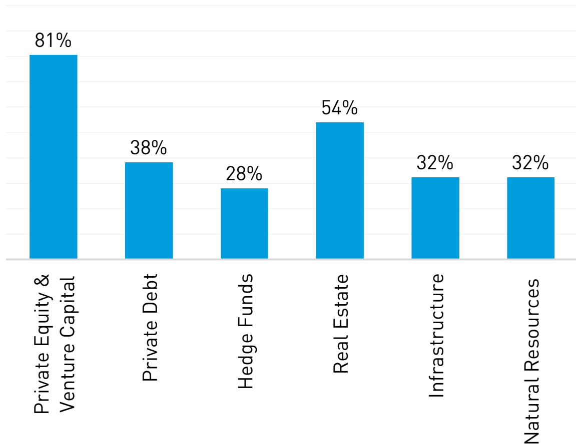
€33bn

Fig. 4.22: Luxembourg-Based Assets under Management (€bn) by Asset Class



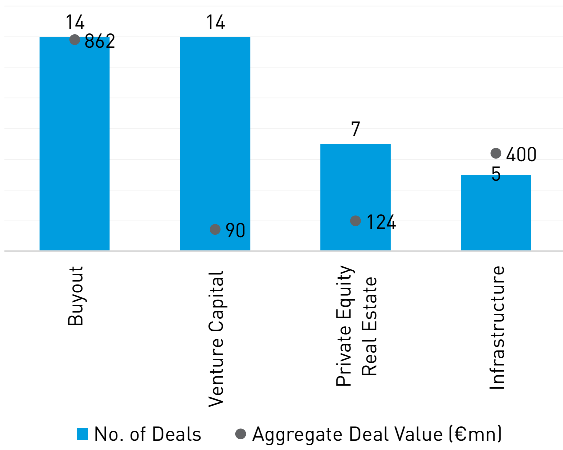
Source: Preqin Pro

Fig. 4.23: Luxembourg-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.24: Private Capital Deals in Luxembourg, 2018 - Q1 2019



Source: Preqin Pro

Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.

Spain: Record PERE Investment

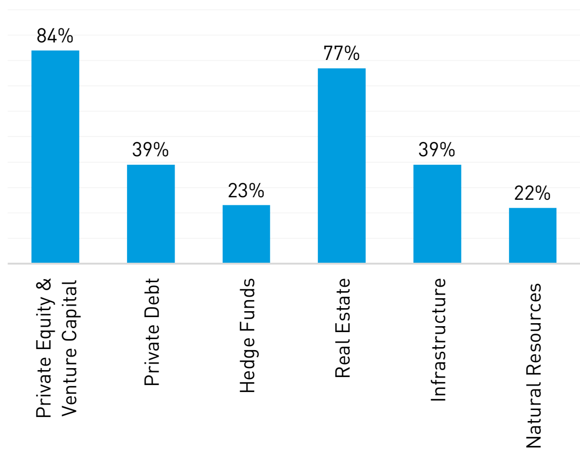
Spain-Based Assets under Management

€16bn

Fig. 4.25: Spain-Based Assets under Management (€bn) by Asset Class

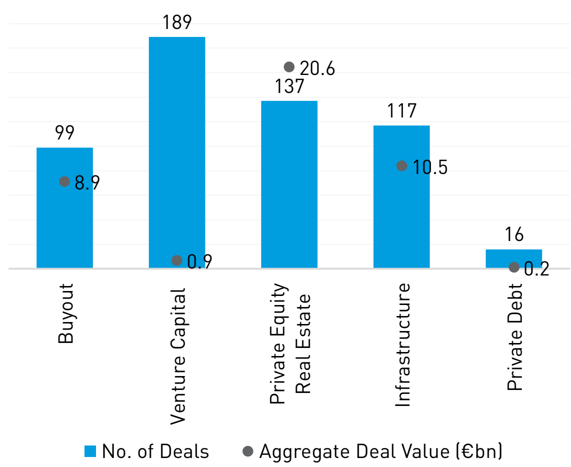
Source: Preqin Pro. Data as of June 2018

Fig. 4.26: Spain-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.27: Private Capital Deals in Spain, 2018 - Q1 2019



Source: Preqin Pro

Spain represents one of the smaller European alternative asset markets; at €16bn, the AUM held by Spain-based fund managers is one of the lowest totals among the countries featured in this report. Nevertheless, in recent years Spain has consistently recorded some of the largest capital flows into the country and is therefore an important market for European alternative investment.

Since the beginning of 2018, €41bn of private capital has flowed into Spain as improving macroeconomic conditions coupled with strong tourism and office opportunities have increased demand for exposure to Spanish assets. In context, only three European markets (the UK, Germany and France) have recorded greater deal activity over the same time period. While private equity represents the largest market within Spain in terms of assets, it is the real assets and real estate markets that have been driving this influx of capital into the country.

The Attraction of Spanish Property

Europe's real estate market has seen strong growth across the continent in recent years. Total PERE deal activity in the region surpassed €100bn for the second consecutive year in 2018, with €108bn of property transacted in Europe, following the record €111bn in 2017 (page 43).

In a similar vein, the Spanish real estate market has been something of a growth story over the past 3-4 years, reaching almost €5bn in aggregate PERE deal value in each of 2016 and 2017. 2018, however, was a stand-out year: several high-value deals were completed for Spanish property, driving the annual aggregate value to €21bn despite the number of deals falling to 103 from 111 in 2017.

Even without the mega deal – the €12bn sale of two office portfolios by Banco Sabadell to Cerberus Capital Management and Deutsche Bank – Spanish PERE activity would still have hit a new high. Preqin data shows that a greater number of large deals are being completed for Spanish property: of the 10 largest PERE deals recorded in Spain since 2014, six were in 2018, including the top three. Each of these six deals were for property portfolios, together totalling €15bn, and span a range of property markets including office, residential and retail, demonstrating that demand for Spanish real estate extends to all sectors.

With the European Commission predicting the Spanish economy to continue the growth seen in recent years, and the diverse property opportunities found within the country, the outlook for investment in Spain is positive.

Denmark: A Thriving Private Equity Market

Gorm Boe Petersen

Director, DVCA – The Danish Venture Capital and Private Equity Association

Denmark's business environment is highly suited to operating in the venture capital and buyout markets. In 2018 the World Economic Forum ranked Denmark 10th in its Global Competitiveness Index and Denmark is widely praised for its macroeconomic stability, flexicurity, high levels of digitalization, skilled workforce, stable financial markets and innovation capabilities.

The ease of doing business in Denmark's markets has attracted, and will continue to attract, buyout firms from all over the world. According to DVCA's private equity-backed buyout deal data, there are now some 75 private equity firms from all over the world that have completed buyout investments in Denmark and close to 300 Danish companies owned by private equity firms today – close to 100 more firms compared to 10 years ago. Denmark's consumer goods and services, industrials and IT sectors are the most active markets for private equity investment, and as more and more firms have looked for exposure to these markets in recent years we have seen increasing international attention as well as more local players active in Denmark's private equity industry.

The economic outlook for the industry remains positive. Interest rates are low and recent fundraising in Denmark has been strong. The deal market is healthy with capital being deployed in Denmark and private equity firms seeing successful exits. Threats to the Danish economy are few and any economic volatility or potential crises will likely be internationally founded, a German economic slowdown for example.

Venture capital is also gaining momentum within Denmark. In both 2017 and 2018 new Denmark-based venture capital firms successfully raised new €100mn+ funds. Unsurprisingly the Danish venture capital market is centred around the life sciences industry, with Copenhagen housing much of the leading international life sciences cluster of Medicon Valley. The IT sector is also a strong market for Danish venture capital; the robotics cluster in Odense provides opportunity for venture firms to gain exposure to a global hub for robotics and automation innovation.

The outlook for venture capital in Denmark is driven by the industry's access, or lack thereof, to institutional capital. The balance sheet of the state and the occupational pension fund system represent over 200% of GDP, but ticket sizes of venture capital investment are too small to represent efficient liability-matching. Recent fund of funds initiatives have bridged part of the gap, but more opportunities remain as Denmark's venture capital industry comes to the fore.

The DVCA

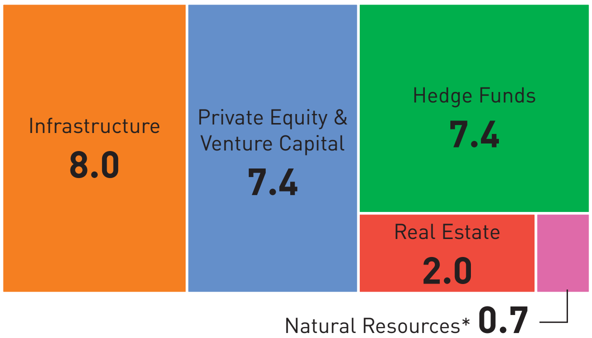
The DVCA is the trade association for buyout and venture capital firms in Denmark. We work with a wide range of investors and business angels and concentrate on making Denmark an even more attractive place to invest, both nationally and globally. DVCA's more than 270 members drive growth and employment throughout Denmark.

www.dvca.dk

Denmark-Based Assets under Management

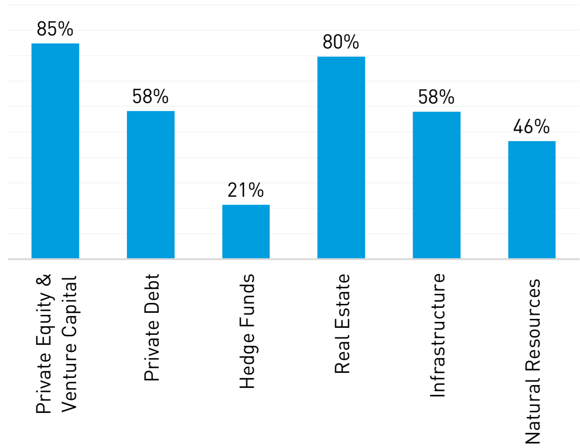
€25bn

Fig. 4.28: Denmark-Based Assets under Management (€bn) by Asset Class



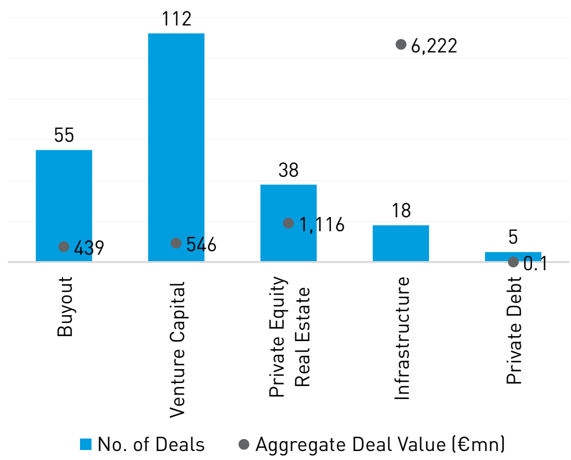
Source: Preqin Pro. Data as of June 2018

Fig. 4.29: Denmark-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.30: Private Capital Deals in Denmark, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

Norway: Private Equity & Venture Capital Growth

Activity in the private equity & venture capital market in Norway in 2018 was higher than any level recorded before 2016, despite taking a hit in Q4 as a result of the drop in oil prices. The lion's share of deals was made by local players, but in terms of the capital invested, international funds dominated, suggesting the Norwegian market continues to be attractive for foreign investors despite increased tension in global trade and political unrest in other parts of Europe and the UK.

The fundraising environment has been strong, and Nordic players have significant dry powder to be deployed over the next year, resulting in a competitive market, with valuations reaching pre-crisis levels. The dry powder also contributes to continued high deal activity, suggesting 2019 could see investment levels on par with, or exceeding, 2018 levels. In the venture space, Norway saw deal volumes and values in the seed space increase in 2018 to the highest values in a decade. Larger venture capital deals are rarer, mirroring the Norwegian venture market where larger venture funds are few and far between, while political will and action coupled with a vibrant startup scene have contributed to a surge in activity in the early-stage space with business angels, family offices and government-backed seed funds.

Recent years have also seen several new and emerging managers raising maiden funds, both in the seed and venture space, but also small and mid-market buyout funds. For Norwegian companies, this is good news. A study conducted by Menon Economics and commissioned by NVCA tracks the development of the companies in the period before and after private equity funds took ownership. It shows that the portfolio companies experienced significant growth after the private equity fund invested. This is especially true for the earliest phases, where the growth rate changes following the fund's investment. The study further shows that Norwegian companies with backing from venture capital and private equity funds show consistent growth in annual contribution to GDP. On average, Norwegian private equity/venture capital-backed companies have increased their value creation by 13% per year for the past 15 years. Average employment growth per year in the portfolio companies has been 6% since 2001, according to the same study, proving the importance of this asset class, not only to institutional investors looking for financial returns, but also to the national economies in our region.

Rikke Eckhoff Høvding
CEO, NVCA

NVCA

The Norwegian Venture Capital & Private Equity Association (NVCA) is the industry association for the VC/PE community in Norway. Its members includes seed, venture, growth and buyout funds, as well as service providers ranging from legal advisers to corporate finance and consulting. The association was established in 2001.

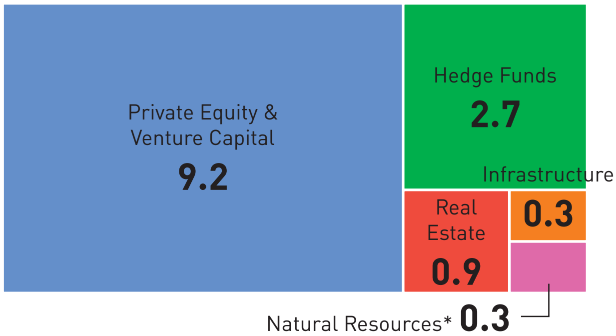
Rikke Eckhoff Høvding joined NVCA as CEO in November 2015. She has previously worked at Argentum Asset Management, Burson-Marsteller and as a Nordic VC/PE editor at unquote.com.

www.nvca.no

Norway-Based Assets under Management

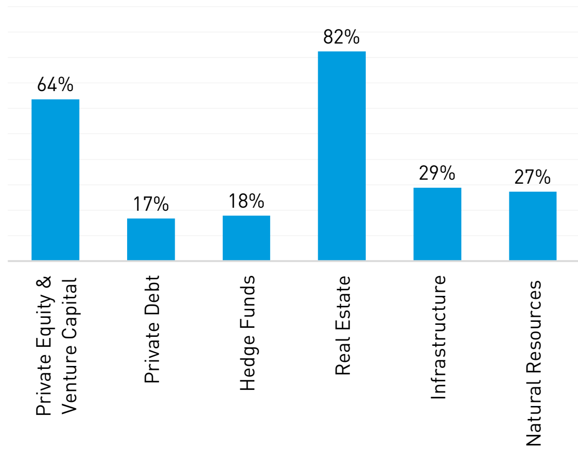
€13bn

Fig. 4.31: Norway-Based Assets under Management (€bn) by Asset Class



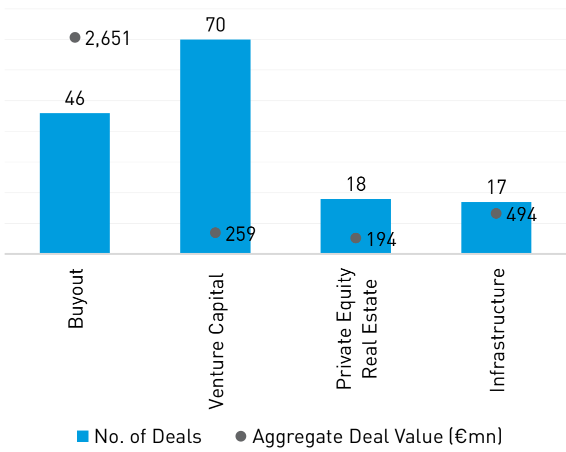
Source: Preqin Pro. Data as of June 2018

Fig. 4.32: Norway-Based Investors Active in Each Asset Class



Source: Preqin Pro

Fig. 4.33: Private Capital Deals in Norway, 2018 - Q1 2019



Source: Preqin Pro

**Natural Resources includes Natural Resources and Timber fund types only to avoid double counting.*

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