



PREQIN MARKETS IN FOCUS: ALTERNATIVE ASSETS IN EUROPE

June 2018

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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/europe18



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CEO's FOREWORD

- Mark O'Hare



Welcome to Preqin's first report focused on alternative assets in Europe. As most of our customers will know, Preqin's databases and strategic focus are resolutely global, so why Europe, and why now?

Outside North America, Europe is the next most significant hub for the industry globally, and plays a key role in its global evolution:

- Europe-based alternative assets fund managers have combined assets under management of €1.48tn, approximately 20% of the global total;
- Europe has a rich and evolving alternative assets ecosystem, with over 5,700 fund management organizations and over 2,800 significant institutional investors active across the various constituent private capital and hedge fund asset classes;
- With a mix of mature and emerging economies, and an evolving social, political and regulatory environment, the alternative assets industry in Europe has its own dynamics, opportunities and challenges that are shaping the environment for investors and fund managers.

This report draws on Preqin's unrivalled data resources, and aims to provide some context behind the numbers and facts that you already use on our online databases, and it also benefits from perspectives and commentary from our partners in the industry who have contributed to its creation and publication; so our thanks must go in particular to Amundi, BlueBay, Transtrend and EPRA for sharing their perspectives with us. Thank you.

It would be counterproductive for me to dwell too long on individual areas within the report – far better for you to go directly to the content that follows – however, I would like to comment briefly on just a handful of important themes:

- **Private equity** can only be described as being in 'robust good health' across Europe, with positive news for fundraising, deal activity and returns for LPs (including of course cash distributions.) This despite the undoubted political turmoil across Europe: strong evidence for the robustness of the asset class for the future?
- **Hedge funds** have had a remarkably positive past year across Europe, with strong cash inflows (notably more so than for the industry globally).
- **Real estate** has had a remarkably strong run in recent years, with European opportunities attracting LP capital and GP interest from around the world (please see page 36 for a new 'funds flow' analysis). Having said this, the challenge for European real estate mirrors that in other regions: how to maintain momentum and attractive returns starting from the current position of high valuations?
- **Real assets** have seen strong growth in both infrastructure and natural resources funds, and the development and growth of renewables has been of particular note – an area where Europe leads the world.
- **Private credit** has seen remarkable growth globally, and especially in Europe, where the market penetration of non-bank lenders has a long way to go to reach levels seen in the US. Opportunities for continued growth?

I have already thanked our partners Amundi, BlueBay, Transtrend and EPRA for sharing their perspectives in the pages that follow. To this I should add my thanks to my colleagues at Preqin for preparing and publishing this report – a real team effort. And of course to you, our customers around the globe, for your continuing support and engagement.

Thank you,

Mark O'Hare



SMOOTHING THE PATH: MANAGING THE RISKS IN PRIVATE ASSET INVESTING

- Pedro Arias, Amundi

A quiet revolution is happening in Europe. It is no longer just banks and governments that are providing funding for the real economy: insurance companies and pension schemes are also playing their part.

The transformation might be silent but it is powerful. Investment in real and alternative assets – which include private equity, real estate, infrastructure and private debt – reached another all-time high of €7.2tn as of June 2017. And new capital raised hit a record of €596bn in the same year.

The popularity of these investments among pension schemes and insurance companies is well understood: the unconventional monetary policies developed in response to the Global Financial Crisis had a significant impact on all asset classes.

Long-term low bond yields and expensive yet volatile equities made investors look to other assets for better sources of return. Real assets are appealing to long-term investors for three reasons: they allow such investors to capture an illiquidity premium, enhance income through a source of predictable returns and create diversification, as they have low correlation to traditional asset classes.

Stricter regulation of banks is also driving the demand for alternative sources of finance for the real economy. This disintermediation of banking is a rapidly growing trend. It is estimated that the move away from bank financing represents between 75% and 80% of funding volumes in the US market and about 20% to 25% of all funding in Europe, where growth is faster.

ENCOURAGEMENT FROM EUROPEAN POLICYMAKERS

It is less well appreciated that European regulators are also playing an important role to encourage investors to invest directly in real economy.

For example, the legal framework makes it easier for insurance companies to buy these assets. The Solvency II directive requires these investors to consider the risk-adjusted return relative to the capital cost of an investment. This is known as the solvency capital ratio (SCR). Under this metric, the regulator has made a secured real estate debt yielding 2% more attractive than a high-yield portfolio yielding 6%. In addition, the SCR of a private debt portfolio is equivalent to BBB – irrespective of its specific credit rating. And the SCR of an infrastructure fund can be reduced to 30% from 49% in certain eligibility circumstances.

The European regulator is now encouraging wealth managers and high-net-worth individuals to invest in this asset class. European long-term investment funds (ELTIF) were created to increase the pool of capital available, in particular, to infrastructure projects as well as small and medium-sized enterprises. These funds must invest in alternative long-term assets and should hold around 70% in those assets. The remainder of the fund can be invested in listed securities to provide a liquidity buffer which aims at managing the asset-to-liability ratio of the portfolio.

While the ELTIF regime was established to provide access for institutional investors to a long-term investment product, it can also be marketed to retail investors. In particular, these funds can be included in pension products.

ASSET MANAGERS MUST EDUCATE THEIR CLIENTS

Although the European regulator is taking the steps necessary to encourage both institutional and retail investors into these asset classes, this is unfamiliar terrain. Investors are reliant on fund managers not only to provide access to these asset classes but also to educate them.

It is important for investors to understand that alternatives have different risk metrics

to traditional asset classes. It is impossible to achieve the same level of diversification in a private equity portfolio that has 15 investments as an MSCI World tracker covering 1,600 shares!

The risks associated with private markets and real assets are broader than those associated with equities and bonds. Political and sector-specific risks are more important considerations. In addition, as these investments are illiquid, it is much harder to accurately measure performance of the assets. The opacity of many investments and the lack of robust statistical and historical data make the task even more difficult.

“The European market remains highly fragmented where local knowledge and contacts are vital

Take private equity. It can often take four to five years to source the right deals and once deployed, it is another eight to 10 years to create the target value so it is often more than a decade before the return is realized – assuming the right exit strategy is in place.

LEGITIMATE CONCERNS OVER FEE STRUCTURE

Locking capital up for 12-15 years is a tough liquidity constraint. Investors' concerns about the fee structure in this scenario are understandable: if they are too high, they could erode the potential return. Investors need to know if they are paying fees on the capital they have committed or on the capital which has been invested. Is it fair for investors to pay fees on capital that is languishing in a bank account, waiting to be deployed?

Amundi believes it is better for fees to be paid on invested capital. This trend is gaining popularity and we think it should

become standard practice in private and real assets.

Charging fees on invested capital might encourage a faster deployment of capital. This might also improve the rates of return on investments as managers will be incentivized to shorten the ramp-up period and therefore the J-curve effect is alleviated.

But charging on invested rather than committed capital would not necessarily improve an organization's ability to access good-quality deals at fair value. This is a key concern frequently voiced by institutional investors when considering investing in private markets. It would be reasonable for an investor to be concerned with such a high level of dry powder, which mounts ever higher. Over the last five years, the global level of dry powder kept reaching a new record high – last year it was €1.5tn. This could encourage funds to take less care when selecting their next project.

A NEW BREED OF ALTERNATIVE MANAGER IS NEEDED

Alternative asset managers have tended to pursue one of two business models. There are boutique firms with deep expertise in a specific market but lack financial clout. There is a danger these smaller players do not have sufficient financial strength to ensure they will survive for the full length of an investment project of one to two decades. Or there are large global players

with strong resources, which ensure they will still be around in a decade when the profit on the investment is realized. These organizations can also generate economies of scale by centralizing risk controls.

There can also be useful pooling of knowledge across different specializations such as real estate debt and property management which creates insights a specialist player cannot access.

Amundi believes successful real and private asset managers have to combine the best of both worlds: they need to be strong global players who can access the right deal flow, and understand the specific complexities of an individual asset class and of a local market. For example, the European market remains highly fragmented where local knowledge and contacts are vital. Long-term business and banking connections are needed to gain access to assets. Boutique specialist managers often lack these connections and struggle to find these potential deals.

Infrastructure illustrates the intricacies of an individual asset class. This is a highly complex and technical asset class. The due diligence required to assess the operational and investment risk takes both time and considerable resources.

Determining how to exit the investment is equally complex: some investments can be easily divested in a few months while others benefit from special tax or

regulatory conditions which require the investment to be held for years. Technical expertise is required to evaluate both industrial and maintenance risk.

It is, however, possible for large financial organizations to reduce the complexity of investing in these real assets and to increase access to a strong source of high-quality deal flow by working in partnership with industrial groups. Working in combination helps to mix the respective talents of the fund manager and the industrial partner. The manager can provide its financial knowledge while the partner understands how to, for example, manage a solar energy farm.

BALANCING TWO COMPETING CONCERNS

Regulators want to encourage investors to allocate capital to the real economy but they also want to ensure investors' lack of familiarity with these assets does not result in them taking unnecessary risk.

As regulators continue to encourage both institutional and retail investors to invest in the real economy of Europe, demand will increase for asset managers that understand the complexities of each asset class and that are able to access high-quality deal flow.

AMUNDI ASSET MANAGEMENT

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10 globally¹. Following the integration of Pioneer Investments, it now manages over €1.45tn² 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 €41.6bn², and offers solutions through funds, club deals, and multi-management funds, including two innovative and ambitious partnerships with EDF and CEA.

PEDRO ARIAS – GLOBAL HEAD OF REAL & ALTERNATIVES ASSETS

Pedro joined Amundi in 2013 to manage the alternative assets business line. He was previously Deputy CEO in charge of international development and real estate at the Casino group, the French retail Group. He served as board member of Casino's major subsidiaries in Colombia, Argentina, Brazil, Uruguay, Thailand, Hong-Kong and Vietnam. Pedro started his career in a law firm before moving to corporate and investment banking in various leading institutions. Pedro was notably involved in mergers and acquisitions across Europe and Latin America and eventually in co-head of the restructuring practice at Rothschild & Cie for Europe. Pedro graduated from ESSEC business school and Paris-Descartes University (Law degree).

real-assets.amundi.com

¹Source IPE "Top 400 asset managers" published in June 2017 and based on AUM as of end December 2016.

²Figures as of 31 March 2018. Source: Amundi Asset Management



SECTION ONE: ALTERNATIVE ASSETS

EUROPE: IN NUMBERS



€1.48tn

European alternative assets under management (as at September 2017).



€601bn

Hedge funds represent the largest share (41%) of the alternatives market in Europe*.



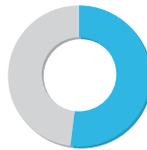
€507bn

Aggregate value of European private capital** deals in 2017, the highest annual total on record.



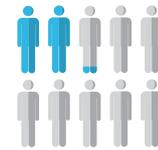
13.0%

Median net IRR of vintage 2011 and 2015 private capital funds, the highest in the past 10 years.



52%

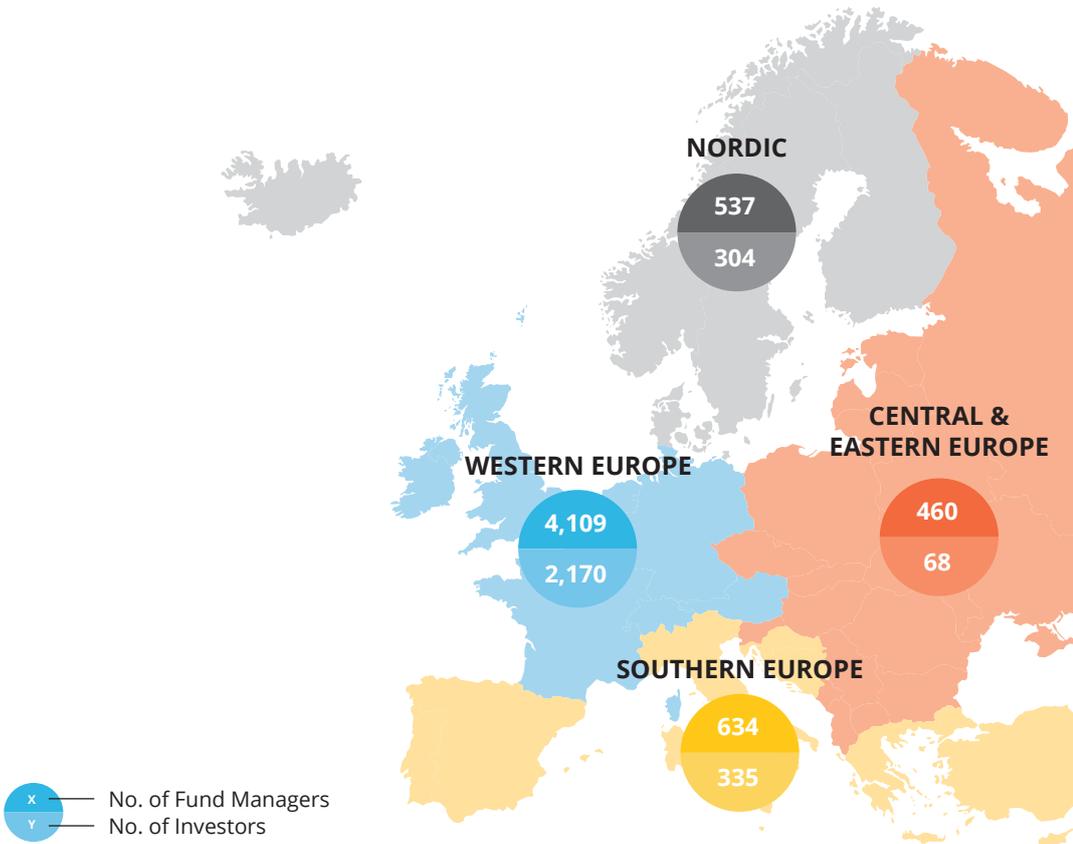
of Europe-based hedge funds experienced net inflows over Q1 2018.



22%

Within Europe, private sector pension funds form the largest proportion of investors active in alternatives.

No. of Alternative Assets Fund Managers and Investors Active in Alternatives in Europe by Region:



x — No. of Fund Managers
y — No. of Investors

*As at September 2017 for the purposes of comparing with private capital AUM data.
**Excluding private debt and natural resources.

Source: Preqin

THE ALTERNATIVE ASSETS INDUSTRY IN EUROPE

European alternative assets under management (AUM) at the end of Q3 2017 reached €1.48tn* (Fig. 1.1). This is 9% higher than in December 2016, with notable increases in hedge fund AUM driven by two quarters of net inflows in the hedge fund industry, Europe's largest alternative asset market, in Q2 and Q3. However, Europe represents only 20% of the global industry, in a distant second place to North America (66%, Fig. 1.2).

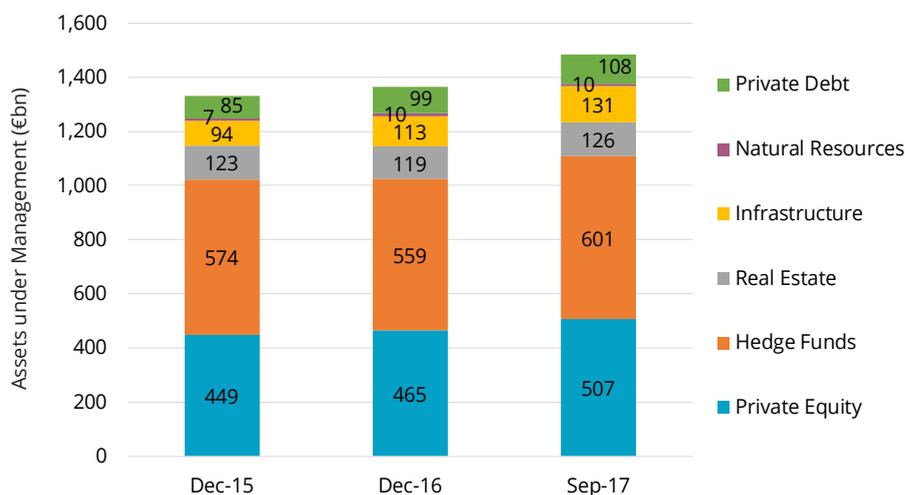
Within Europe, the more developed economies of Western Europe dominate the alternatives landscape, with the sub-region accounting for 72% and 85% of the number of fund managers and institutional investors located in Europe respectively.

Fifty-two percent of hedge funds in Europe saw net inflows over Q1 2018, noticeably higher than any other region globally (Fig. 1.3). The proportion of funds that saw no change in asset flows over Q1 2018 was similar across all regions except for Rest of World: only 8% of hedge funds remained stagnant.

Encouragingly, Europe-focused fundraising has surpassed the pre-Global Financial Crisis (GFC) high of €132bn for two consecutive years since 2015, achieving a new peak in 2017 with 363 funds reaching a final close and securing an aggregate €184bn in capital commitments (Fig. 1.4). While the number of funds closed over the past four years has remained relatively stable, there has been an average year-on-year increase of 16% in aggregate capital raised in the same period.

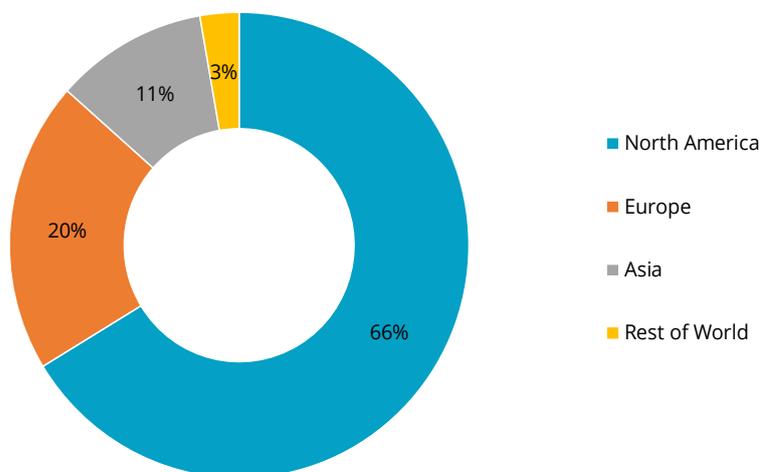
Furthermore, Europe-focused private capital performance has remained strong across all vintages, with the median net IRR never dipping below 7.4% (Fig. 1.5). Pre-GFC, Europe-focused private capital funds consistently performed better than their North American counterparts up until 2007, when Europe-focused funds lagged

Fig. 1.1: Europe-Based Alternative Assets under Management by Asset Class, 2015 - 2017*



Source: Preqin

Fig. 1.2: Alternative Assets under Management by Region (As at September 2017)*



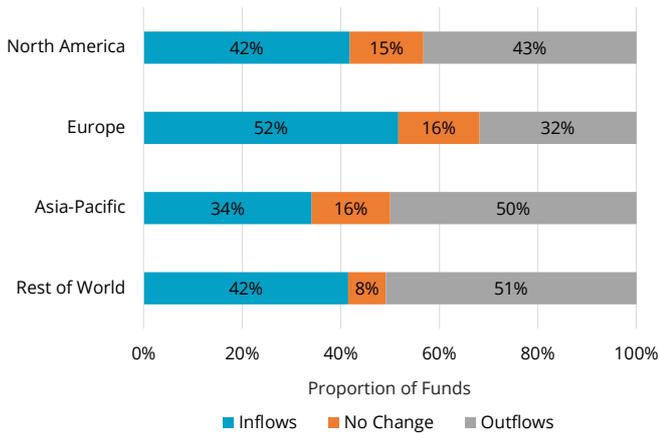
Source: Preqin

behind. Since 2014, the trend appears to be reversing once again. Funds focused on Europe have outperformed North America-focused private capital funds in nine of the 16 vintages examined. The risk/return profile of Europe-focused private capital funds is illustrated in Fig. 1.6, with real estate funds demonstrating the highest standard deviation (19.0%) of all private capital asset classes, while infrastructure funds have the highest median net IRR (+11.3%).

The number of private capital deals completed in Europe each year has increased steadily since 2010, reaching a new peak at the end of 2017, with deals in each asset class examined having grown in number from 2016 (Fig. 1.7). However, the number of venture capital deals completed in 2017 did not exceed its previous record of 2,312 in 2014 and 2016.

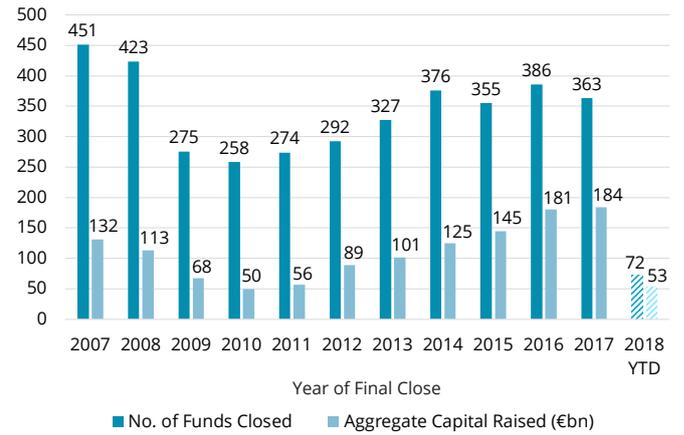
*Based on the most recent available figure for private capital. Hedge fund assets under management (AUM) is shown for the same period for the purposes of fair comparison. AUM data is calculated in USD and has been converted to EUR using the 30 September 2017 USD:EUR exchange rate in all places.

Fig. 1.3: Hedge Fund Asset Flows over Q1 2018 by Fund Manager Headquarters



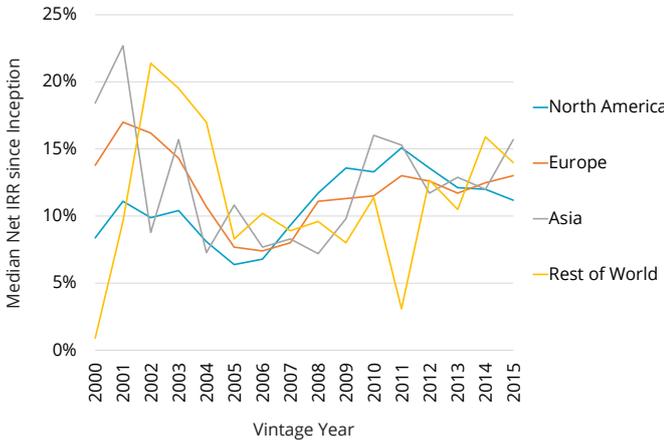
Source: Preqin

Fig. 1.4: Annual Europe-Focused Private Capital Fundraising, 2007 - 2018 YTD (As at March 2018)



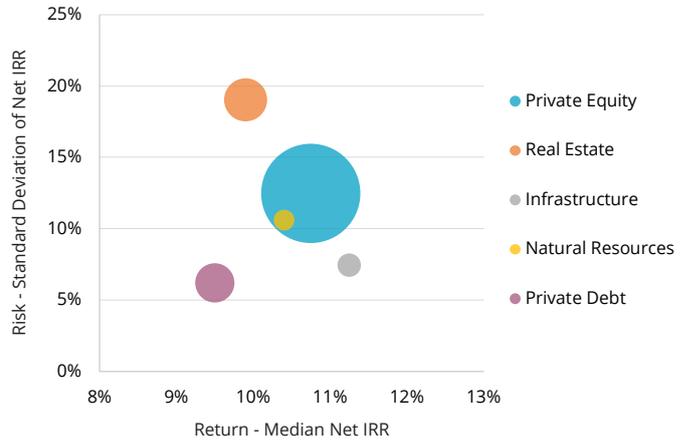
Source: Preqin

Fig. 1.5: Private Capital: Median Net IRRs by Primary Geographic Focus and Vintage Year



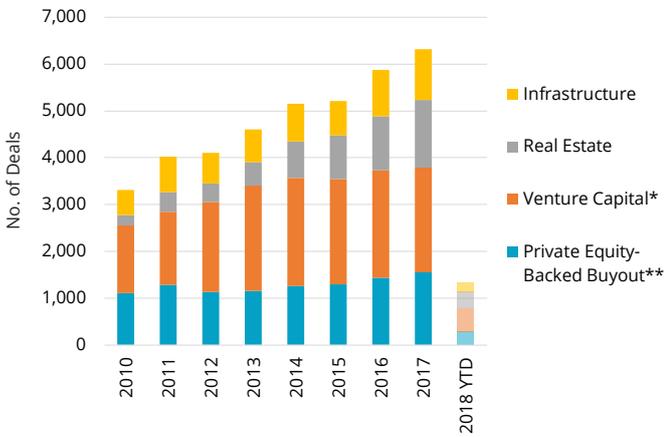
Source: Preqin

Fig. 1.6: Europe-Focused Private Capital Funds: Risk/Return by Asset Class (Vintage 2005-2015)



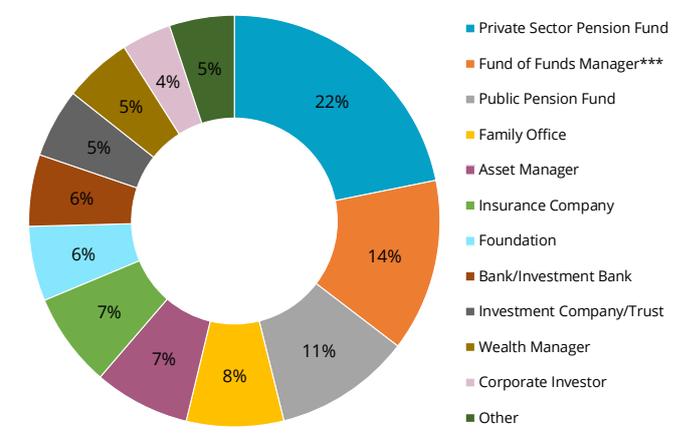
Source: Preqin

Fig. 1.7: Private Capital Deals Completed in Europe by Asset Class, 2010 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 1.8: Europe-Based Institutional Investors by Type



Source: Preqin

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

**Includes announced and completed private equity-backed buyout deals.

***Includes private equity, secondary, real estate, real assets, infrastructure, private debt, listed, hybrid fund of funds managers and hedge fund of funds managers.



BEGINNING OF THE END FOR BETA CRUISING

- David Riley, BlueBay Asset Management

With the QE regime coming to an end, so is the suppression of asset price dispersion. BlueBay's head of credit strategy and asset allocation David Riley looks at capturing alpha as the economic environment turns on the beta trade.

20 September 2017 marked a watershed moment for global financial markets – the beginning of the end of quantitative easing (QE). The world's most influential central bank – the US Federal Reserve (Fed) – announced that from October it would start to shrink its balance sheet, bloated by more than \$4.2tn of Treasury- and mortgage-backed securities amassed since the 2007-2008 financial crisis in an effort to forestall a depression and stimulate economic recovery.

The European Central Bank (ECB) and Bank of Japan (BoJ) are also gradually reducing the scale of their asset purchases. The peak in QE has passed with important implications for asset markets and investment strategies.

QE AND THE INVESTMENT REGIME

The wash of stimulus money that flooded markets from 2007 suppressed asset price dispersion and elevated cross-asset correlations as the ebb and flow of central bank liquidity became the overwhelming common macro factor driving global asset prices. Correlations across sectors within asset classes and between the individual asset classes themselves rose along with markets. Yields were pushed artificially low, valuations moved upward and the classic negatively correlated relationship between bonds and equities became distorted. In such an environment, the rewards from asset and security selections were much more limited with investment returns dominated by the QE-induced 'beta' rally which favoured passive benchmark tracking over active investment strategies.

But as the QE-era investment regime begins to unwind, we are witnessing the first signs of a shift in the investment

environment. Stock correlations across the S&P 500 Index fell throughout 2017 and dispersion in stock performance is rising, helping active equity managers to outperform passive investment vehicles. Similarly, dispersion in credit, especially in high yield, is also moving higher as investors recognize greater differentiation in borrowers' credit profiles.

THREE POST-QE SHIFTS

We believe the new investment regime will result in three shifts:

- Lower asset correlation
- Greater dispersion in asset performance
- Lower beta (market) returns

1. Lower asset correlation

Asset correlations measure how investments move in relation to one another. For much of the post-crisis period, markets moved in lockstep, signalling high correlation. This defies classical financial theory, which tells us that when equities rise then bonds should fall, and vice versa. Instead, in the QE era, there was often a positive relationship between the two. Looking within the fixed income universe, regional differences in the performance of government bonds and credit have become less pronounced as the ebb and flow of central bank liquidity has overwhelmed divergences in economic and credit fundamentals. While this 'rising tide lifts all boats' environment benefitted passive index-tracking strategies, active managers were thwarted as low-quality companies followed markets upwards without the fundamentals to back their inflated valuations. However, we are now seeing early signs that correlation levels are beginning to ease, with the 2017 numbers similar to those recorded pre-2008. We expect this shift to continue as QE is withdrawn.

2. Greater dispersion in asset performance

Falling correlation levels provide a proxy for increased dispersion. Essentially

measuring the difference between the best and worst performers in any group – in this context asset classes. For the past few years as developed market government debt has yielded so little, high-yield and non-investment-grade bonds have done well. Investors have chased yields into more risky areas of the fixed income market, accepting higher levels of default in anticipation of higher returns. While we believe there are attractive investments across the asset class spectrum, subscriptions for high-yield and non-investment-grade bond issues have risen, influenced by somewhat inflated issuer company valuations.

Fortunately, in line with falling correlation levels, we are starting to see greater differentiation within sectors. This should pave the way for active managers to put their selection powers to work, scrutinizing underlying fundamentals to select the best quality positions, rather than any issuer doing well on a combination of hype, overblown equity prices and guaranteed market security as QE flows were indiscriminate in the companies they ultimately supported. To paraphrase Mario Draghi, central banks did "whatever it took" to bolster markets. One result was very low dispersion. As this support is now being withdrawn, we expect dispersion to increase.

3. Lower beta (market) returns

QE flows supported markets and drove up performance through the two factors discussed above. As the global bulk bond buying campaign is unwound, overall market performance (market beta) will likely ease off, reflecting the fact that post-crisis return levels have been held artificially high. Declining market values will likely cause alarm for investors following broad-brush passive approaches, as they hold all index constituents indiscriminately and are therefore exposed to all of the downside. But any good active manager will have cherry picked the best of the universe for their clients' portfolios,

minimizing downside exposure. Lower beta returns lead the way for true alpha generation, where manager performance is ahead of the market as a result of intelligent issuer selection.

BOTTOM LINE: DISPERSION IS KEY

Active fixed income managers do not need high volatility to outperform passive strategies, but they do require greater dispersion. Markets must differentiate between sectors and issuers for intelligent credit selection to be rewarded. Interestingly, greater dispersion levels combined with lower cross-correlation levels often result in lower, not higher, levels of relative volatility.

POLITICAL NOISE AND ACTIVIST POLICIES

One factor driving the increase in dispersion is the rise of populist politics and more interventionist governments, a trend we expect to continue as central banks wind down QE. Voter allegiances have become more fluid, rendering traditional sources of political insight less reliable.

Greater political and policy uncertainty requires investors to have access to a broader range of intelligence sources. These include the need for proprietary research through direct communication with key influencers, recognizing and

exploiting news bias and effectively utilizing social media. The rise of unreliable news sources and 'fake news' means that investors have to be smart and selective in what they consume.

NOT SO SAFE – TRADITIONAL DEBT NOW VULNERABLE

The purpose of traditional core fixed income – high-grade and government bonds – in many investor portfolios is to provide predictable income and safety, including low levels of asset price volatility. The legacy of QE and ultra-low policy interest rates is that traditional fixed income offers very little in the way of income and is increasingly vulnerable to episodes of market volatility. The interest-rate sensitivity of fixed income benchmarks – their duration – has increased dramatically during the QE era.

With duration levels at record highs, many traditional holdings have become portfolio dead weights: they offer record-low yields (negative in some cases including Germany, Switzerland and Japan) and will be hit hard by higher interest rates and volatility. In the space of just six weeks from the end of April 2015, a mere 50 basis points rise in German bund yields led to a negative return of more than 6% for investors passively holding a portfolio of German government bonds.

ALTERNATIVE APPROACHES

With the traditional favourites no longer delivering palatable yields, investors are increasingly looking for alternative solutions in order to meet their income and return targets. The liquid alternatives universe – which is typically unconstrained by benchmarks – spans a range of strategies designed to provide diversification away from traditional asset classes, either by trading the same underlying securities in a non-traditional manner, or by investing in non-traditional and new asset classes.

Both approaches reduce correlation levels within a traditional portfolio, increasing genuine diversification, providing downside protection when traditional allocations weaken and ultimately generating superior risk-adjusted returns.

Selecting the right fixed income allocations to ensure performance in a post-QE world comes down to discipline and expertise in managing interest rate, currency and credit risks. Manager skill, a global opportunity set and a commitment to active portfolio management are the factors that will separate those who will succeed from those afraid to trail blaze.

BLUEBAY ASSET MANAGEMENT

BlueBay is a specialist fixed income manager. Headquartered in London with a strong European presence, we invest over \$59bn for institutional investors and financial institutions, from active benchmarked portfolios to alternative strategies and private debt.

As a firm, we seek to deliver optimal outcomes for clients and promote a culture of strong performance, coupled with innovation and collaboration. Our purpose is to be a respected, leading asset manager for our clients. We do this by embracing our values of integrity, transparency and respect that have been the backbone of our firm since inception in 2001.

BlueBay has offices in the UK, Switzerland, Germany, Luxembourg, Stamford (US), Japan and Australia. BlueBay Asset Management LLP is wholly-owned by Royal Bank of Canada and part of RBC Global Asset Management. BlueBay Asset Management LLP is authorised and regulated by the Financial Conduct Authority.

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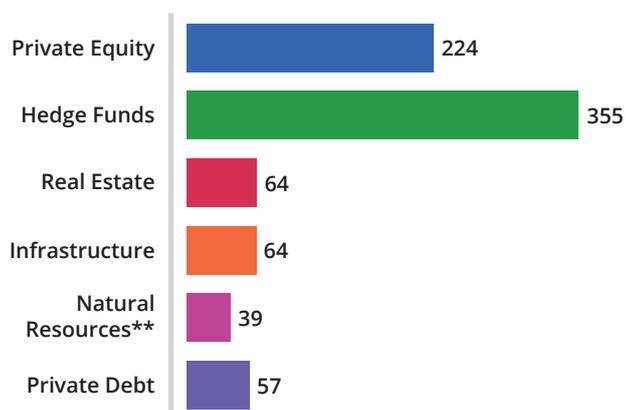


AUM: €768bn

ALTERNATIVES IN THE UK



UK-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

29%

Private sector pension funds make up the largest proportion of UK-based investors.

3

Average number of funds UK-based investors plan to allocate to in the next 12 months.

UNILEVER SPREADS

In December 2017, KKR acquired Unilever's margarine and spreads business for €6.8bn, the largest UK-based private capital deal announced since the start of 2017. Unilever Spreads is based in London and the buyout transaction is expected to be completed in mid-2018.

M&G UK COMPANIES FINANCING FUND

The largest UK-focused private capital fund to close in the past 10 years, the private debt fund reached a final close on £1.5bn (€1.8bn) in December 2014. The fund, managed by M&G Investments, provides financing to mid-cap companies in the UK by investing in newly created senior debt positions.

GREATER MANCHESTER PENSION FUND

The Manchester-based public pension fund will commit to between four and eight private equity funds in the next 12 months on an opportunistic basis, targeting balanced, buyout and secondaries strategies across the European and North American markets.

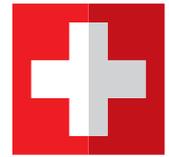
JAPAN SYNTHETIC WARRANT FUND - USD CLASS

Dejima Asset Management's Japan Synthetic Warrant Fund is the top performing UK-based hedge fund with a three-year annualized return of 34.21% (as at March 2018). The Guernsey-domiciled vehicle, launched in 2005, employs a long/short strategy and gains exposure to the Japanese equity market by asset swapping convertible bonds on companies that are quoted on the Japanese Stock Exchanges.

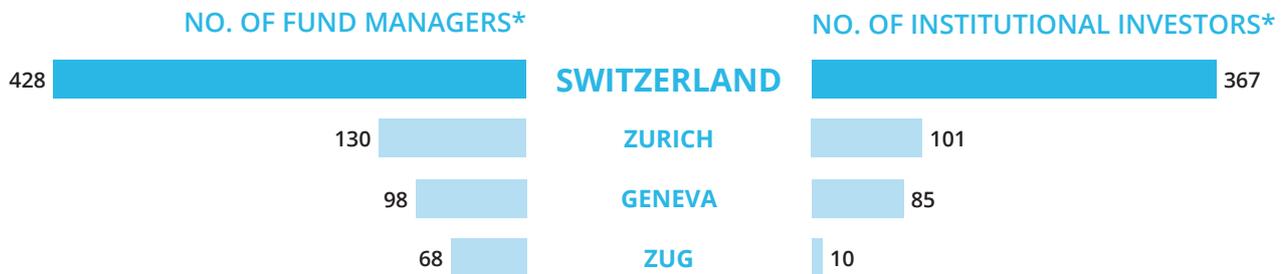
*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.

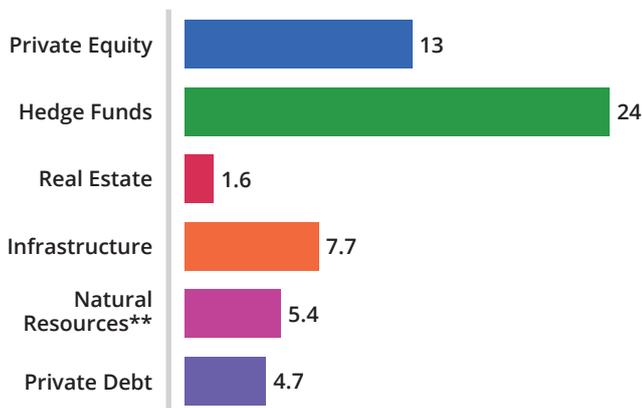
ALTERNATIVES IN SWITZERLAND



AUM: €52bn



SWITZERLAND-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

75%

of Switzerland-based investors allocate to real estate, the largest proportion allocating to any asset class.

6

Average number of funds Switzerland-based investors plan to allocate to in the next 12 months.

AKZO NOBEL'S SPECIALTY CHEMICALS BUSINESS

In March 2018, Carlyle Group and GIC acquired Akzo Nobel's Specialty Chemicals Business for over €10bn, the largest Switzerland-based private capital deal announced since the start of 2017. The buyout deal is expected to be completed before the end of 2018.

UBS CLEAN ENERGY INFRASTRUCTURE SWITZERLAND

The largest Switzerland-focused private capital fund to close in the past 10 years, the infrastructure fund reached a final close on CHF 397mn (€330mn) in October 2014. The vehicle, managed by UBS Clean Energy Infrastructure Switzerland, invests solely in Swiss assets and targets clean and renewable energy infrastructure projects.

PREVIS

The Bern-based public pension fund intends to maintain its current allocation to real estate in the next 12 months and will therefore make new investments as current ones mature, seeking to commit CHF 100mn (€85mn). Previs will target core strategies on a global basis, using a mix of new and existing managers.

TELEIOS GLOBAL OPPORTUNITIES FUND, LTD.

Launched in 2014, Teleios Capital Partners' fund is the top performing Switzerland-based hedge fund with a three-year annualized return of 21.94% (as at March 2018). It is an activist hedge fund focused primarily on European markets. The Cayman Islands-domiciled vehicle seeks to identify event driven opportunities in equities and distressed debt.

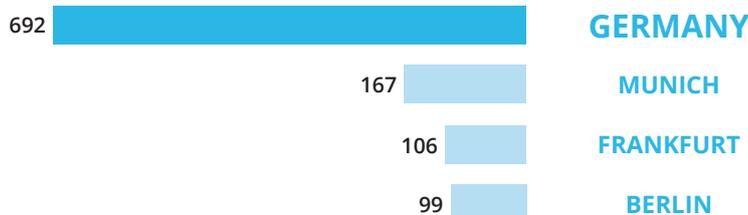
*Includes fund of funds managers.

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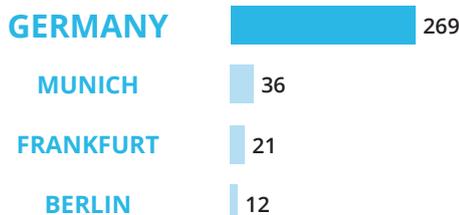


ALTERNATIVES IN GERMANY

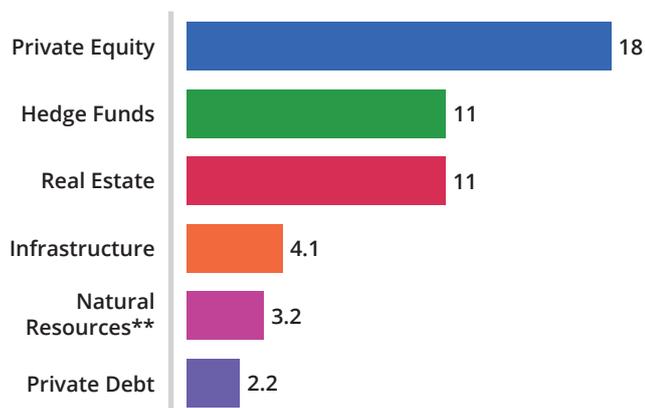
NO. OF FUND MANAGERS*



NO. OF INSTITUTIONAL INVESTORS*



GERMANY-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

19%

Private sector pension funds account for the largest proportion of all Germany-based investors in alternatives.

4

Average number of funds Germany-based investors plan to allocate to in the next 12 months.

STADA ARZNEIMITTEL AG

In August 2017, Bain Capital and Cinven acquired 63.85% of all outstanding shares of Stada Arzneimittel AG, valuing the deal at €5.2bn including debt. Stada Arzneimittel is a pharmaceutical company which specializes in the production of generic and OTC (over-the-counter) drugs. Partners Group also participated in the PIPE deal – the largest Germany-based private capital deal announced since the start of 2017.

PATRIZIA WOHNMODUL I

The largest Germany-focused private capital fund to close in the past 10 years, the private real estate fund reached a final close on €2bn in September 2011. PATRIZIA Immobilien AG's vehicle targets residential assets in Germany, investing in a combination of existing and asset-repositioning properties as well as project developments.

EXTOREL

The Munich-based family office plans to make between two and three hedge fund investments in the next 12 months, gaining exposure solely via single-manager vehicles. It will invest in relative value arbitrage, long/short credit, multi-strategy, event driven and long/short equity strategies with a global reach, focusing primarily on the US and emerging markets.

WERMUTH EASTERN EUROPE LONG/SHORT STRATEGY

The equity-focused Wermuth Eastern Europe Long/Short Strategy is the top performing Germany-based hedge fund with a three-year annualized return of 11.77% (as at March 2018). It seeks to provide long-term capital growth with controlled risk through a combination of equity focused sub-strategies. The systematic vehicle utilizes the firm's proprietary software to identify, regularly review and invest in a universe of what the software considers to be eligible stocks.

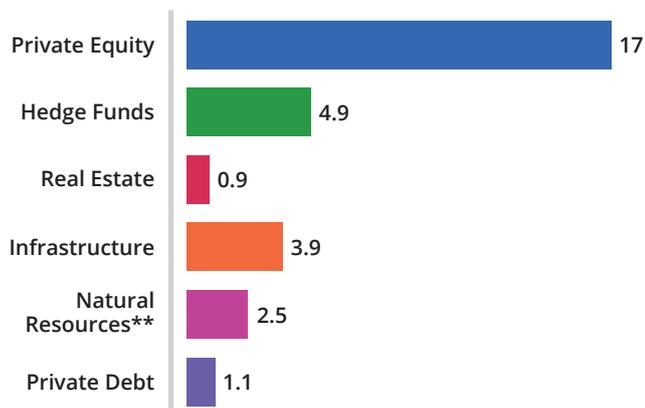
*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.

ALTERNATIVES IN THE NETHERLANDS



NETHERLANDS-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

57%

Private sector pension funds account for the largest proportion of all Netherlands-based investors.

2

Average number of funds Netherlands-based investors plan to allocate to in the next 12 months.

Q-PARK

In May 2017, KKR acquired the Dutch parking operator Q-Park for €2.95bn. The firm operates parking facilities across Europe, owning 830,000 parking spaces. The infrastructure deal is the largest Netherlands-based private capital deal announced since the start of 2017.

BEDRIJFSLEENINGENFONDS

The largest Netherlands-focused private capital fund to close in the past 10 years, the private debt fund reached a final close on €960mn in March 2017. The vehicle, managed by Netherlands Investment Institution, targets senior debt, focusing on the education/training, energy and healthcare industries in the Netherlands.

PGB PENSIOENDIENSTEN BV

The Amsterdam-based asset manager will invest in at least two unlisted infrastructure funds in the next 12 months, committing between €50mn and €200mn to each fund. It will target vehicles with a primary strategy, focusing on a variety of industries on a global basis.

MINT TOWER ARBITRAGE FUND - CLASS I

Managed by Mint Tower Capital Management, Mint Tower Arbitrage Fund is the top performing Netherlands-based hedge fund with a three-year annualized return of 6.50% (as at March 2018). It is a convertible and volatility arbitrage-focused hedge fund which launched in 2010. By employing a combination of the two strategies, the fund aims to deliver positive returns irrespective of market conditions.

*Includes fund of funds managers.

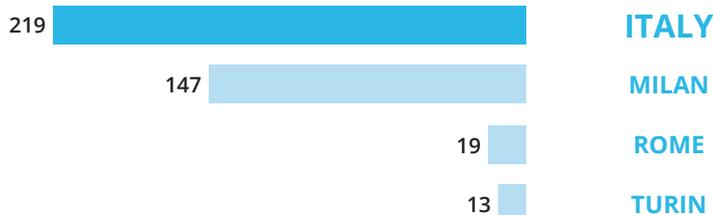
**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.



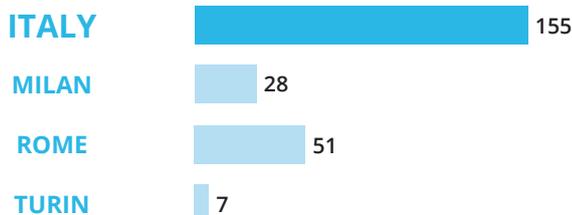
AUM: €17bn

ALTERNATIVES IN ITALY

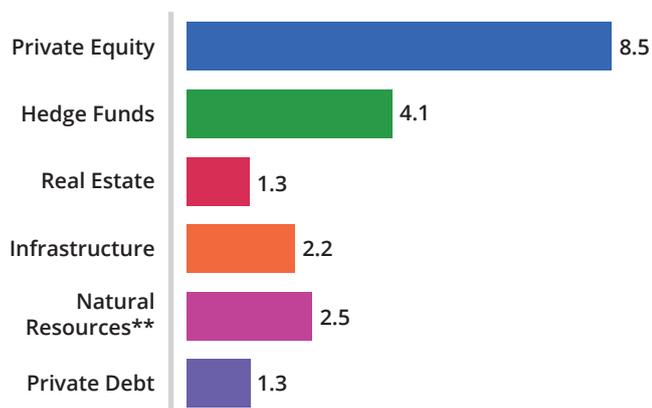
NO. OF FUND MANAGERS*



NO. OF INSTITUTIONAL INVESTORS*



ITALY-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

79%

of Italy-based investors allocate to real estate, the largest proportion allocating to any asset class.

2

Average number of funds Italy-based investors plan to allocate to in the next 12 months.

FEDRIGONI SPA

In December 2017, Bain Capital acquired Fedrigoni SpA, an international producer of paper, film, self-adhesive and related products for a reported €650mn. The buyout deal is the largest Italy-based private capital deal announced since the start of 2017.

ENPAM

The Rome-based public pension fund will be committing to up to five new private equity funds in the next 12 months, targeting distressed debt and secondaries on a global basis.

FONDO INVESTIMENTI PER L'ABITARE

The largest Italy-focused private capital fund to close in the past 10 years, the private real estate fund of funds reached a final close on over €2bn in March 2012. The fund is managed by CDP Investimenti and targets opportunistic and value added strategies, focusing its investments on the social housing sector throughout Italy.

FININT BOND FUND - CLASS A

Finint Bond Fund is the top performing Italy-based hedge fund with a three-year annualized return of 7.44% (as at March 2018). It is a fixed income arbitrage-focused hedge fund managed by Enrico Marchi and Andrea de Vido's Finanziaria Internazionale Investments.

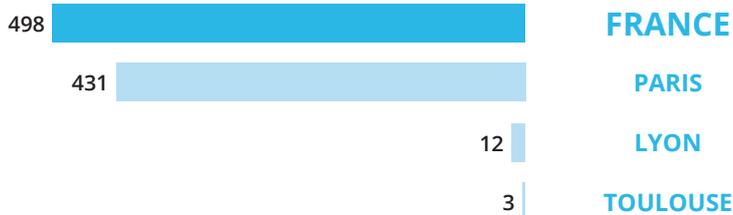
*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.

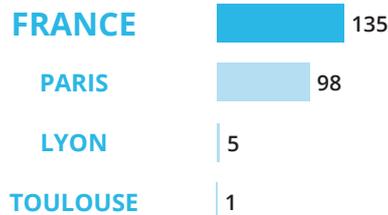
ALTERNATIVES IN FRANCE



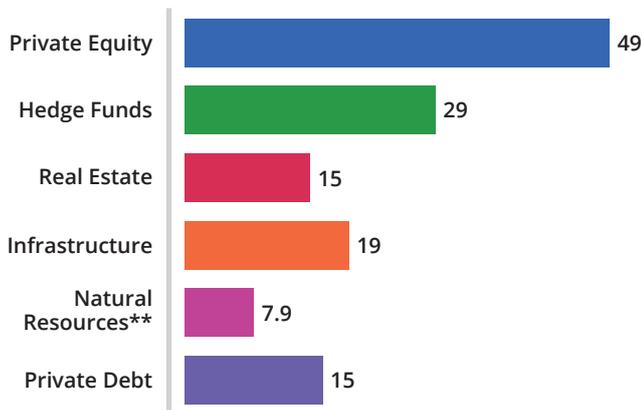
NO. OF FUND MANAGERS*



NO. OF INSTITUTIONAL INVESTORS*



FRANCE-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

81%

of France-based investors allocate to private equity, the largest proportion allocating to any asset class.

5

Average number of funds France-based investors plan to allocate to in the next 12 months.

DOMUSVI

In June 2017, Intermediate Capital Group and Sagesse Retraite Santé acquired a majority stake in DomusVi from PAI Partners for €2.4bn. The buyout deal for the healthcare company is the largest France-based private capital deal announced since the start of 2017.

FRANCE INVESTISSEMENT III

The largest France-focused private capital fund to close in the past 10 years, the private equity fund of funds, managed by Bpifrance Investissement, reached a final close on €2bn in April 2012. It will invest in both regionally and nationally focused vehicles, targeting a range of fund types including venture capital and turnaround.

BPIFRANCE

The Maison-Alfort-based sovereign wealth fund will invest in up to 40 funds across both private equity and private debt in the next 12 months, and will consider re-ups and new managers. It focuses its investments primarily on France.

ORSAY MERGER ARBITRAGE FUND - USD SHARE CLASS 3

Orsay Merger Arbitrage Fund is the top performing France-based hedge fund with a three-year annualized return of 11.21% (as at March 2018). It is an Ireland-domiciled hedge fund focused on risk/merger arbitrage opportunities primarily in the US. The fund launched in 2011 with €100mn in seed capital.

*Includes fund of funds managers.

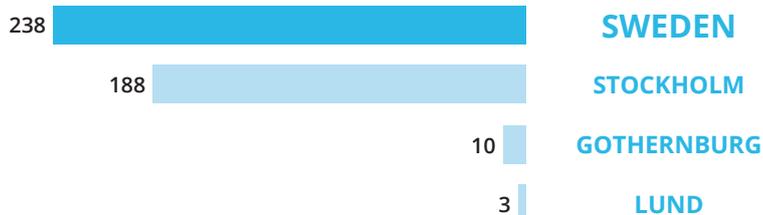
**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.



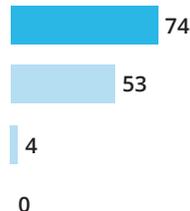
AUM: €78bn

ALTERNATIVES IN SWEDEN

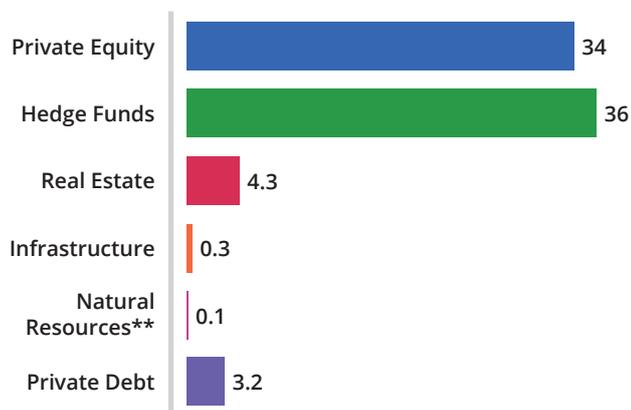
NO. OF FUND MANAGERS*



NO. OF INSTITUTIONAL INVESTORS*



SWEDEN-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

74%

of Sweden-based investors allocate to real estate, the largest proportion allocating to any asset class.

2

Average number of funds Sweden-based investors plan to allocate to in the next 12 months.

MARKBYGDEN WIND FARM

In November 2017, GE and Green Investment Group (GIG) acquired the Markbygden Wind Farm from Svevind in an infrastructure deal worth €800mn. The subject of the largest Sweden-based private capital deal in 2017, the 650 MW facility is currently under development.

AREIM FUND II

The largest Sweden-focused private capital fund to close in the past 10 years, the private real estate fund reached a final close on SEK 2.8bn (€320mn) in July 2013. The fund, managed by Andersson Real Estate Investment Management, pursues value added investments in Swedish residential development projects.

AP-FONDEN 2

The Gothenburg-based public pension fund will commit up to SEK 3.5bn (€340mn) to up to 10 private equity funds, targeting buyout, venture capital and growth strategies on a global basis in the next 12 months.

GLADIATOR FUND

Focused primarily on Nordic states, Gladiator Fund is a Sweden-domiciled hedge fund managed by Max Mitteregger Asset Management. Launched in 2005, the equity-focused vehicle is the top performing Sweden-based hedge fund with a three-year annualized return of 13.99% (as at March 2018), and invests in a range of market instruments to achieve its investment objectives.

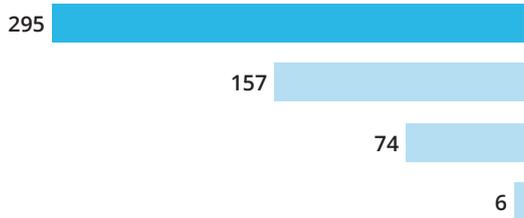
*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.

ALTERNATIVES IN SPAIN



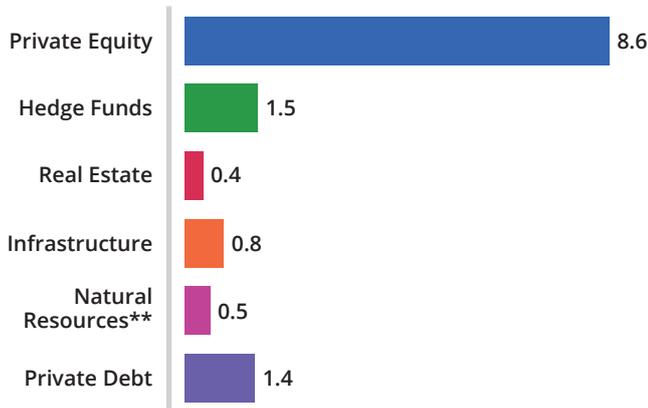
NO. OF FUND MANAGERS*



NO. OF INSTITUTIONAL INVESTORS*



SPAIN-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE



of Spain-based investors allocate to private equity, the largest proportion allocating to any asset class.



Average number of funds Spain-based investors plan to allocate to in the next 12 months.

GAS NATURAL FENOSA

In February 2018, CVC Capital Partners acquired a 20.07% stake in Gas Natural Fenosa, a natural resources energy company in Madrid. The PIPE deal, worth €3.8bn, was the largest Spain-based private capital deal since the start of 2017.

PORTOBELLO CAPITAL FUND IV

The largest Spain-focused private capital fund to close in the past 10 years, the private real estate fund reached a final close on €600mn in February 2018. Portobello Capital's fund will invest in growing Spanish businesses across a diverse range of industries.

VIDACAIXA

The Barcelona-based insurance company will commit up to €20mn to one or two private real estate funds over the next 12 months, targeting European and North American markets and all real estate strategies, excluding distressed debt.

BEN OLDMAN SPECIAL SITUATIONS FUND

Launched in 2013, the distressed-focused Ben Oldman Special Situations Fund is the top performing Spain-based hedge fund with a three-year annualized return of 9.74% (as at March 2018). Through its global reach and ability to consider opportunities outside its core investment focus, the fund targets an absolute return of 20% per annum.

*Includes fund of funds managers.

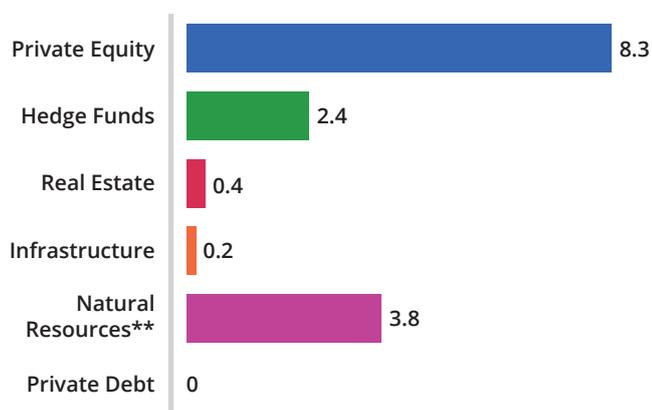
**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.



ALTERNATIVES IN NORWAY



NORWAY-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE

76%

of Norway-based investors allocate to real estate, the largest proportion allocating to any asset class.

3

Average number of funds Norway-based investors plan to allocate to in the next 12 months.

VISMA CONSULTING

In June 2017, an investor group led by Hg together with GIC, Montagu Private Equity and ICG acquired Visma Consulting from KKR and Cinven. The buyout deal for the accountancy software business servicing provider was valued at NOK 15.2bn (€1.6bn), making it the largest Norway-based private capital deal since the start of 2017.

FORMUESFORVALTNING

The Oslo-based wealth manager typically allocates 12% of its total assets to hedge funds and will invest across a range of strategies on a global scale. In terms of first-time funds, the firm will consider providing seed capital, and will invest in emerging managers and spin-offs.

PARETO PROPERTY PARTNERSHIP IS/AS

The largest Norway-focused private capital fund to close in the past 10 years, the private real estate fund reached a final close on NOK 2.25bn (€245mn) in December 2014. The vehicle, managed by Pareto Securities, targets core and core-plus strategies, investing in logistic, retail and warehouse properties in the greater Oslo region.

AAM ABSOLUTE RETURN FUND - CLASS B (NOK)

AAM Absolute Return Fund is a global long/short equity hedge fund focused primarily on the natural resources and wider energy sector. The Ireland-domiciled fund is the top performing Norway-based hedge fund with a three-year annualized return of 23.59% (as at March 2018), and seeks to identify and exploit inefficiencies in publicly traded securities.

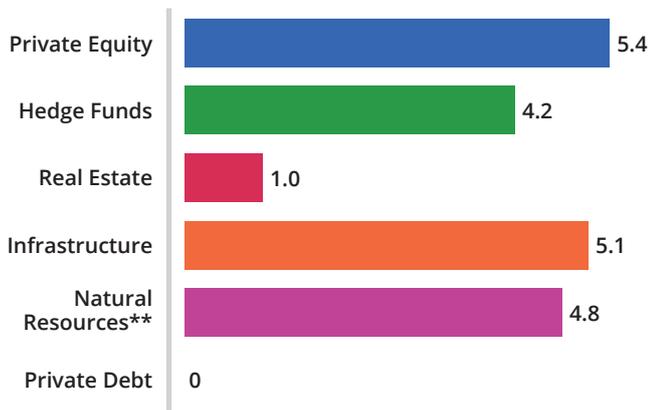
*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.

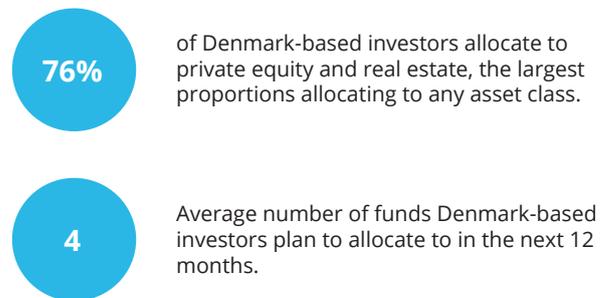
ALTERNATIVES IN DENMARK



DENMARK-BASED AUM BY ASSET CLASS (€bn)



INVESTOR APPETITE



MAERSK OIL

In August 2017, Total acquired Maersk Oil, the oil division of Danish shipping conglomerate AP Moller-Maersk, in a deal worth \$7.5bn (€6.3bn), the largest Denmark-based private capital deal since the start of 2017.

SEED CAPITAL DENMARK III K/S

The largest Denmark-focused private capital fund to close in the past 10 years, the venture capital fund reached a final close on €819mn in April 2016. SEED Capital Denmark's early-stage fund focuses on seed-stage investments within the IT and med-tech sectors.

LÆRERNES PENSION

The Hellerup-based public pension fund plans to commit DKK 1.1-1.8bn (€150-240mn) to five or six new private equity funds over the next 12 months. It will target buyout and growth strategies in North America and Europe and typically allocates between €30mn and €40mn per fund.

DANSKE INVEST HEDGE FIXED INCOME STRATEGIES FUND - EUR

Launched in 2005, Danske Invest Hedge Fixed Income Strategies Fund is a US-, Europe- and Nordic-focused hedge fund managed by Danske Invest. The fund is the top performing Denmark-based hedge fund with a three-year annualized return of 10.19% (as at March 2018). Its relative value approach targets returns uncorrelated to other asset classes, irrespective of market conditions.

*Includes fund of funds managers.

**Some assets double-counted in other private capital asset classes due to the nature of underlying investments.



**SECTION TWO:
PRIVATE EQUITY & VENTURE
CAPITAL**

PRIVATE EQUITY IN EUROPE: RECORD ACTIVITY IN UNCERTAIN TIMES

- Christopher Elvin, Head of Private Equity Products

As the second largest region for private equity investment, activity in Europe shapes global trends and impacts investment portfolios around the world. In recent years, and in line with the global trend, private equity activity in Europe has reached post-crisis record levels, both in terms of the number and aggregate value of deals.

This record activity was seen in a period where much of the narrative surrounding Europe was that of uncertainty and volatility. 2016 saw the UK vote to leave the EU, creating uncertainty in one of the largest economies in Europe, while throughout 2017 there were general elections held in France, Germany and the Netherlands amid a rise in anti-establishment sentiment. Alongside this political activity was changing monetary policy: in November 2017 the Bank of England increased interest rates for the first time since 2007, and in mainland Europe the ECB showed signs of tapering its bond-buying program. Navigating these conditions can prove challenging and it seems that, amid volatility in public markets, private equity investment has been on the up.

DEALS IN 2016

As seen on page 24, the aggregate value of private equity-backed buyout deals completed for European companies has remained at post-crisis highs since 2014. However, when looking at quarterly activity in the UK compared to the remainder of Europe, more trends begin to emerge. Q2 2016 saw a spike in deal value outside the UK as Finland-based Supercell OY was acquired by a Tescent-led consortium for \$8.6bn. However, perhaps most noticeable is the buyout activity in H2 2016. Fig. 2.1 shows a significant decline in deal value in both the UK and Europe in Q3 2016, likely linked to the market uncertainty caused by, and the future ramifications of, the Brexit vote. This being said, in the quarter immediately after, deal flow recovered as several large deals were completed for UK companies:

- In October 2017, Cinven and CVC Capital Partners agreed a £1bn deal for NewDay Group, a leading consumer finance provider, specializing in the UK credit card market.
- Toronto-based Onex Corporation agreed a £1.35bn deal in December for Parkdean Resorts, a UK caravan-holiday parks operator.

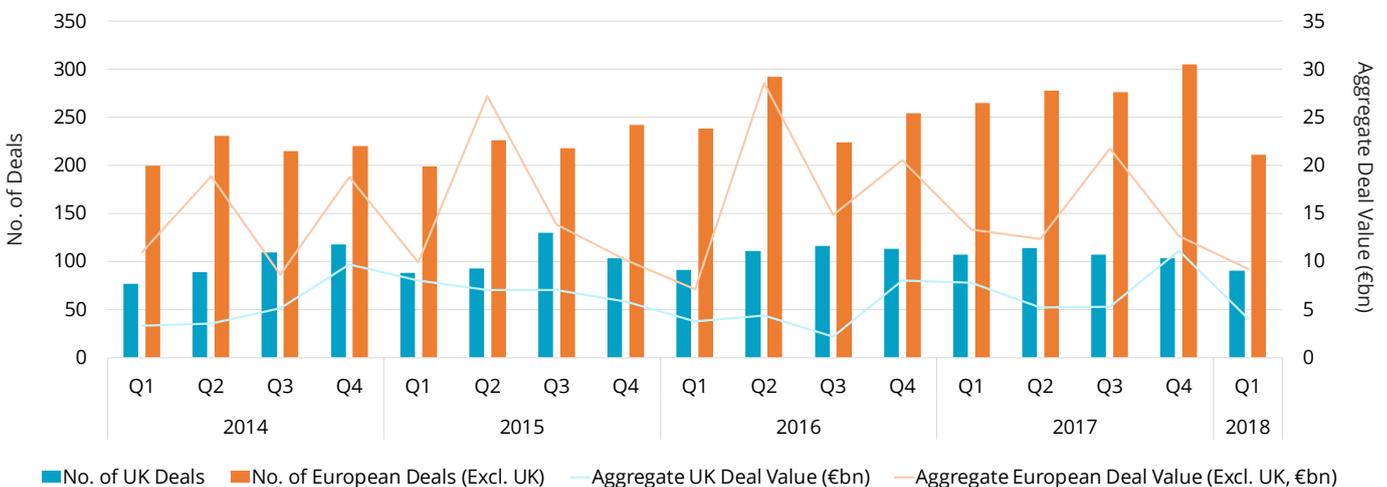
Interestingly, each of these portfolio companies were considering IPOs in 2016 but opted for sales, as private equity firms were perhaps able to benefit from UK stock market uncertainty.

DEALS IN 2017

As with 2016, H2 provides the more noticeable activity in 2017, with sharp growth in aggregate deal value occurring in Europe in Q3 and in the UK in Q4, almost matching the value of all other European deals in Q4 2017. As seen in Fig. 2.3, Germany, France and the Netherlands together accounted for just over half of the total value of deals completed in Europe (excluding the UK) in 2017, with activity remaining high in these markets amid the general elections. Indeed, 10 of the 20 largest deals of Q3 2017 in mainland Europe were for companies based in France (4), Germany (3) and the Netherlands (3), including:

- Beijing Sanyuan Foods Co., Ltd and Fosun International acquired St-Hubert, a food company based outside Paris, for €625mn in July.
- Also in July, PAG Asia Capital entered into a strategic growth partnership with Amsterdam-based Home Credit Group. The Hong Kong-based

Fig. 2.1: Private Equity-Backed Buyout Deals: UK vs. Rest of Europe, Q1 2014 - Q1 2018



Source: Preqin

fund manager invested CNY 2,000 (~€278mn) with the intention of becoming a value-added minority shareholder of the group's operations in China.

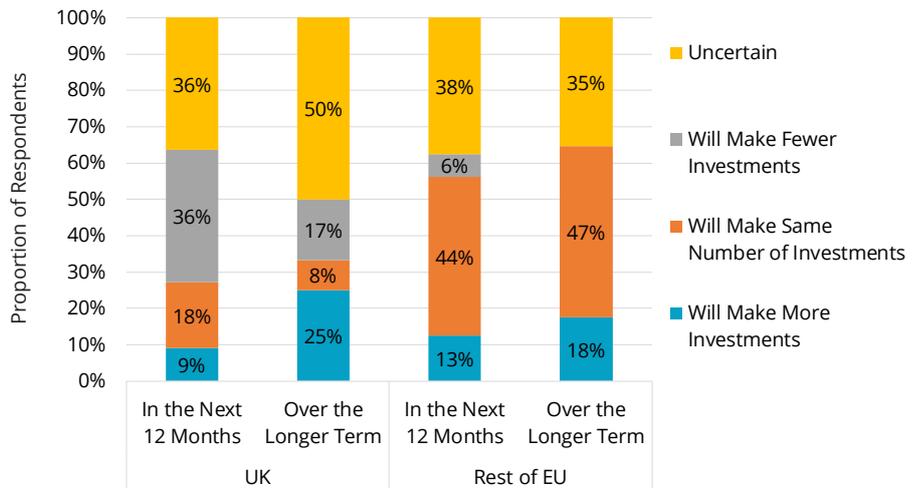
- In August, Bain Capital and Cinven acquired a majority stake in Frankfurt-based Stada Arzneimittel AG for €5.24bn, the largest ever private equity-funded takeover of a German listed company.

Similar to the Q3 activity in Europe, UK deal flow in Q4 2017 was boosted by a mega deal: the sale of Unilever's spreads business to KKR in a deal worth €6.8bn, with brands such as Flora and Becel included in the sale. Interestingly, in Q1 2018 Unilever announced that it would be consolidating its headquarters in the Netherlands, merging its London- and Rotterdam-based entities.

APPETITE FOR EUROPEAN INVESTMENT

The post-crisis-high level of deal activity seen across Europe in recent years, as well as some key larger deals being completed, indicates that investor appetite for European companies has remained strong over the course of an uncertain period.

Fig. 2.2: Fund Manager Views on the Impact of Brexit on Their Future Private Equity Investments in the UK vs. Rest of EU

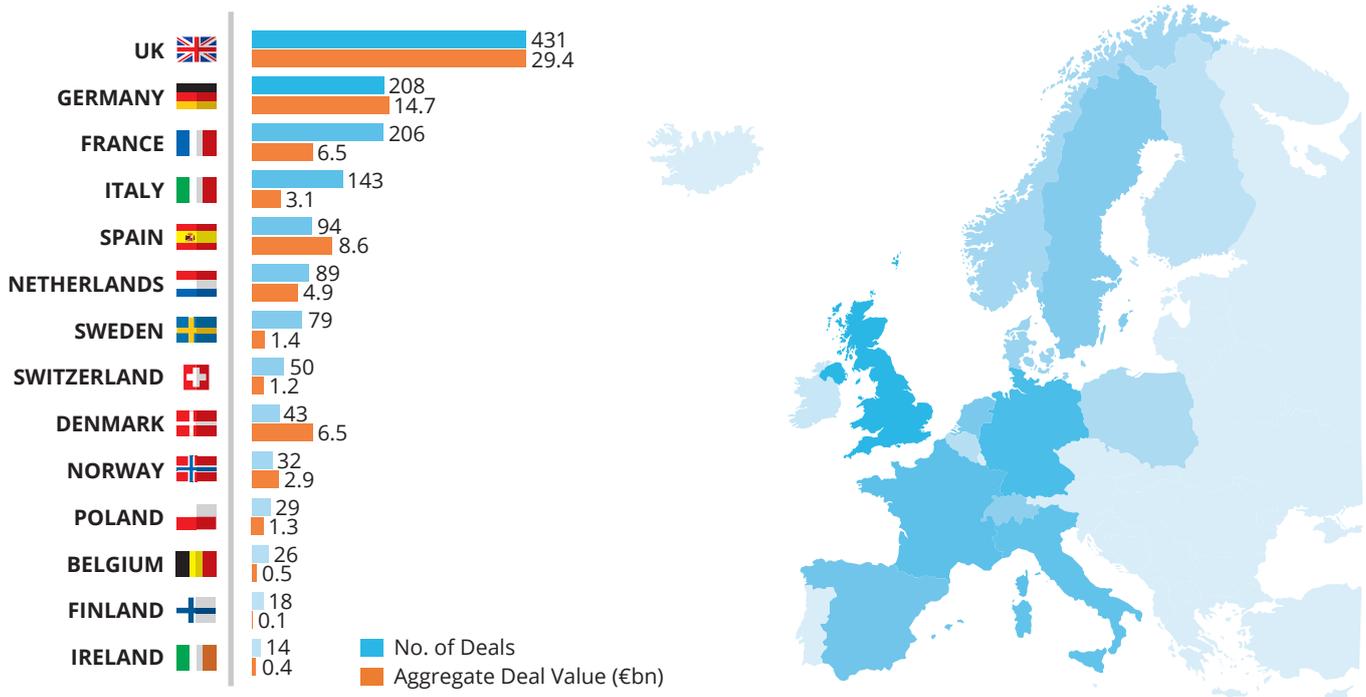


Source: Preqin Fund Manager Survey, July 2016

Immediately after the result of the UK/EU referendum, Preqin interviewed private equity fund managers on their investment plans for the region in light of the result. While many were uncertain of their future plans, a significant 25% and 18% of fund managers indicated they would be investing more in the UK and the rest of the EU over the longer term respectively (Fig. 2.2). With significant deals completed towards the end of 2017,

and steps being taken towards a Brexit agreement, perhaps we are beginning to see this increased level of investment. Furthermore, with €30bn secured by private equity vehicles targeting Europe that have closed so far in 2018 – following years of record Europe-focused fundraising (see page 24) – the potential for future private equity investment in Europe looks strong.

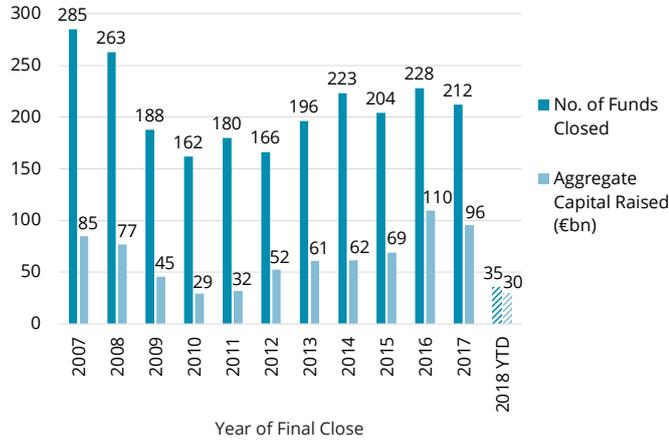
Fig. 2.3: Private Equity-Backed Buyout Deal Activity in Europe in 2017 by Location



Source: Preqin

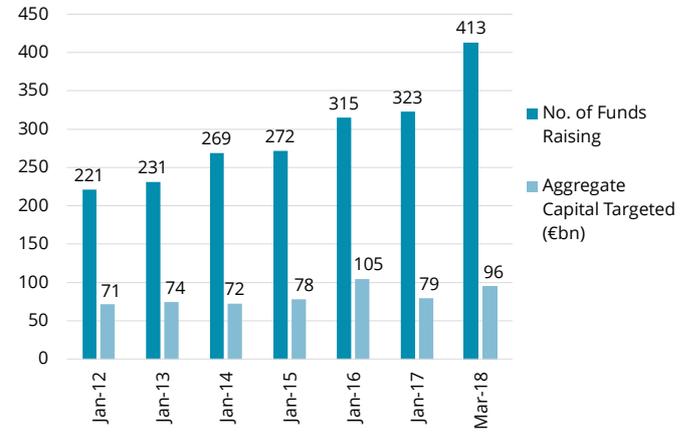
KEY PRIVATE EQUITY & VENTURE CAPITAL CHARTS

Fig. 2.4: Europe-Focused Private Equity Fundraising, 2007 - 2018 YTD (As at March 2018)



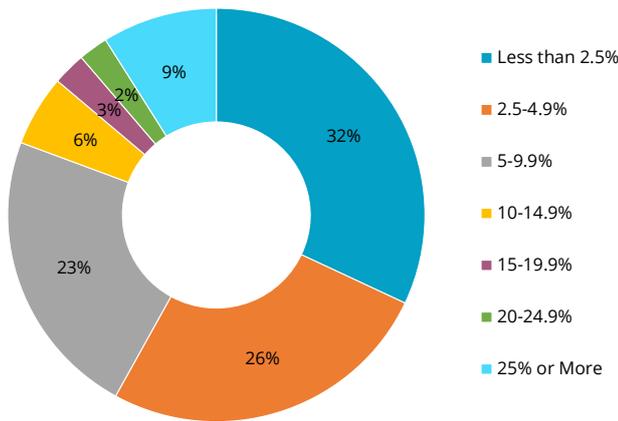
Source: Preqin

Fig. 2.5: Europe-Focused Private Equity Funds in Market over Time, 2012 - 2018



Source: Preqin

Fig. 2.6: Europe-Based Institutional Investors in Private Equity by Current Allocation (As a Proportion of Total Assets)



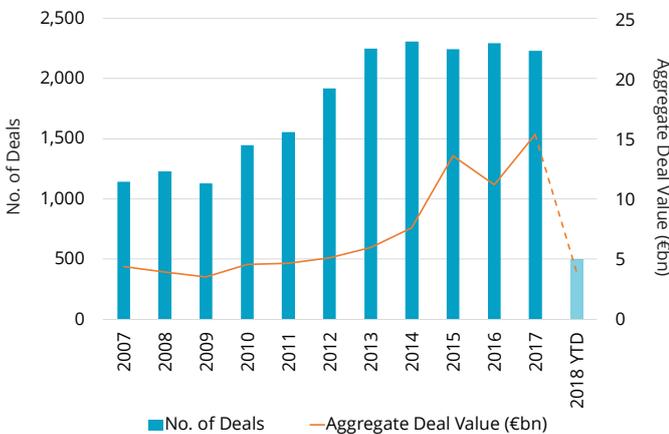
Source: Preqin

Fig. 2.7: Private Equity-Backed Buyout Deals in Europe, 2006 - 2018 YTD (As at March 2018)



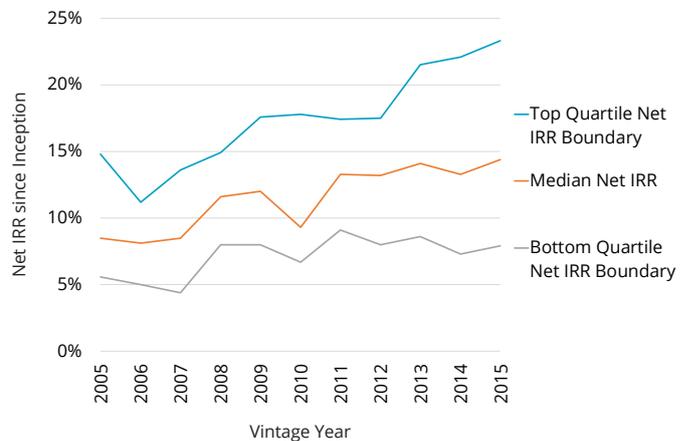
Source: Preqin

Fig. 2.8: Venture Capital Deals* in Europe, 2007 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 2.9: Europe-Focused Private Equity Funds: Median Net IRRs and Quartile Boundaries by Vintage Year



Source: Preqin

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



SECTION THREE: HEDGE FUNDS

BEAT THE INDEX, DON'T BEAT THE MARKET

- Harold de Boer, Transtrend

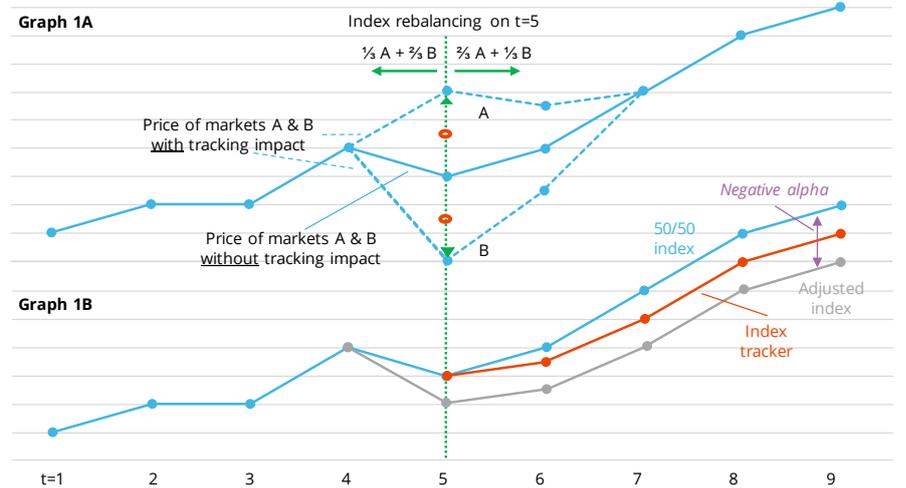


Markets are not a train that one can hop on and hop off without impacting its timetable. All trading activity has market impact. In fact, market impact is the only force that drives prices. Think about it: the Apple share price does not go up because the company presents great figures – it goes up because investors are willing to pay more for a share than they did before. That could be because of the figures presented. But the impact is the same when investors are buying for any other reason. For instance to track or beat an index.

Index investing involves very little trading for the person buying the investment. But for the market participant offering it, index investments do require trading. Whether it is to adjust for changes in the composition of the index or for in- or outflows, for instance due to investors rebalancing across different 'passive' investment strategies. All this trading activity will impact the markets that together make up the index. As we will illustrate, a direct impact is that this trading dampens the index returns. This is an impact that an investor seeking to track the index does not take into account when he benchmarks his returns to the index.

To understand the mechanism we assume an imaginary index consisting of only two markets that are essentially the same: without any index-tracking trading impact, their returns would be identical (the blue solid curve in Graph 1A). Because they are identical, all indices composed of any linear combination of these two markets would have the exact same returns. Further assume that this specific index consists of one-third of market A and two-thirds of market B initially. On the close of the fifth day this index will be adjusted to two-thirds of market A and one-third of market B. All investors tracking this index will then have to buy market A to double their position in A; and they will have to sell market B to halve their position in B. It is naive to assume that this can be

Fig. 1: The Direct Market Impact of Index Tracking



Source: Transtrend

done without market impact. In the real marketplace, market A will close higher and market B lower as a result of the index rebalancing – we assume by three units either way. After some time, let us assume two days in equal steps, this temporary mispricing will be corrected, and markets A and B will return to the levels that they would have had without the index trackers' impact (the upper and lower dashed lines in Graph 1A showing the price series of markets A and B, respectively).

To examine what happens to this index as a result of its composition adjustment, let us have a look at an alternative, unadjusted, index comprised of 50% in markets A and B (the blue curve in Graph 1B). The returns of this 50/50 index are exactly what the returns of markets A and B would have been without the impact of the investors tracking the other, adjusted index: during the mispricing the impacts on markets A and B cancel each other out in this particular combination; after the correction, any unadjusted combination of A and B will again have the same returns. The adjusted index's returns, however, (the grey curve in Graph 1B) lag the 50/50 index by a unit per the close of the fifth day, by a unit and a half per the close of the sixth day, and by two units per the close of the

seventh day. This underperformance will remain until the next revision of the index.

This is the direct market impact of the trading activity associated with index tracking. One could say that the blue curve represents the beta of a truly passive long-only investment in these markets. An index-tracking strategy achieving the returns of the adjusted index, the grey curve, delivers this beta with a *negative alpha*.

The mechanism is straightforward. Whenever trading an index requires a position to be increased, in this example in market A, the buying activity will drive up the existing position's price, after which a price correction to the 'true' price will follow. However, the upward impact of buying necessarily affects the previous smaller position, while the downward impact of the correction affects the resulting larger position. Conversely, for every position that needs reducing, the downward impact of selling affects the previous larger position size, while only the resulting smaller position is affected by the upward impact of the ensuing correction.

Some investors may think that their investment will not be vulnerable to this

mechanism because they are directly invested in a fund or other structure that follows this index, so they do not need to trade to keep track with the index. But such structures can only be offered by intermediaries who do execute the necessary trading activity, and the index will bear the market impact that these intermediaries' activity will bring. Other, relatively small investors may think that they will not be affected due to the small size of their orders. But small order size will not help either, when there are other, larger investors tracking the index along with the smaller ones.

Of course, most large index investors are very well aware of their potential market impact. But often they seem to consider this something bad that the market does to them, rather than something that they do to the market. Efforts aimed at getting a return close to the index, motivating traders to accomplish this or even giving them an incentive to do better than the index, are likely to make things worse.

“ Markets are not a train that one can hop on and hop off without impacting its timetable

Back to the fifth day in the example above. An index investor who manages to move market A up, by buying large quantities

towards the end of the day and paying an average price nicely in the middle – i.e. one and a half units higher instead of the three units higher at the close (and who similarly sells down market B) – that investor will outperform the index that is his benchmark (the orange curve in Graph 1B ends up higher than the grey curve). But for every unit that he outperforms his index, he will have underperformed the index's returns as they would have been without his activity. So the only reason that this index investor outperforms his benchmark is that he actually brings the index down; he adds nothing to his own performance, nor does he contribute anything to the functioning of the market.

This is what 'trying to outperform an index' unfortunately often comes down to, especially where it concerns indices that require a lot of trading activity, such as commodity indices. Index trackers' typical trading activity, of relatively large moves in a relatively short window just before the market closes, can for instance be seen in the constituent markets of the Goldman Sachs Commodity Index, just to name a popular one.

Other 'passive' investment strategies that have been growing in popularity, such as certain smart (alternative) beta products, also bring such activity to markets. In fact, any investment manager who promises to deliver a return series that can be composed of observed market prices, while those market prices are actually

impacted by the trading activity of that investment manager, is prone to deliver this self-imposed *negative alpha*. When the only investment task at hand is to follow a simple set of rules, without due regard to the effect on the marketplace, both the returns of the investment strategy and the marketplace will suffer. Truly active investment managers striving to buy low and sell high – making the market instead of beating it – are necessary to counter this growing market force.

That is why a reward for simply outperforming an index should be regarded as a perverse incentive. Its muddy footprints have contaminated many markets. Of course. If we expect investors to beat the market, if we make their pay dependent on by how much they beat the market, we should not be surprised that markets will indeed get beaten up. Contributing to the market requires other incentives and another state of mind, one in which tracking and beating an index is not the holy grail of investing.

TRANSTREND

Mr. De Boer is the architect of Transtrend's Diversified Trend Program – a systematic medium term trend following trading program – and is responsible for research & development, portfolio management and trading.

Transtrend has over 25 years of experience in active investment management through the development and application of systematic trading strategies. Rooted in commodities trading, Transtrend is based in Rotterdam, the Netherlands and manages \$5bn in assets. Transtrend cultivates an environment of innovation, independent thinking and being in control, and aims to contribute to well-functioning, well-organized and reliable markets.

www.transtrend.com

HEDGE FUNDS IN A REGULATED EUROPE

- Amy Bensted, Head of Hedge Fund Products

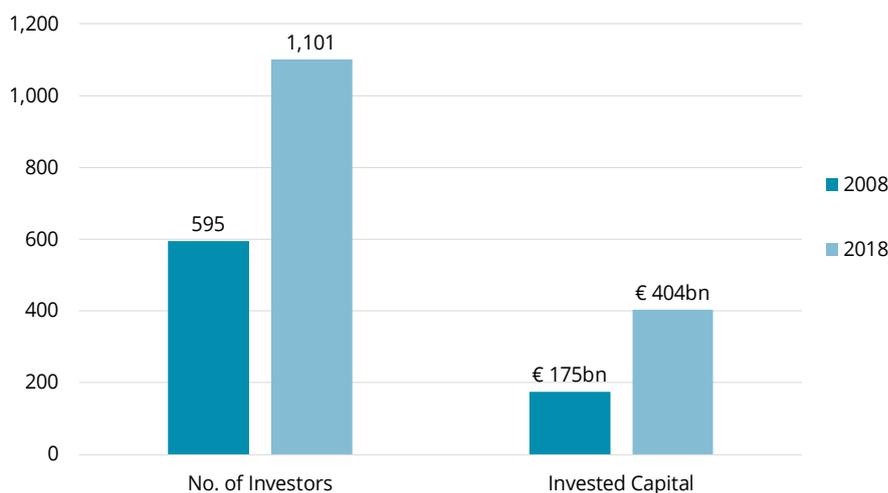
What is impacting Europe-based hedge funds today?

Globally, the hedge fund sector has fundamentally shifted over the past decade. The fallout of the GFC triggered many of those changes, leading to more and more investors turning to hedge funds post-crisis and, as a result, the industry became more institutionalized. As seen in Fig. 3.1, in 2008 we estimate that Europe-based investors allocated a combined €175bn to hedge funds; today there are over 1,100 institutional investors in Europe actively investing over €404bn in hedge funds – a huge increase.

With an increasingly institutional client base, we have seen hedge funds evolve and professionalize to meet their growing demands. Also, we have seen the industry increasingly attract the attention of the regulators, both to protect this growing investor base, and to limit the impact of alternative managers in another crisis event. And the impact of regulation – in an uncertain political climate – is probably having the largest effect on the European hedge fund industry we see today.

Certainly, the regulatory appetite is beginning to look much more different in Europe than in the US, and that could lead to bifurcation in the industry in both regions. This year we have seen MiFID II come in in January, and GDPR is fast approaching. In contrast, in the US, President Trump is signalling the loosening of regulations that impact hedge fund managers. So, this presents challenges and additional costs for managers in the EU, and does not seem to be showing any signs of abating, which does make the operational environment more challenging. Particularly when costs are being squeezed by investors.

Fig. 3.1: Europe-Based Hedge Fund Investors: Number and Total Capital Invested, 2008 vs. 2018



Source: Preqin

And that is without even mentioning the B-word: 'Brexit'. What does this mean for hedge fund managers in UK and Europe?

When it comes to the impact of Brexit on the European hedge fund industry, the only thing that is certain is that there is a lot of uncertainty. The 29 March 2019 deadline is less than a year away, and will have a potentially significant impact on the European hedge fund market – although what that means is far from clear.

There are lots of ways to think about what Brexit will mean for hedge funds – for instance, what will this mean for employment in the hedge fund sectors in the UK and Europe, or where hedge funds are based? As I mentioned, there has been an explosion in the size of the industry over the past decade. Today, the average investor is investing over 10% of their total AUM in hedge funds, and there are 3,000 hedge funds in Europe alone. And with that boom a whole service industry has grown up to support this growing sector. In 2017 we produced a study with AIMA looking at employment in the hedge fund sector; the study estimated that there are

390,000 individuals employed in the hedge fund industry (including related service providers) worldwide, estimating about 20% in Europe. That was a growth from 300,000 employees in the hedge fund world in 2010. So, the hedge fund industry has a huge part to play in economies across Europe – not just working to invest money on behalf of pension funds etc., but also to create employment and wealth. The UK is at the centre of the hedge fund industry in Europe, employing an estimated 56,000 individuals – will we see more managers move operations on to the continent? Will more individuals move to mainland firms? Time will tell.

What does all this mean for investors in Europe?

A significant effect on the pressures or challenges in the hedge fund industry globally has been continued innovation in regards to the products on offer. Regulatory change – both within the UCITS regime and through the introduction of the AIFMD – led to the emergence and growth of the alternative UCITS market over the past 10 years. Currently, we track 905 European UCITS products and

we estimate that a third of Europe-based investors retain an appetite for these alternative hedge fund vehicles. If you look at the source of private wealth in Europe, this grows to 41% of these investors using UCITS to access hedge fund strategies.

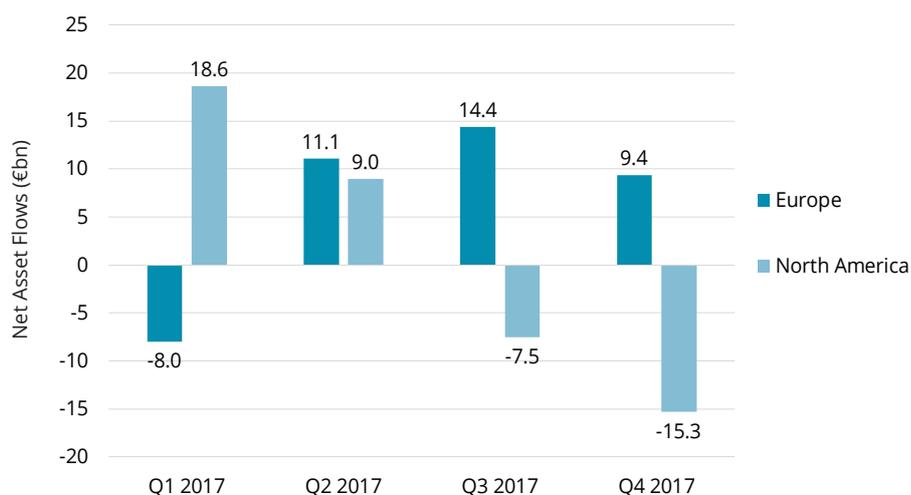
More recently, we are seeing the industry change at a faster rate than ever before. As a data provider, it is exciting to see the rapid pace of change that is going on in the hedge fund universe; over the past 12 months we have added cryptocurrencies, artificial intelligence and alternative risk premia to our hedge fund services to reflect the changing industry.

On the flip side, regulation could have a detrimental impact on the choice of funds EU investors have available to them, as managers look to avoid selling in the region until there is clarity on the impact of some newer regulations. This could have many possible outcomes: some of the larger Europe-based firms may accumulate more assets, or we may see investors begin to be more proactive in their searches for managers – if funds are less likely to come to them, it may become more of a task that investors need to reach out to fund managers. Certainly, we have seen a movement among institutions to begin to more proactively build out portfolios in recent years, and expect this to only grow. However, with 15,000 hedge funds out there, finding the right funds is a big task for investors.

What does 2018 hold in regard to funds and investors?

Despite the headwinds that European managers face, such as incoming regulations and Brexit, the European industry had a more successful 2017 than North American hedge funds. If you look

Fig. 3.2: Asset Flows: Europe- vs. North America-Based Hedge Funds, Q1 2017 - Q4 2017



Source: Preqin

at the results presented in Fig. 3.2, you can see that in North America in 2017, we saw net outflows over the second half of the year amounting to over €23bn, almost wiping out the H1 positive flows. In Europe, in contrast, we saw net inflows of €24bn across 2017.

This positive 2017 is also translating into a more active 2018 when it comes to new European products hitting the market. From our November survey of hedge fund managers, 39% of Europe-based managers reported they had a new launch planned for 2018; in contrast, just 23% of North America-based hedge fund managers reported the same. So, managers in Europe are seeing opportunity in 2018; in particular, we see that many have managed futures strategies slated for launch.

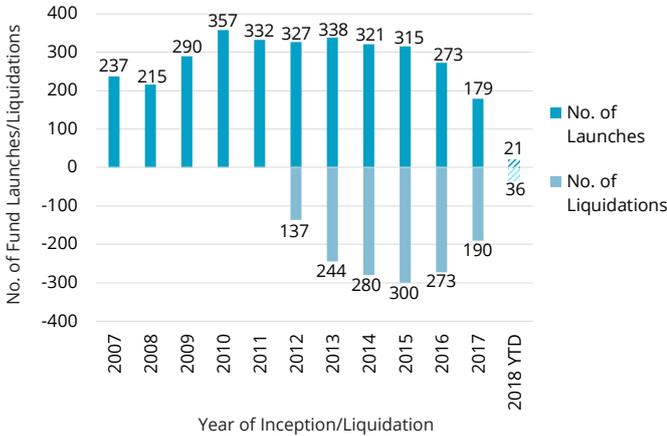
We are also seeing European investors being particularly active in 2018. Of the 355 investors with open mandates on Preqin's online platform, nearly half (47%) are based in Europe. This is a significant increase

from 2017, when 39% of fund searches on our product were issued by Europe-based investors. So, we could see an uptick in the amount of fresh capital coming into hedge funds from Europe and the total capital invested by these institutions increase further from the €404bn today.

So really, even though managers and investors alike in Europe are facing challenges, the outlook is positive: we expect more funds to launch this year and more capital to flow into hedge funds both from the European investor community, and also into funds based in the region.

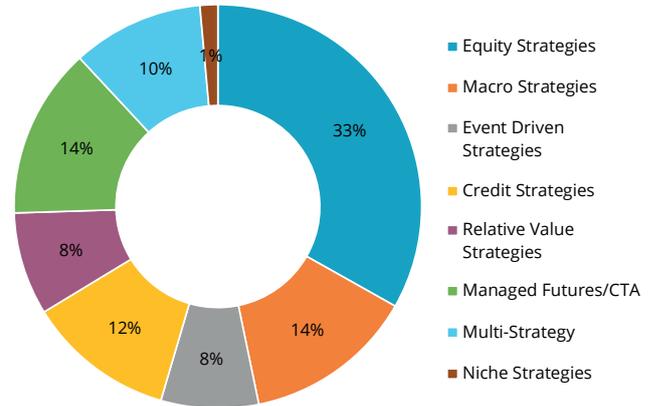
KEY HEDGE FUND CHARTS

Fig. 3.3: Europe-Based Hedge Fund Launches and Liquidations, 2007 - 2018 YTD (As at March 2018)



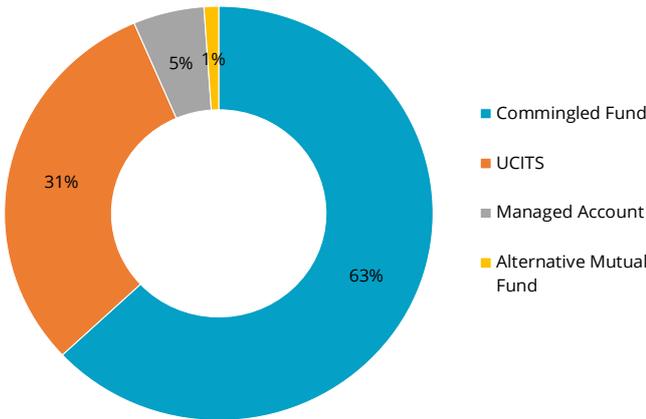
Source: Preqin

Fig. 3.4: Europe-Based Hedge Funds by Top-Level Strategy



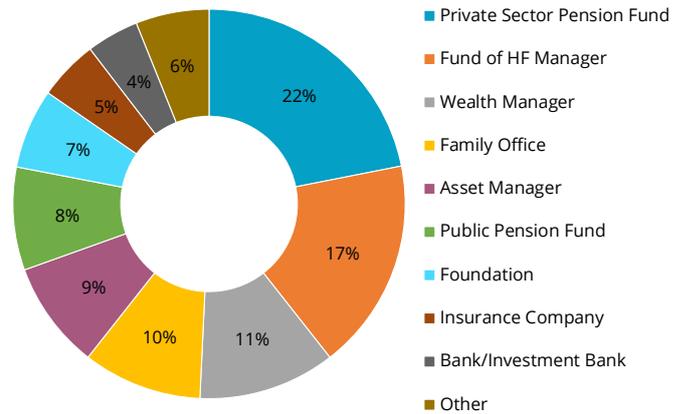
Source: Preqin

Fig. 3.5: Europe-Based Hedge Funds by Structure



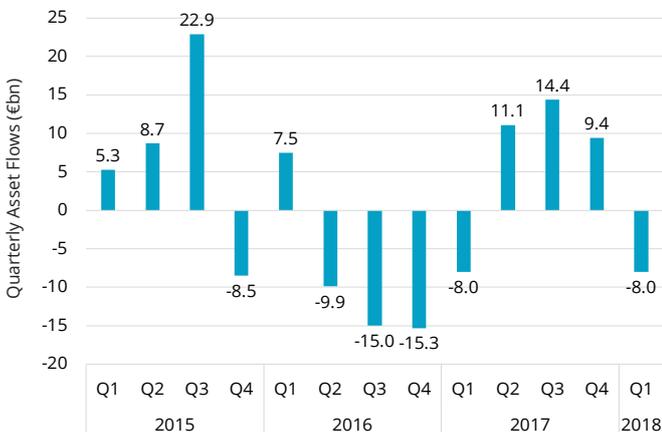
Source: Preqin

Fig. 3.6: Europe-Based Investors Active in Hedge Funds by Type



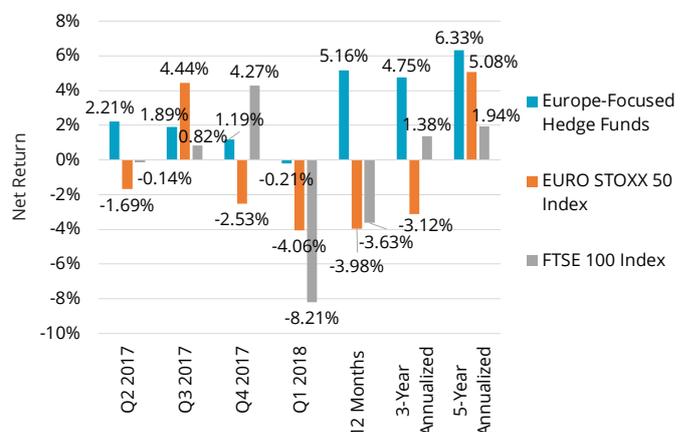
Source: Preqin

Fig. 3.7: Quarterly Europe-Based Hedge Fund Asset Flows, Q1 2015 - Q1 2018



Source: Preqin

Fig. 3.8: Performance of Europe-Focused Hedge Funds vs. All Hedge Funds and Public Market Indices



Source: Preqin

An aerial photograph of a city, likely New York City, with a prominent red overlay. The image shows a dense urban landscape with numerous buildings, streets, and a large park area in the foreground. The text "SECTION FOUR: REAL ESTATE" is centered in the middle of the image in a bold, white, sans-serif font.

SECTION FOUR: REAL ESTATE

REAL ESTATE: HOW TO COPE WITH CONVERGING EUROPEAN RATES OF RETURN?

- Jean-Marc Coly, Amundi



Over the last few years, the European real estate market has been characterized by diversity. Today, however, it seems to be significantly evolving. Real estate rates of return are converging downwards in the main EU countries, which causes worry among investors seeking at least consistent levels of performance. To cope with this convergence, with the pressure on rents and with the prospect of a hike in interest rates, Amundi is convinced one needs to go back to the fundamentals of real estate investment. This means favouring high-quality core assets, while focusing on geographic and sectorial diversity, in order to provide investors with both protection and return, says Jean-Marc Coly, CEO of Amundi Real Estate.

Oliver Senchal: What is the scale of the convergence process between rates of return on the European real estate market?

Jean-Marc Coly: It can be especially observed between Europe's main markets, i.e. Germany, France and the UK, once currency-hedging costs have been removed. But it is not just happening between national markets. Rates of return are also converging between cities in the same country, especially between the capital and the other main large metropolitan areas, or even between different neighbourhoods within one city.

In addition, we also see various types of real estate assets converging downwards. Logistics is one of the most telling examples: returns have gone under the 5% threshold, which is an all-time low.

OS: How can you adapt your investment strategy to this new deal environment?

JMC: We are not changing our investment strategy, but rather we choose to focus on our key strength: selecting high-quality core assets. We set evermore demanding selection criteria. Asset imperfections can be tolerated when they can be offset by the acquisition rate. But not in a very pricey market, when premiums can no longer cover the risk those imperfections pose for long-term performance. So we pay extra attention to the fundamentals, meaning the size of the real estate market, its level of liquidity, the quality of the asset that will ensure sustainable performance and finally the diversity and depth of the rental market, which will provide consistent return.

Even though they have converged downwards to 3-5%, major European markets remain key markets, provided one focuses on quality core assets, which can preserve portfolio value, should interest rates go up. Such assets also help take advantage of rising rents, induced by the economic recovery which can be witnessed in most parts of the eurozone.

“ Rates of return are also converging between cities in the same country

OS: What could be the consequences of a hike in interest rates?

JMC: The more-than-probable rise of interest rates in the eurozone needs to be taken into account in any real estate strategy. Its main consequence would be a downward adjustment of real estate values. However, as the economic recovery seems to be here for good, it should positively impact both the occupancy rate in our buildings and lease payment, thus offsetting this downward trend.

The quality of our investment in high-quality core assets also helps preserve values, as we strongly believe the rise in interest rates and economic growth will not equally impact all types of assets.

OS: Is the convergence of real estate rates putting an end to geographic diversification?

JMC: It is actually the opposite. The convergence process leads us to strengthen our diversification strategy

in Europe. Let me just remind you that Amundi was one of the very first asset managers to implement a pan-European strategy for its real estate investments, through partnerships with the best local players. This has helped us create the right ecosystem to ensure quick and effective market penetration, while providing us with the flexibility we needed to change partners or disengage from a market.

In today's uncertain environment, with rates, values and rents converging downwards, we set our sights on peripheral countries, which offer interesting features. We favour countries that are close to Germany, France or the UK, such as the Netherlands, Belgium, Luxembourg, Italy and Ireland. They have booming economies and real estate rates of return that still exceed those of major European markets by 50-100 base points.

These 'middle' countries have markets that are deep enough to be liquid, and provide opportunities to capture additional return. In 2017, we invested over €6bn (with leverage), 28% of which was spent outside France, in Germany and the Netherlands mainly.

The Spanish market is attractive as well. Rates are almost similar to those of the main markets, but economic growth is stronger and should cause rents to rise more significantly and more rapidly. We think they will go back to pre-2007 levels.

The link between economic recovery and rising rents is a key element to take into account, and countries such as the UK, which will bear the negative impact of

Brexit, will be penalized. As a matter of fact, we prefer to disengage from the UK for now, while adjustments have not yet taken place. We made no acquisition in the UK in 2017 and we will not make any in 2018.

“ Countries such as the UK, which will bear the negative impact of Brexit, will be penalized

OS: Your strategy is about favouring core assets. Does that still enable you to invest in diversified real estate segments?

JMC: In Europe, there are sectors with core assets, but in which rates of return have not been converging as much. The

first among those is the hotel business. We favour quality business hotels in prestigious locations. This has led us to invest in the downtown areas of large European cities. We have excluded the leisure business, which faces stiff competition from e-commerce platforms, such as Airbnb.

The healthcare sector also offers interesting returns, if one shows caution in dealing with public policy fluctuations and regulations. We focus on residential facilities, and especially senior-living houses, as an avenue for diversification. And we also pay attention to business parks, dedicated to SMEs, as those should quickly benefit from the economic recovery. In addition, even though it may be a complex segment to access and manage, the business park sector offers high risk premiums.

OS: Is it time to expand beyond EU borders?

JMC: It is still probably too early to expand beyond the eurozone, even just to look at mature markets such as Asia, the US or Canada. It is even harder to already consider investing in tomorrow's real estate areas, such as Africa or Russia. But we will certainly have to get there. In any case, if we expand outside Europe, we will replicate the formula that made us successful in our domestic market: signing partnerships with local players, in all areas of expertise, so we can acquire in-depth knowledge of local specificities and keep our flexibility and agility.

AMUNDI ASSET MANAGEMENT

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10¹ globally. Following the integration of Pioneer Investments, it now manages over €1.45tn of assets² across six investment hubs based in 37 countries. At the end of 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 €41.6bn², and offers solutions through funds, club deals and multi-management, including two innovative and ambitious partnerships with EDF and CEA. As part of this new platform, Amundi Real Estate is a company specialized in developing, structuring and managing European focus property funds. With more than €27.8bn² of assets under management², the firm is N°1 in France in terms of fundraising and assets under management for SCPI and retail OPCI (IEIF - March 2018), and is part of the Top 10 Asset Managers for offices in Europe (IPE - December 2017). Amundi Real Estate is an authorized management company active in France, Germany, Italy, UK, Benelux, Czech Republic and Austria.

JEAN-MARC COLY

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

real-assets.amundi.com

¹Source IPE "Top 400 asset managers" published in June 2017 and based on AUM as of end December 2016.

²Figures as of 31 March 2018. Source: Amundi Asset Management



NOW IS THE TIME FOR LISTED REAL ESTATE

- Matthew Fletcher, EPRA

You may be surprised by total annualized returns of 9.2% achieved over the last 15 years from European listed real estate. Recent reclassification as a standalone sector by equity benchmarks and increasing global adoption of Real Estate Investment Trust (REIT) legislation bodes well for the future development of the sector. EPRA, the European Public Real Estate Association, is the voice of the publicly traded European real estate sector.

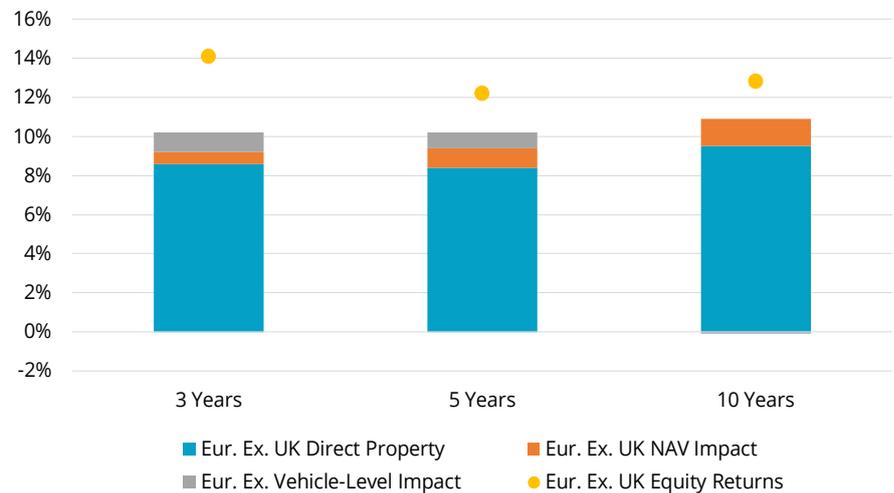
WHAT ARE THE RECENT RETURNS SEEN IN EUROPEAN LISTED REAL ESTATE?

European listed real estate companies provided a total return of 13.4% in 2017, as judged by the constituents of the FTSE EPRA/NAREIT Developed Europe Index Series. This return compares to total annualized returns of 12.5% and 8.4% over five and 20 years respectively and we will use the index series as the basis for our following market review and analysis.

To put further context around these returns, the value of the total listed real estate sector in Developed Europe was €396bn and the largest listed real estate markets are the UK (€85bn), France (€79bn) and Germany (€75bn). We can demonstrate that 65% of the total value is represented within the index and it comprises 103 constituents, which is an increase from 84 in December 2008, with an approximate free-float market capitalization of €225bn.

It is worth understanding the principles behind the index series as we believe it is the best available representation of European listed real estate and it is certainly the most widely used. The FTSE EPRA/NAREIT Index Series is a free-float market capitalization-based index series. To ensure it remains the most real estate-focused, liquid and investible, there are quarterly reviews undertaken on constituents where companies can be added or deleted.

Fig. 1: Asset to Security-Level Impact in Europe Ex. UK (2006-2015)



Source: MSCI, SNL, EPRA

For a company to become an index constituent it must comply with FTSE Ground Rules. It must have derived at least 75% of total EBITDA from the ownership, trading and development of income-producing real estate. There is also a relative size rule for companies that is expressed as a percentage of the regional index market capitalization. Liquidity is tested semi-annually and in relation to daily average trading in the prior 12 months. Companies with a free float of 5% or below are excluded from the index. New issues can be considered for index constituency through the Fast Entry route that has specific criteria attached to it.

The index series is increasingly investible across specific geographic and real estate sub-sectors. Once considered niche or alternative, logistics and build-for-rent are examples of sub-sectors that investors are readily able to invest in through the listed route.

WHY INVEST IN LISTED REAL ESTATE? BECAUSE IT'S REAL ESTATE.

It is a core belief that investing in real estate requires a long-term perspective. Real estate investors look to receive a regular income stream with the potential

for capital appreciation based on the underlying asset value.

Listed real estate companies are conceived to develop, manage and own real estate assets for the long term – they are ongoing concerns. REITs, the most important subset of listed real estate, were first enacted by US Congress in 1960. There are now 41 countries globally, including 13 within the EU, that have a REIT regime, and there is considerable potential for future growth.

Investors benefit from the efficiency of being able to gain a diversified exposure by sector or geography at relative ease, transacting at a lower cost than alternative forms of real estate and deriving real estate return at relative speed with the optionality of adjusting an exposure over time.

Analysis from 'Listed and private real estate: putting the pieces together' by MSCI (2017) shown in Fig. 1 demonstrates that listed real estate is closely correlated to other forms of real estate. Looking at three-, five- and 10-year periods, we see that the bulk of the equity performance can be explained by asset-level

movements, which accounted for roughly 70% of overall real estate company stock performance in mainland Europe over five or more years. The proportion was higher in the UK.

The analysis corresponds to the empirical academic research 'Are REITs real estate' by Hoesli and Oikarinen (2012), concluding that long-term REIT market performance is substantially more tightly related to direct real estate performance than to general stock market returns, where long term is now viewed as time periods beyond 18 months.

“ Intuitively it makes sense that listed real estate long-term returns reflect direct real estate returns because the investments are in the same underlying bricks and mortar

WHO INVESTS IN LISTED REAL ESTATE?

We are seeing large institutional investors increasingly benefit from listed real estate within their allocation. There is academic research demonstrating improved annualized returns of 1% over 15 years when incorporating a global listed real estate allocation of 30% to a UK unlisted real estate allocation¹.

We believe the benefits of a diversified real estate strategy gained by large institutional investors are also available to mid-size and smaller investors right through to

individuals, and listed real estate is an efficient addition to the whole portfolio.

We increasingly see real estate investors looking to derive real estate total return (income and capital appreciation) from significant listed real estate allocations. We also note equity investors that look to listed real estate for equity exposure diversification from the broader market into an asset class that has low correlation and a strong income component. For a pension scheme and individuals, there may be no need to incur the costs from selling investments to realize gains and satisfy obligations when you have been receiving a five-year average yield of 4.0% from your listed real estate investments in the FTSE EPRA/NAREIT Developed Europe REITs Index.

WHAT ARE THE RECENT DEVELOPMENTS IN LISTED REAL ESTATE?

There are important developments in listed real estate that demonstrate an increasing maturity and indicate the likelihood of further growth in the investible universe, both by number and the market capitalization of companies. The equity industry classification benchmarks – ICB and GICS – have both undertaken to create a distinct sector for real estate based on the increasing size of the sector and recognition that it is not correlated to other equity sectors. This is the first change to GICS sectors since their formation in 1999. While MSCI implemented the update in September 2016, FTSE has committed to the sector update on 1 January 2019.

ESG is an increasingly important topic for investors and we believe listed real estate

companies are well positioned. EPRA has implemented a series of sustainability best-practice recommendations for use by companies to highlight the important work being undertaken within the sector. It is no surprise to us that listed real estate companies outperform most other real estate participants in the ESG awards from other established third-party assessors.

RECENT CAPITAL ALLOCATION IS KEY

Listed real estate companies access capital through the full range of sources in the debt and equity capital markets. Last year was a record year with €23bn debt and €8bn equity raised. The average weighted coupon rate on bonds for index constituents has fallen from 3.6% at December 2010 to 1.6% at December 2017. Similarly, we have also witnessed significant reductions in average loans-to-value, from 44% to 37% at the same dates. The companies' debt profile improvements should position them well in a period of increasing interest rates.

IN SHORT

Listed real estate is real estate and should form a significant allocation within a sophisticated investor's long-term toolkit. The actual returns that have been achieved over the last 15 years are similar if not superior to other types of real estate investment. There have been significant positive developments in the presentation and visibility of the listed real estate sector over recent years that position it positively for the future.

EPRA

EPRA, the European Public Real Estate Association, is the voice of the publicly traded European real estate sector. With more than 250 members, covering the whole spectrum of the listed real estate industry (companies, investors and their suppliers), EPRA represents over €450bn of real estate assets* and 94% of the market capitalization of the FTSE EPRA/NAREIT Europe Index.

EPRA's mission is to promote, develop and represent the European public real estate sector.

For more information please refer to www.epra.com or email info@epra.com.

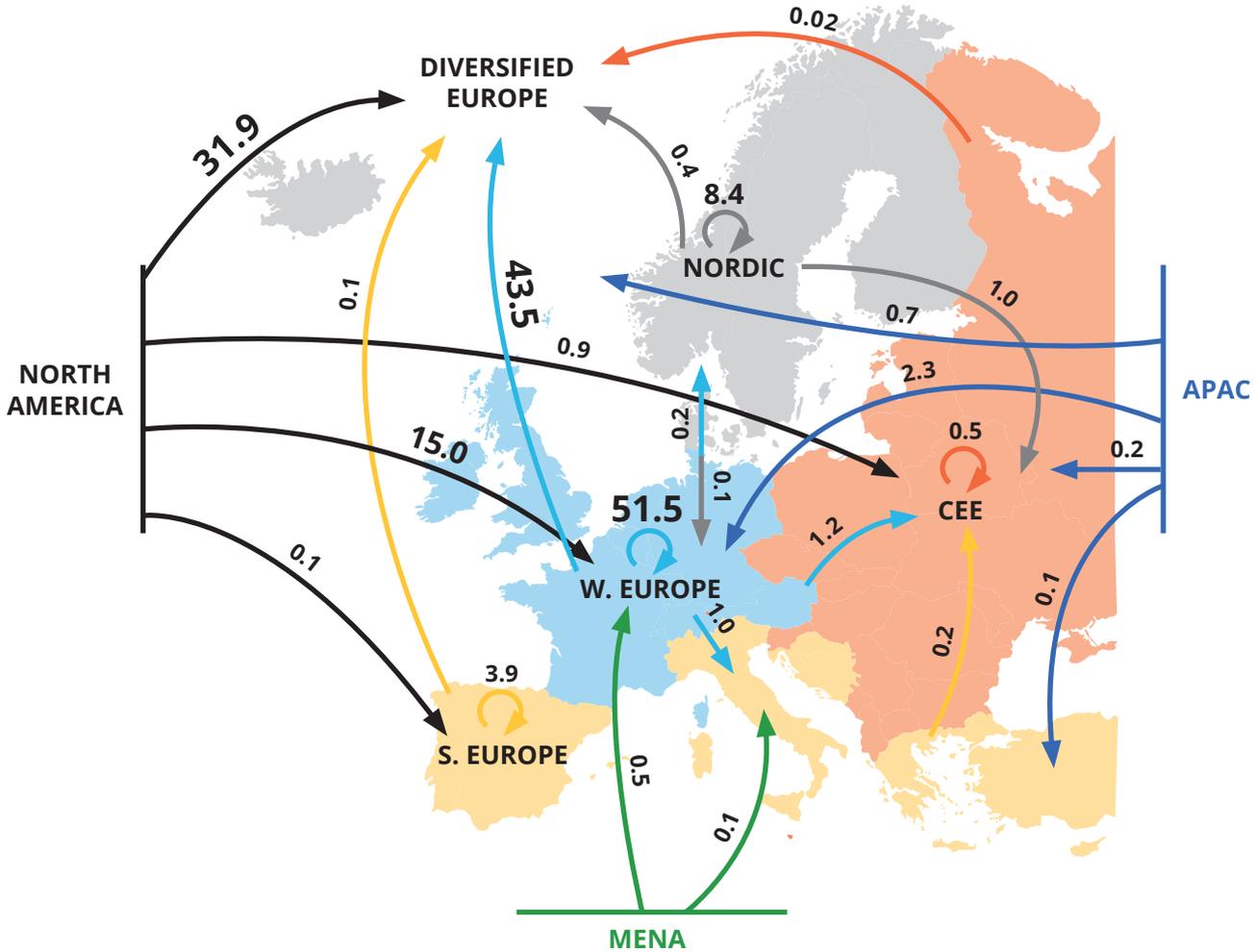
¹The performance implications of adding global listed real estate to an unlisted real estate portfolio: A case study for UK Defined Contribution funds. Alex Moss and Kieran Farrelly 2014

*European companies only.

INTERREGIONAL CAPITAL FLOWS IN EUROPE

- Oliver Senchal, Head of Real Estate Products

Europe-Focused Closed-End Private Real Estate Fundraising by GP Location (€bn), 2011 - 2018 YTD (As at March 2018):



There is worldwide interest from real estate firms in raising Europe-focused vehicles. Much of this interest is a result of the opportunities for diversification in the region, which are abundant across the risk/return spectrum. This goes all the way from prime assets in major cosmopolitan areas like London, Paris or Berlin to ground-up development opportunities in less saturated markets within Central & Eastern Europe (CEE). Illustrative of the scope of opportunities from an LP perspective is the level of returns that have been on offer from Europe-focused private real estate, consistently achieving median

net IRRs of 10-15% in post-crisis vintages and accompanying record levels of distributions back from fund investments in recent years.

However, the European industry has not always experienced good times. The Global Financial Crisis (GFC) had a significant impact on the region, not only on the performance of funds investing there but also in the capacity and capability of firms to raise new vehicles and attract institutional capital. As such, fundraising focused on the region fell from a peak of 126 fund closures in 2007, which secured

an aggregate €25bn, to its nadir in 2010 (56 funds raised €8.6bn, Fig. 4.1). Stagnation prevailed in European fundraising markets for five years post-crisis until a surge of activity in 2014, with capital raised growing 128% from 2013 to a new peak and beginning a new phase of consistently strong fundraising for the market.

FOCUSED OR DIVERSE?

We will classify private real estate funds primarily targeting European investment into three camps. The first includes funds that just invest their capital into one country, the second targeting investment

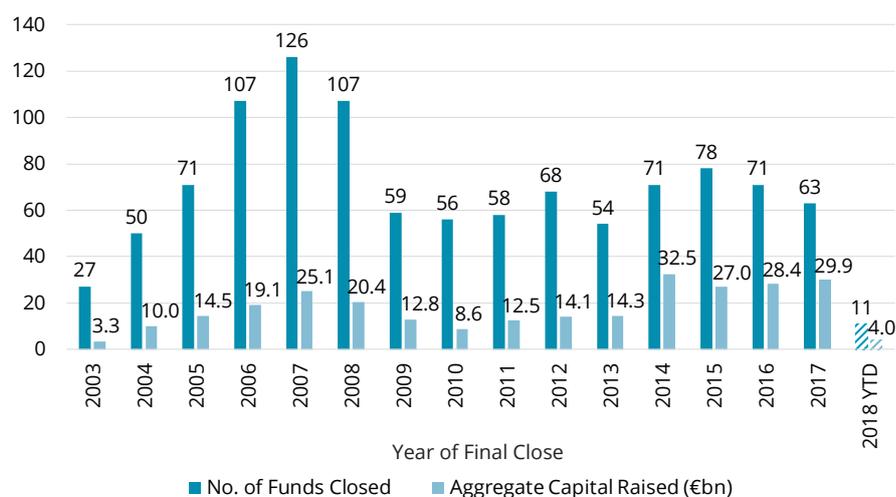
in a specific European sub-region (CEE, Nordic, Southern Europe, Western Europe) and lastly, those that invest across more than one region (multi-regional).

Country-specific funds consistently represented the majority of products that reached a final close before 2011 (average 60%), although their prominence has declined in the years since (average 48%). Conversely, regional and multi-regional funds have risen in prominence. In terms of capital raised, regional and multi-regional funds have represented the majority of committed capital. However, in the years just after the crisis (2010-2012), country-specific vehicles managed to capture an average of 58% of capital focused primarily on Europe. It was not until 2013 that the status quo resumed and funds with a broader European remit collected the majority of capital commitments; it has remained this way since then. Furthermore, post-2012 country-specific fundraising in Europe has been at its lowest level and the market closely resembles the 2008 and 2009 landscape.

For vehicles focused on just one country, the UK and Germany are the dominant targets in Europe, together representing 51% of funds closed and 65% of the total capital raised for country-specific Europe-focused funds respectively since 2003. Fig. 4.2 highlights some of the movements of interest in country-specific funds from 2003-2010 and 2011-2018 YTD.

Unsurprisingly, funds investing across more than one sub-region in Europe,

Fig. 4.1: Annual Europe-Focused Closed-End Private Real Estate Fundraising, 2003 - 2018 YTD (As at March 2018)



Source: Preqin

and those primarily investing in the more developed economies of Western Europe (including country-specific vehicles within their respective regions), continued to attract the majority of Europe-focused capital (Fig. 4.3). Comparing 2003-2010 fundraising with 2011-present fundraising shows that both multi-regional, Western Europe- and Nordic-focused funds have generally secured more in aggregate, while CEE- and Southern Europe-focused vehicles have performed worse.

EUROPEAN CAPITAL FLOWS

Unpicking the web of commitments to Europe-focused real estate is particularly complicated, especially when the market is divided up in a multitude of ways. The first way to explore this data is to understand that Europe-focused fundraising is dominated by firms headquartered in the

region, and this is true of both eight-year timeframes examined (Fig. 4.4).

As expected, with the highest concentration of private real estate fund managers (predominantly in the UK and Germany), Western Europe-based managers lead the way in Europe-focused fundraising, securing half the capital raised between 2003 and 2010 and increasing its share of the market by raising 60% of aggregate capital commitments in the past eight years. This growth in market share comes at the expense of managers based in Southern Europe (whose share fell from 9% of capital raised to 3%) and CEE-based firms (fell from 2% to 0.3%).

Subdividing more recent Europe-focused fundraising (post-2010) by manager location picks up some interesting trends.

Fig. 4.2: Key Markets for Country-Specific Europe-Focused Closed-End Private Real Estate Funds (As at March 2018)

	Proportion of Funds Closed		Proportion of Aggregate Capital Raised	
	2003-2010	2011-2018 YTD	2003-2010	2011-2018 YTD
UK	23%	42%	30%	46%
Germany	21%	21%	28%	21%
Italy	20%	5%	15%	8%
France	7%	7%	5%	9%
Netherlands	6%	1%	1%	1%
Sweden	5%	2%	1%	2%
Russia	4%	1%	3%	1%
Finland	3%	6%	4%	3%
Portugal	3%	1%	1%	0.2%
Poland	1%	3%	1%	2%
Spain	1%	3%	1%	3%

Source: Preqin

Unsurprisingly, domestic preference prevails, with firms headquartered in one region mainly raising vehicles that focus on investments in their home region. This is more apparent in the smaller markets, where 96%, 94% and 93% of capital raised by CEE-, Nordic- and Southern Europe-based managers respectively is focused on the region or country in which they are based.

While the smaller markets have raised multi-regional funds, it is only really Western Europe-based managers that contribute meaningful amounts of capital to multi-regional fundraising (98% of capital secured for funds targeting more than one sub-region on the continent).

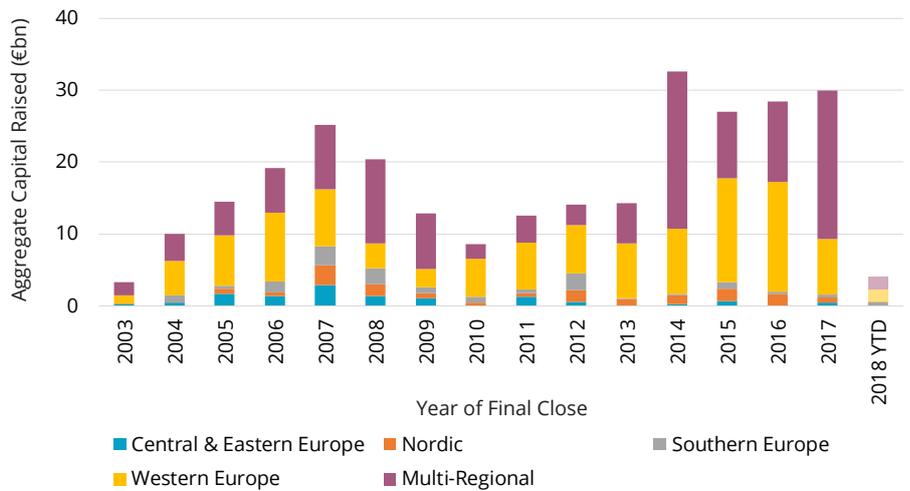
Outside Europe, North America-based fund managers have raised the largest proportion of Europe-focused capital (29% since 2003). Asia-based buyers of property typically make headlines for purchases within Europe; however, those raising institutional capital have generally been more active in raising capital for Asian or North American real estate than in Europe. As such, only 2% of Europe-focused capital has come from Asia-based real estate fund managers since 2003.

WILL WE SEE ANOTHER YEAR OF GROWTH?

By taking advantage of the concentration of institutional investors on the continent and the ability of Europe-focused funds to deliver for these investors, fundraising in the region has been growing year on year. However, this has only exacerbated concerns about where and how this 'wall of capital' (€51bn of Europe-focused dry powder as at March 2018) will be deployed. Complicating future fundraising efforts on the continent is the record number of Europe-focused funds in market (138 vehicles targeting €50bn) compounding an already crowded transactional space and fears that we are late in the cycle.

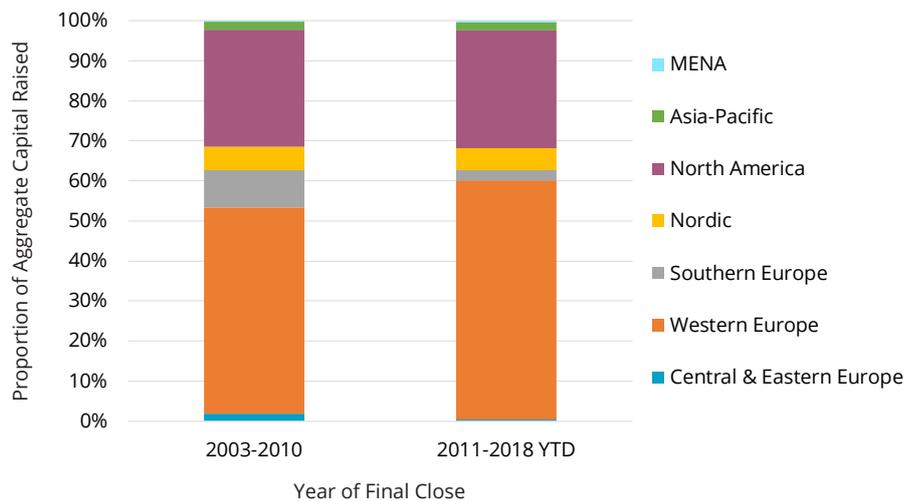
Answering the 'where', recent fundraising points to a continuation of trends witnessed in recent years, with capital targeted centred on a diversified European remit (38%) and Western Europe (53%),

Fig. 4.3: Annual Europe-Focused Closed-End Private Real Estate Fundraising by Sub-Region, 2003 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 4.4: Europe-Focused Closed-End Private Real Estate Fundraising by GP Location, 2003 - 2018 YTD (As at March 2018)



Source: Preqin

and in particular, the major economies in this region, namely the UK, Germany and France.

However, we could be seeing a rebalancing of fundraising in the mid-term, as managers look to make more investments in less saturated markets than we have traditionally seen since 2003. This could be pertinent for Southern Europe-focused investment, where investors could find higher returns as a result of the opportunities created by a more positive economic outlook.

REASONS TO CONTRIBUTE DATA

BE SEEN

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ENSURE

that the data we hold for your firm and funds is correct

GENERATE

incoming leads from industry professionals seeing your profile

CONTRIBUTE

to industry benchmarks and help further research into this area

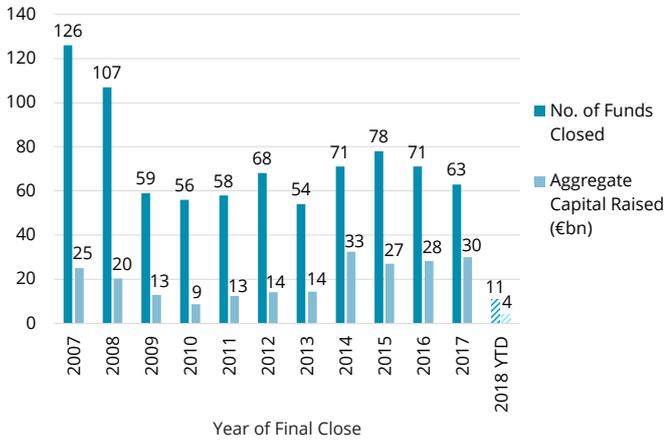
Contributing data is free and simple. For more information, please visit:

www.preqin.com/sharedata



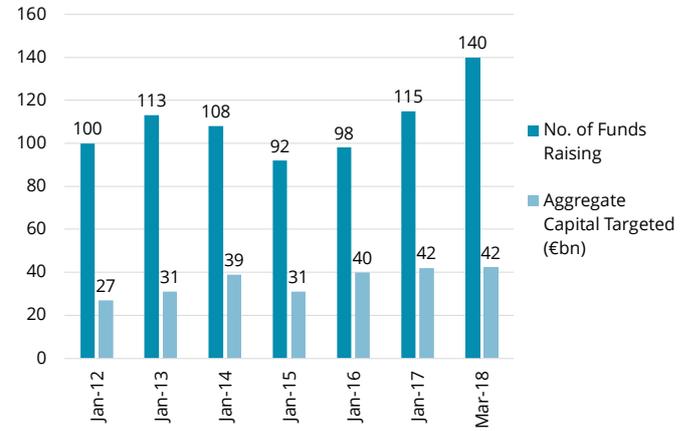
KEY REAL ESTATE CHARTS

Fig. 4.5: Annual Europe-Focused Closed-End Private Real Estate Fundraising, 2007 - 2018 YTD (As at March 2018)



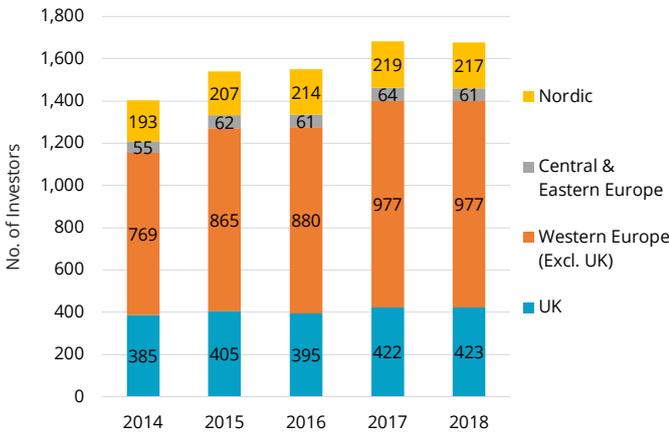
Source: Preqin

Fig. 4.6: Europe-Focused Closed-End Private Real Estate Funds in Market over Time, 2012 - 2018



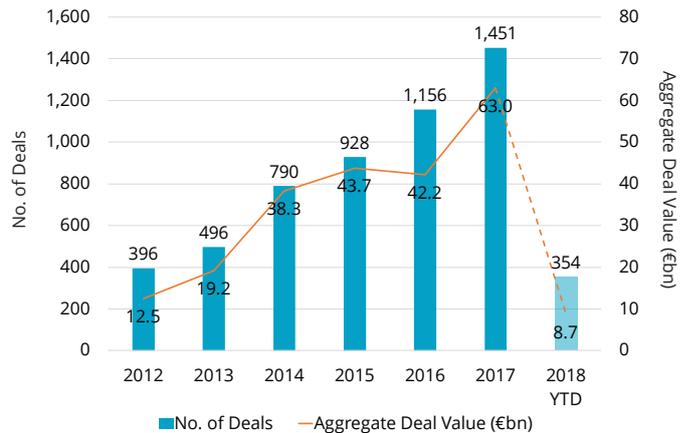
Source: Preqin

Fig. 4.7: Europe-Based Institutional Investors in Private Real Estate by Region, 2014 - 2018



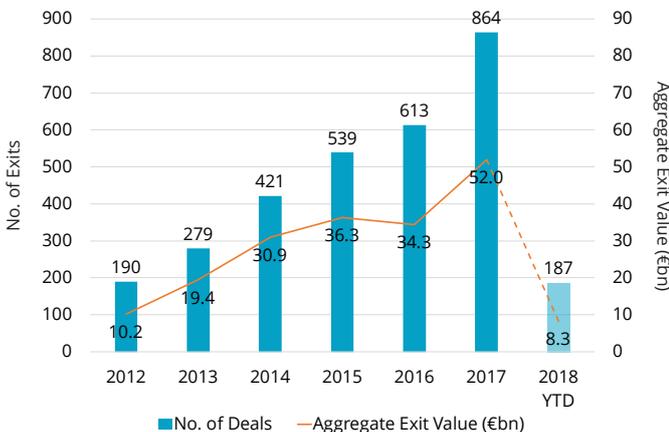
Source: Preqin

Fig. 4.8: Private Equity Real Estate Deals in Europe, 2012 - 2018 YTD (As at March 2018)



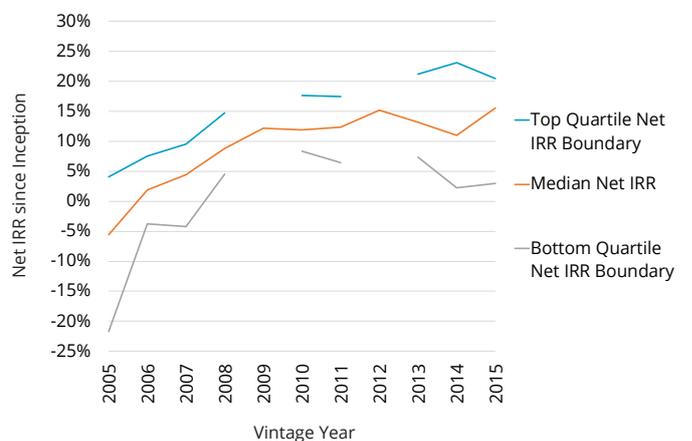
Source: Preqin

Fig. 4.9: Private Equity Real Estate Exits in Europe, 2012 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 4.10: Europe-Focused Closed-End Private Real Estate Funds: Median Net IRRs and Quartile Boundaries by Vintage Year



Source: Preqin



**SECTION FIVE:
REAL ASSETS**

RENEWABLE ENERGY: EUROPE'S TRANSITION TOWARDS A CLEANER FUTURE

- Patrick Adefuye, Head of Real Assets Products

For over two decades, the role played by the renewable energy sector in Europe has continued to grow in prominence as the European Union (EU) attempts to reduce its reliance on fossil fuels. The introduction of short-term targets up to 2020 and 2030 – and a long-term target for 2050 – and supporting policy measures has seen the EU embark upon a major transformation.

THE EU'S RENEWABLE ENERGY STRATEGY FOR 2020 AND 2030

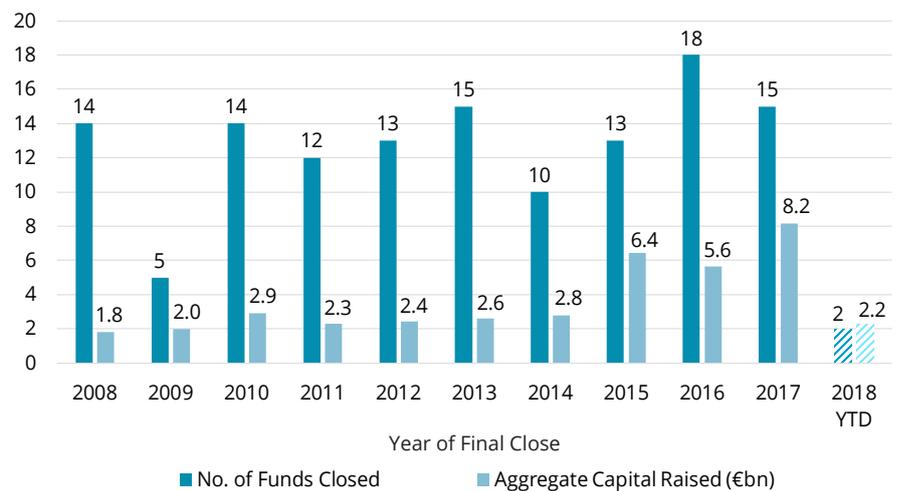
The EU's 2009 Renewable Energy Directive sets out its policies for renewable energy consumption over the next 40 years. By 2020, it aims to reduce its greenhouse gas emissions by at least 20%, and increase renewable energy's share of the region's energy consumption to at least the same proportion. All EU Member States must also ensure at least 10% of their transport energy needs are derived from renewable energy by 2020. By 2030, the EU has set a target of 35% of its energy consumption to be derived from renewable energy sources. Through the introduction of these targets, the EU hopes to make Europe more energy efficient by accelerating investment in energy-saving buildings, resources and transportation, while also striving to build a pan-European energy market through infrastructure development.

As Europe looks to transition towards a cleaner future, what impact has this had on renewable energy investment in the region?

A RECORD YEAR FOR RENEWABLES FUNDRAISING

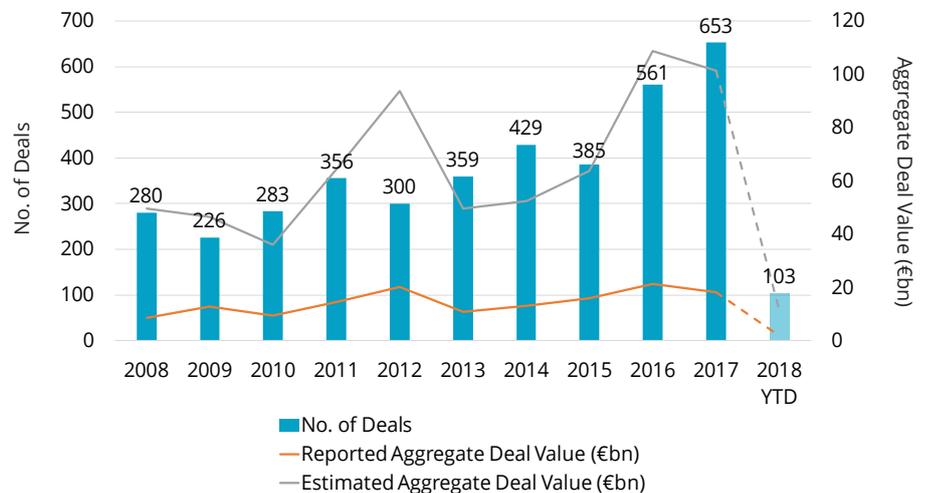
Renewable energy fundraising – funds with an energy investment remit focused on biomass, geothermal, hydroelectric, solar or wind power, or a combination of these assets – has grown over recent years with a record €8.2bn secured by funds closed in 2017, above the average €4.0bn raised annually over the previous nine years

Fig. 5.1: Annual Europe-Focused Unlisted Renewable Energy Fundraising, 2008 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 5.2: Renewable Energy Infrastructure Deals in Europe, 2008 - 2018 YTD (As at March 2018)



Source: Preqin

(Fig. 5.1). This marked rise is reflective of an increase in investor demand for investment in a sector surrounded by falling prices, competitive bidding processes for contracts, the emergence of new developers and technological advancements. In addition, institutional investors, which increasingly consider environmental, social and governance (ESG) factors in their investment decision-making, are turning more and more

to renewables vehicles. As well as the environmental impact, the development of such assets also responds to a social need for diversification of energy sources.

MORE RENEWABLES TRANSACTIONS IN EUROPE

A total of 653 renewable energy infrastructure deals were completed in 2017 for an estimated €101bn (Fig. 5.2). While the estimated aggregate deal value

was 7% lower than the previous year, the number of transactions completed was 16% higher. However, when compared with 2008, the number of European renewables deals completed was 2.3x greater in 2017, while the estimated aggregate value of these deals was 2.0x greater. Further, the proportion of renewable energy deals completed globally constituted by European deals has risen each year since 2015, from 34% to 49% in 2017.

Much of the investment in European renewables has emanated from the UK, Germany and France, with the total number and aggregate value of deals in these countries over the past 10 years representing 56% and 61% of all renewables transactions in Europe respectively (Fig. 5.5).

Wind power assets constitute a significant proportion of renewable energy deals completed in Europe in the past five years, as seen in Fig. 5.3. While the offshore wind boom relates, in part, to EU Member States' transition towards renewable energy, this figure can also be attributed to reduced production costs for wind energy, a resource widely considered to be the cheapest among newly installed power sources across many countries in the region. One notable deal that took place in 2017 was the acquisition of a 50% stake in UK-based Walney Offshore Wind Farm by Danish pension funds PKA AIP and PFA Pension for £2.1bn (Fig. 5.6).

THE POTENTIAL IMPACT OF BREXIT ON THE EUROPEAN RENEWABLES INDUSTRY

Since 2008, over €50bn has been invested in UK renewables, accounting for over a third (35%) of the entire European renewables industry over this period more than twice as much as the next biggest market in the region (Germany, €25bn). Given the UK's involvement in the European renewable energy market, and with the UK's withdrawal from the EU less than a year away, what impact is Brexit likely to have on the European renewable energy market?

Through its Renewable Energy Directive, the EU's strategy on the industry has sought to unify borders and sectors within the area, as well as address climate and energy concerns. By opting to leave the EU, the UK would, under most models (the exception being the European Economic Area model), be released from its targets set out in the Directive, and in doing so, may sever relations with other nations that had previously been cemented in ensuring growth in the sector.

The EU also faces the prospect of the UK relaxing its regulations in a move to undercut European markets by lowering renewable energy standards. This approach would not only impact upon trade between the UK and EU Member States, but will also make existing EU regulation harder to enforce. Despite such risks, and following the outcome of the UK/EU referendum, the UK signalled its commitment to reducing greenhouse gas



84%

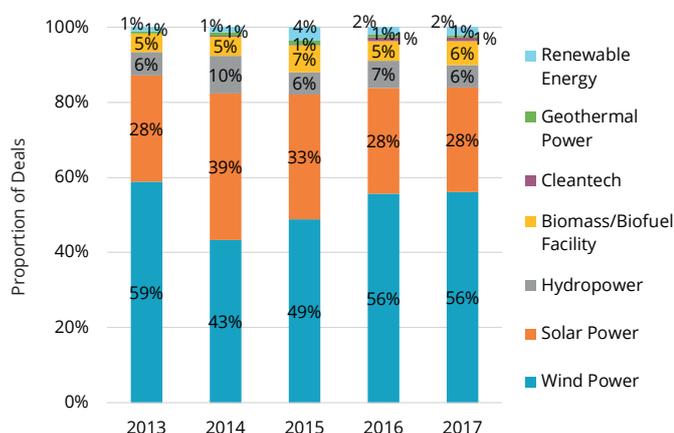
of the aggregate value of all European renewable energy deals completed in 2017 derived from wind power deals.

emissions by 57% between 2028 and 2032 through the adoption of its fifth carbon budget under the Climate Change Act 2008.

Moreover, if the UK is no longer included among the EU's climate targets, this will leave other EU countries facing the challenge of increasing their investment activity in the renewable energy sector in order to meet the EU's overall target of at least 40% fossil fuel reductions (from 1990 levels) by 2030. This may encourage further investment in EU nations outside the UK.

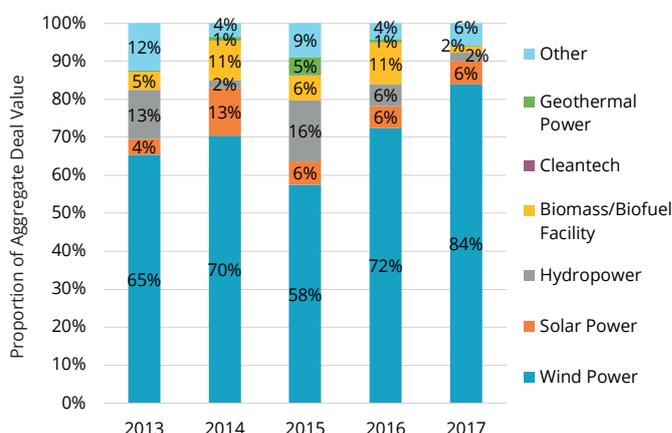
The establishment of the 2009 Renewable Energy Directive spurred great momentum in efforts to increase renewable energy usage and investment, and helped establish Europe as leader on this front. However, by 2017, the proportion of global aggregate deal value in renewables in Asia had overtaken Europe (34% of deal value emanated from Asia compared to

Fig. 5.3: Number of Renewable Energy Infrastructure Deals in Europe by Industry, 2013 - 2017



Source: Preqin

Fig. 5.4: Aggregate Value of Renewable Energy Infrastructure Deals in Europe by Industry, 2013 - 2017



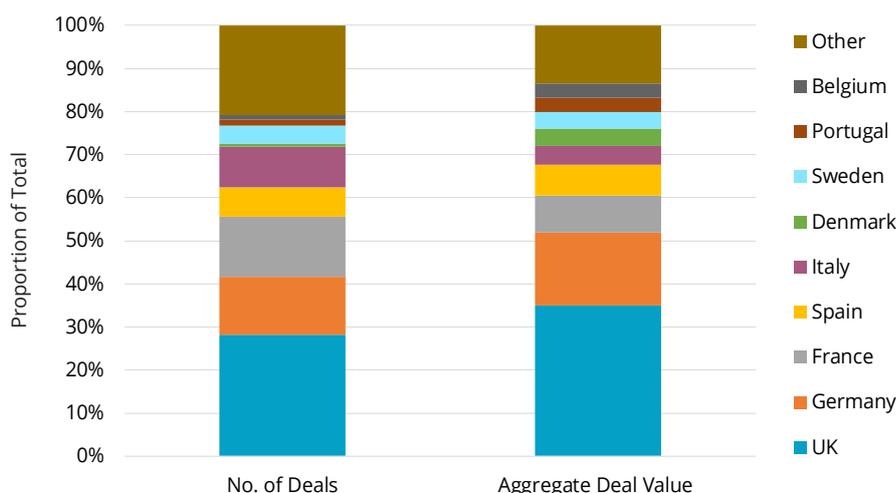
Source: Preqin

26% in Europe). Efforts need to be made to regain this momentum in renewable energy investments across Europe. The establishment of EU nations' targets for 2030 will help in creating clarity in policies post-2020. The European Investment Bank estimated that an additional €177bn per year will be necessary between 2021 and 2030 in order to reach the EU's energy and climate objectives for the latter year. The UK's annual contribution to the EU is estimated at around €10bn, which further widens the investment gap and highlights the need for further investment over the coming years.

OUTLOOK

The European renewable energy industry is presenting challenges as well as opportunities for investors. The sector has many potential benefits which include lowering greenhouse gas emissions, a more diversified supply of energy and less reliance on fossil-fuel markets. A rise in the number of deals in Europe over the past decade may also lead to further job creation in the renewable technology industry. However, with Brexit looming, uncertainty prevails in the form of the potential impact of such an event on attracting foreign investment to the UK,

Fig. 5.5: Renewable Energy Infrastructure Deals in Europe by Location, 2008 - 2017



Source: Preqin

and also on the pipeline for UK-based investors in offshore renewable energy infrastructure.

Nevertheless, there remains a strong pipeline for fund managers to secure more capital for renewable energy assets in Europe: as at March 2018, almost a quarter (24%) of all unlisted energy funds in market are primarily targeting renewable energy assets in Europe, with these vehicles collectively seeking €18bn

(19% of all institutional capital targeted by energy funds). Among these funds is Glennmont Partners' Clean Energy Fund Europe III, which is seeking €600mn for investments in onshore wind, solar PV, biomass and small-scale hydrogeneration assets in Europe. The fund invests in both construction and operational phases and will aim to procure a total portfolio of 500 MW.

Fig. 5.6: Largest Renewable Energy Infrastructure Deals in Europe, 2008 - 2017

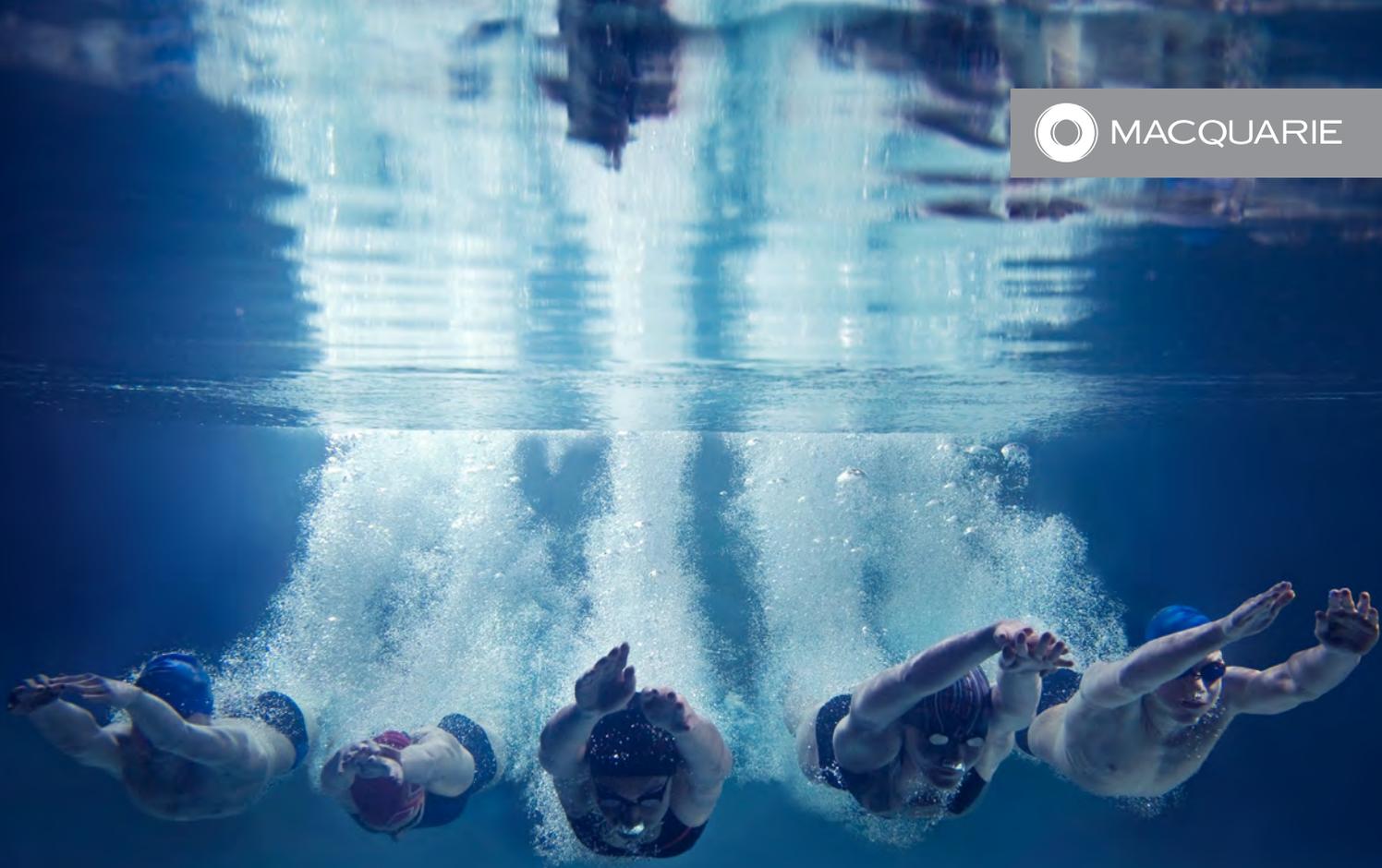
Asset	Location	Industry	Investor(s)	Deal Size (mn)	Stake (%)	Date
Beatrice Offshore Wind Farm	UK	Wind Power	Repsol YPF, SSE	3,000 GBP	100	Feb-09
Gwynt y Môr Offshore Wind Farm	UK	Wind Power	RWE Group, Siemens Financial Services, Stadtwerke München	2,700 EUR	100	Jul-14
Walney Offshore Wind Farm	UK	Wind Power	PFA Pension, PKA AIP	2,122 GBP	100	Jul-09
Rampion Offshore Wind Farm	UK	Wind Power	E.ON	2,000 GBP	100	Jun-10
London Array Wind Farm	UK	Wind Power	E.ON, Masdar, Ørsted	2,200 EUR	50	Nov-17
Fécamp Offshore Wind Farm	France	Wind Power	EDF Group, Ørsted	2,000 EUR	100	Apr-12
Saint-Nazaire Offshore Wind Farm	France	Wind Power	EDF Group, Ørsted	2,000 EUR	100	Apr-12
Veja Mate	Germany	Wind Power	Copenhagen Infrastructure II	1,900 EUR	100	Jul-08
Race Bank Offshore Wind Farm	UK	Wind Power	Macquarie European Infrastructure Fund V	1,600 GBP	100	Oct-12
Dudgeon Offshore Wind Farm	UK	Wind Power	StatKraft, Statoil	1,500 GBP	100	Apr-12

Source: Preqin

Fig. 5.7: Largest Europe-Focused Unlisted Renewable Energy Funds in Market (As at March 2018)

Fund	Firm	Firm Headquarters	Target Size (mn)	Fund Status
Copenhagen Infrastructure III	Copenhagen Infrastructure Partners	Copenhagen, Denmark	3,000 EUR	Sixth Close
Fondi Italiani Per Le Infrastrutture III	F2i SGR	Milan, Italy	3,000 EUR	First Close
Macquarie Infrastructure Debt Fund (UK Inflation Linked) 2	Macquarie Infrastructure Debt Investment Solutions	London, UK	1,000 GBP	First Close
Macquarie Global Infrastructure Debt Fund	Macquarie Infrastructure Debt Investment Solutions	London, UK	1,000 USD	Second Close
Aquila Energy Transition Infrastructure Fund	Aquila Capital	Hamburg, Germany	750 EUR	Raising

Source: Preqin



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For more than two decades, MIRA has set the stage investing in the infrastructure assets that people value and use every day. We know that successful long-term investment demands commitment and experience behind the scenes to create enduring value.

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KEY REAL ASSETS CHARTS

Fig. 5.8: Annual Europe-Focused Unlisted Infrastructure Fundraising, 2007 - 2018 YTD (As at March 2018)



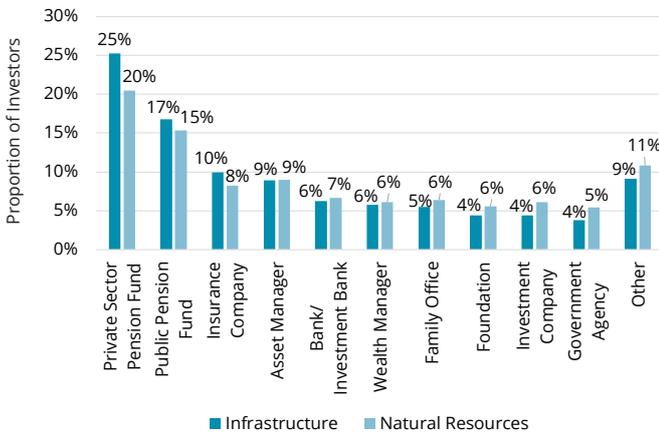
Source: Preqin

Fig. 5.9: Annual Europe-Focused Unlisted Natural Resources Fundraising, 2007 - 2018 YTD (As at March 2018)



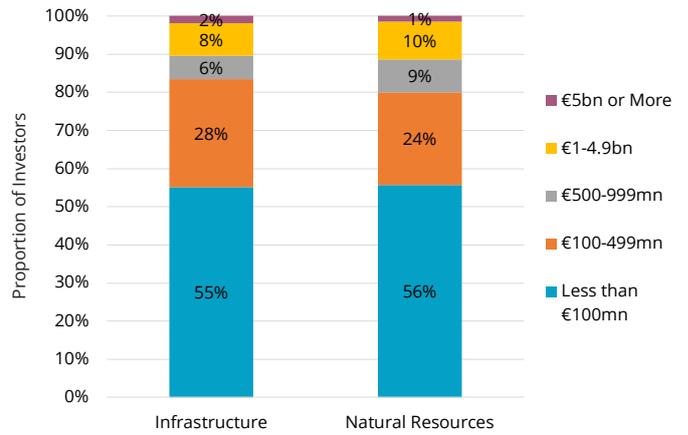
Source: Preqin

Fig. 5.10: Europe-Based Institutional Investors in Real Assets by Type



Source: Preqin

Fig. 5.11: Europe-Based Institutional Investors in Real Assets by Capital Committed



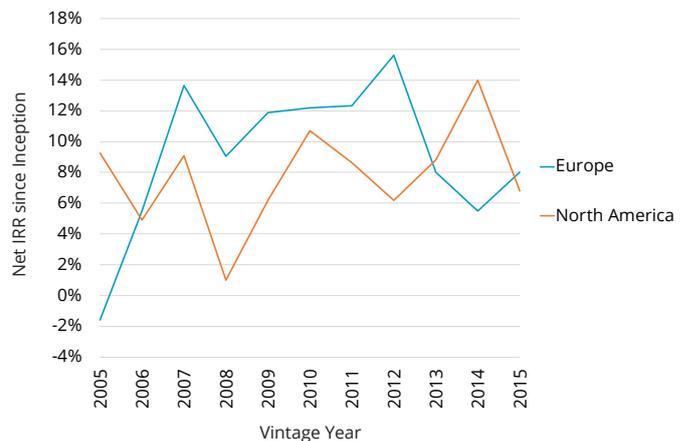
Source: Preqin

Fig. 5.12: Infrastructure Deals in Europe, 2007 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 5.13: Unlisted Infrastructure Funds: Median Net IRRs by Primary Geographic Focus and Vintage Year



Source: Preqin

A low-angle, blue-tinted photograph of a skyscraper with a large clock in the foreground. The clock is a large, round, white clock with black hands and numbers, mounted on a tall, dark pole. The skyscraper is a grid of windows, some of which are lit up. The sky is a clear, light blue. The overall mood is professional and modern.

SECTION SIX: PRIVATE DEBT

DIVERSITY AND CREDIT CYCLES: WHAT IS THE BEST STRATEGY TO INVEST IN EUROPEAN PRIVATE DEBT?

- Thierry Vallière, Amundi



Disintermediation is clearly gaining traction in Europe, and investors, looking for promising opportunities, are now favouring the private debt market. If, indeed, the European market offers assets that can justifiably attract investors, it nonetheless remains quite different from its US counterpart. Ignoring or underestimating European specificities might not only lead investors to miss out on some of the best investment opportunities, but it could also generate additional risks, warns Thierry Vallière, Global Head of Private Debt Group at Amundi.

Tom Carr: The European private debt market has recently been driven towards disintermediation. Is it going to resemble the US market?

Thierry Vallière: Disintermediation is deeply rooted in the US mindset and represents between 75% and 80% of funding volumes of the US market. This is mainly due to the way the US banking system works, with leaner balance sheets and looser regulations. So, historically, US banks have transferred part of their risks to institutional and retail investors.

In Europe, on the contrary, banks have more substantial balance sheets and retail customers cannot directly buy disintermediated debt. Disintermediation is nonetheless gaining ground and now amounts to 20-25% of all funding. European issuers want to diversify their funding sources and arrangements, while investors are looking for increased yield and diversification. The trend is also supported by new regulations. So it should be a long-term trend.

All in all, and even though the European private debt market is not as deep and mature as in the US, it has expanded significantly over the last 10 years.

TC: Can managers approach the European private debt market in the same way they would approach the US market?

TV: Maturity and depth are not the only differences between both markets. The US market is a relatively homogeneous one, with a single fiscal law, unified creditors rights and common insolvency proceedings – which favour creditors. The EU may show signs of harmonization

and integration, but each member state currently still has its own banking regulation, fiscal law and insolvency proceedings. The latter offer more protection in the UK and the Netherlands than in Italy, for instance.

Banking systems are also very different, from one country to the other. France has several major integrated banking networks, while Germany and Italy boast a myriad of local and regional banks. Companies are not the same either. US corporations can access a market of 325 million people, while European companies are probably more diversified, both within and outside of the EU.

So owing to the diversity of the European landscape, managers need deep local roots and intimate knowledge of European states and of their local players.

TC: Taking into account this high level of complexity, can Europe become a strategic market for private debt?

TV: European private debt is a fast-expanding market that can no longer be ignored in strategic diversified allocations. It offers numerous and diverse investment opportunities, thanks to a diversified economic landscape. Relative values are therefore up for grabs. Time-to-market should not be neglected either. And the timing is right: the market is growing fast, it is far from being mature and there are many opportunities to seize.

However, there is not a direct correlation between capital raised and investment opportunity. In 2008, the investment opportunity set was great, but you could not get capital from investors. Now, you

can get the capital, but with the overall excess liquidity in the market, can you spend it wisely? Managers need to remain very disciplined and rigorous to find the appropriate risk-adjusted return transactions.

“European private debt is a fast expanding market that can no longer be ignored”

TC: How can you identify these opportunities?

TV: You need strong local roots to address the European private debt market. And that is the strength of Amundi, with our subsidiaries and partnerships in many countries. You need to cope with the specificities of banking systems, and we can rely on our local networks. We also take into account the components of each country's economic fabric. We typically invest in companies with turnovers ranging from €75mn to €1bn, and €300-500mn sweet spots.

There are, for instance, many such exporting companies in Germany. They make up the famous “Mittlestand”, one of the country's economic pillars. Their business profiles are interesting, but institutional investors usually cannot afford to provide the same level of competitive funding as banks or savings banks. Italian companies are often family owned, and usually use short-term funding through local players. France has a different model with five healthy banking players. It offers many opportunities and

France is actually Europe's second most disintermediated market, after the UK.

These examples help to understand why investors need the support of players who are closely acquainted with European specificities.

TC: So the ability to arbitrate is at the heart of your investment strategies?

TV: We arbitrate between countries, indeed, but also between assets. Our size gives us privileged access to an abundant deal flow. As a matter of fact, deals are often directly offered to us before being offered to smaller players.

However, our sourcing capabilities, which are increasingly crucial as more and more players enter the field, do not mean we are not highly selective. On average, we have access to close to 450 operations every year, but our hit ratio is only 5% or 6%. Last year we spent €660mn on 23 operations. Almost half of those were carried out outside France.

And compared to pure private debt players, we are also able to ponder the relative value of each asset, in relation to Amundi's other fields of expertise, such as

fixed income. Thanks to the scope of our activities, we are not under any pressure to invest, and we prefer to wait for the right deal, rather than select assets by default.

TC: Can selectivity act as a hedge in case of a turnaround in the credit cycle?

TV: Managers currently operate in the most changing and challenging environment ever. It is marked by unconventional monetary policies which have negative consequences for most asset classes. In addition, interest rates are progressively rising again as the European QE is being alleviated. If money becomes more expensive, default rates could increase among less robust players and on transactions undertaken with a slippage in risk management.

So we have decided conservatism was the way to go. We invest in the most secure and senior part of capital structures, as it will be hit last in case of a cycle turnaround. This is what we do for all private debt assets, be they corporate, LBOs or real estate. We also favour floating rate structures, as they will desensitize us, should rates be on the rise.

Finally, Amundi has shown its ability to strive through credit cycles, while some other asset managers have yet to experience one full cycle.

TC: Does that mean there is only one strategy to approach the European private debt market?

TV: Protecting ourselves against a possible cycle turnaround does not mean we cannot build diversified investment strategies. Some of the portfolios we have built are centred on mid-caps, while others are more liquid and favour large caps and LBO operations. The latter nicely complement traditional high-yield strategies.

We also offer targeted strategies, for commercial real estate, or others which are innovation driven, for Italian food products for instance.

However diverse they may be, all of these strategies have one thing in common: they are built on our local presence with pan-European scope and strict risk management.

AMUNDI ASSET MANAGEMENT

Amundi is Europe's largest asset manager by assets under management and ranks in the top 10¹ globally. Following the integration of Pioneer Investments, it now manages over €1.45tn of assets² across six investment hubs based in 37 countries. At the end of 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 €41.6bn², and offers solutions through funds, club deals and multi-management, including two innovative and ambitious partnerships with EDF and CEA. As part of this new platform, the Private Debt division manages €6.5bn² and has a dedicated team of experienced professionals in corporate financing who leverage Amundi's extensive Fixed Income capabilities: No.1 European bond manager with €800+bn of assets and 150 dedicated professionals, including 19 in-house research experts and 18 sector analysts². The private debt division is intended to participate in the financing of companies and their projects (LBOs, investments, external growth, etc.).

THIERRY VALLIERE

Thierry Valliere 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 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.

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¹Source IPE "Top 400 asset managers" published in June 2017 and based on AUM as of end December 2016.

²Figures as of 31 March 2018. Source: Amundi Asset Management

THE EUROPEAN PRIVATE DEBT OPPORTUNITY

- Tom Carr, Head of Private Debt Products

Europe remains an area of significant attention and interest in the private debt space. With the initial growth in the asset class focusing primarily on North America, many participants are now looking to Europe as the next frontier for significant growth. As North American regulation loosens, potentially allowing an opportunity for bank lenders to ramp up their activity in the mid-market space, the opposite looks to be occurring in Europe with regulation looking likely to tighten and potentially create new opportunities and avenues for direct lenders targeting the region. With macro tailwinds in the region and a strong legal regime in place,

the opportunity set in Europe looks likely to be strong in the coming years.

PRIVATE DEBT FUNDRAISING

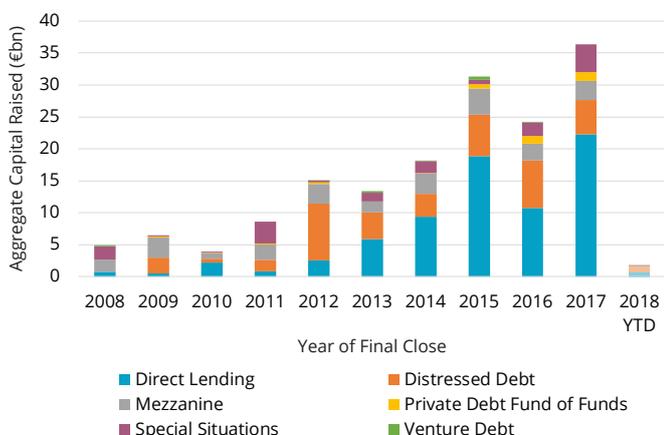
Europe-focused private debt managers have seen a slight downtick in fundraising during the first quarter of 2018, with four funds having reached a final close securing an aggregate €1.9bn (Fig. 6.1). Compared to Q1 2017, when 16 Europe-focused funds secured €8.1bn, early figures for the region could be considered underwhelming, especially given the record-setting end to 2017, in which €14bn was raised across 10 private debt funds focused on Europe that closed in Q4 2017.

With Europe-focused fundraising passing €36bn in 2017, the bar set for managers focused on the region is quite high, and the likelihood of private debt fundraising continuing the record-setting pace could now be in question for 2018. However, with 88 Europe-focused private debt funds in market seeking just under €43bn currently, there is an avenue for strong fundraising in 2018, led by €24bn in capital targeted by direct lending managers focused on the region.

EUROPE-FOCUSED DRY POWDER

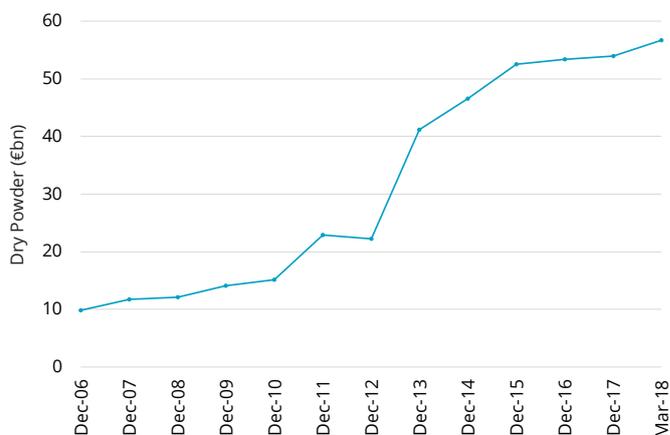
Record fundraising levels in 2017 have also led to record-high dry powder totals

Fig. 6.1: Annual Europe-Focused Private Debt Fundraising by Fund Type, 2008 - 2018 YTD (As at March 2018)



Source: Preqin

Fig. 6.2: Europe-Focused Private Debt Dry Powder, 2006 - 2018



Source: Preqin

Fig. 6.3: Largest Europe-Focused Private Debt Funds in Market (As at March 2018)

Fund	Firm	Vintage	Target Size (mn)	Fund Type	Fund Status
ICG Europe Fund VII	Intermediate Capital Group	2018	4,000 EUR	Mezzanine	Raising
OCM European Principal Opportunities Fund IV	Oaktree Capital Management	2016	3,000 EUR	Distressed Debt	Third Close
Park Square Capital SMBC JV	Park Square Capital Partners	2017	3,000 EUR	Direct Lending	Raising
Direct Lending Fund III	BlueBay Asset Management	2018	2,500 EUR	Direct Lending	Raising
Pemberton European Mid-Market Debt Fund II	Pemberton Asset Management	2017	2,000 EUR	Direct Lending	Raising
Strategic Value Special Situations Fund IV	Strategic Value Partners	2017	1,750 USD	Distressed Debt	Second Close
Tikehau Direct Lending IV	Tikehau Investment Management	2017	1,200 EUR	Direct Lending	First Close
Bain Capital Special Situations Europe	Bain Capital Credit	2018	1,000 EUR	Special Situations	Raising
EQT Mid-Market Credit Fund II	EQT	2018	1,000 EUR	Direct Lending	First Close
Pemberton Strategic Credit Opportunities Fund	Pemberton Asset Management	2018	1,000 EUR	Special Situations	Raising

Source: Preqin

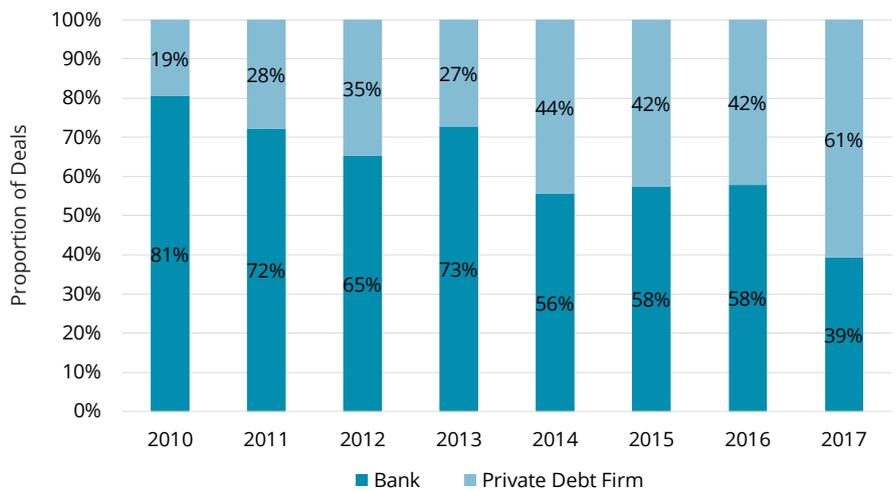
for Europe-focused funds, with managers having access to €57bn in commitments targeting the region as at March 2018, up nearly €3bn from the end of 2017. Putting this record level of capital to work could be challenging for managers moving forward, although there is still significant opportunity as borrowers become increasingly comfortable and experienced working with direct lenders. However, in light of record fundraising, the small increases in dry powder indicate managers have been successfully putting capital to work in Europe, with the proportion of private debt-backed deals in the region increasing steadily over time.

“ In light of record fundraising, the small increases in dry powder indicate managers have been successfully putting capital to work in Europe ”

DEAL ACTIVITY

Private debt deal activity in Europe has traditionally been led by those firms with a combination of knowledge, relationships and access to the nuanced differences between countries and regional disparities. Although competition between banks and private debt firms for access to high-quality deals has remained stout compared to the US, managers have

Fig. 6.4: Private Debt-Backed Deals in Europe: Banks vs. Private Debt Firms, 2010 - 2017



Source: Preqin

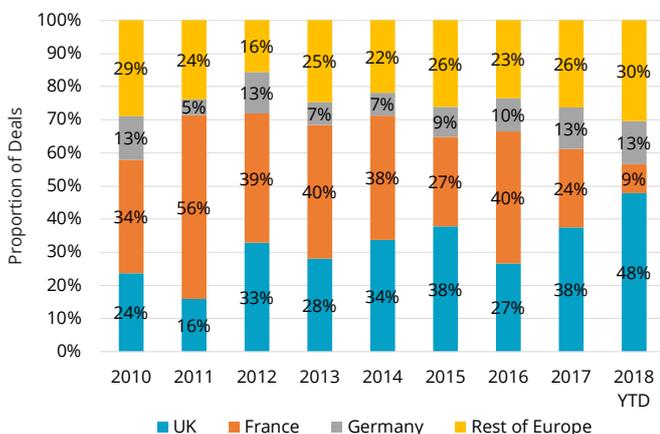
carved out a robust piece of the market, with regulation trending towards allowing those managers to continue and increase access to lending both in sponsored and non-sponsored transactions.

The UK accounted for the largest proportion (38%) of deals across the eurozone in 2017, with France and Germany accounting for the second and third highest levels of activity in terms of both the number and aggregate value of deals in the year (Fig. 6.5). With direct lending having attracted the most attention among private debt in Europe, the UK seems poised to continue as the main hub for private debt activity in the near future. Deal flow for emerging alternative lending markets in Europe has

certainly expanded in recent years, as some managers look outside developed Europe in search of relative value.

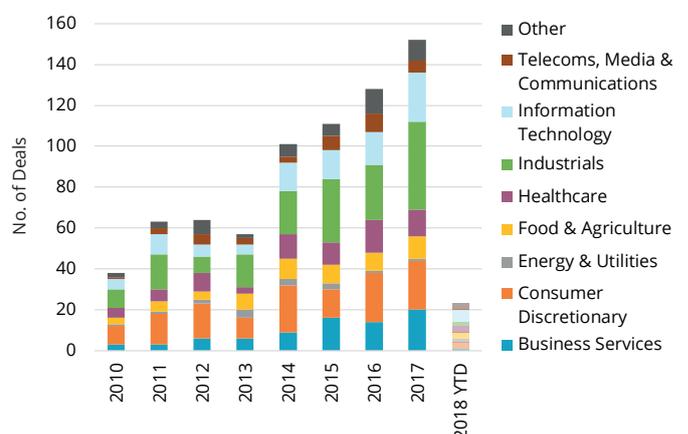
Direct lending is solidly in place as a necessary financing tool for businesses throughout the continent, as evidenced in the massive fundraising growth seen since 2013 for Europe-focused lenders, having secured €1.9bn in 2018 so far. Furthermore, the products being developed as a result of the capital influx in the space has led to greater deal access, with diversity in offerings across debt strategies. Specialty finance, asset-backed lending and revolving credit facilities have all evolved in recent years to fit the risk/return profiles of borrowers across the diverse regional opportunities in Europe.

Fig. 6.5: Private Debt-Backed Deals in Europe by Location, 2010 - 2018 YTD (As at March 2018)



Source: Preqin

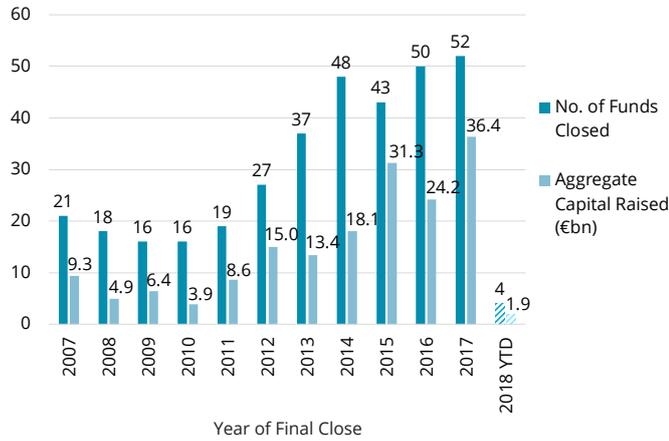
Fig. 6.6: Number of Private Debt-Backed Deals in Europe by Industry, 2010 - 2018 YTD (As at March 2018)



Source: Preqin

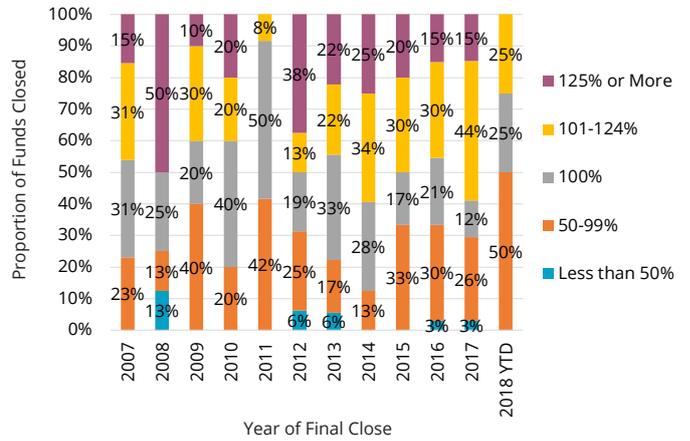
KEY PRIVATE DEBT CHARTS

Fig. 6.7: Annual Europe-Focused Private Debt Fundraising, 2007 - 2018 YTD (As at March 2018)



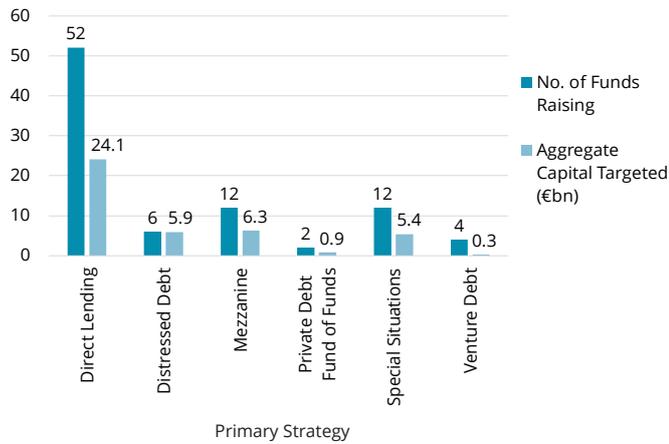
Source: Preqin

Fig. 6.8: Europe-Based Private Debt Funds Closed by Proportion of Target Size Achieved, 2007 - 2018 YTD (As at March 2018)



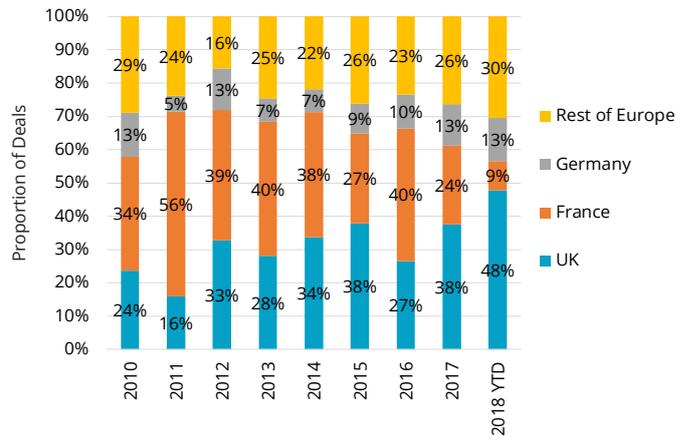
Source: Preqin

Fig. 6.9: Europe-Based Private Debt Funds in Market by Primary Strategy (As at March 2018)



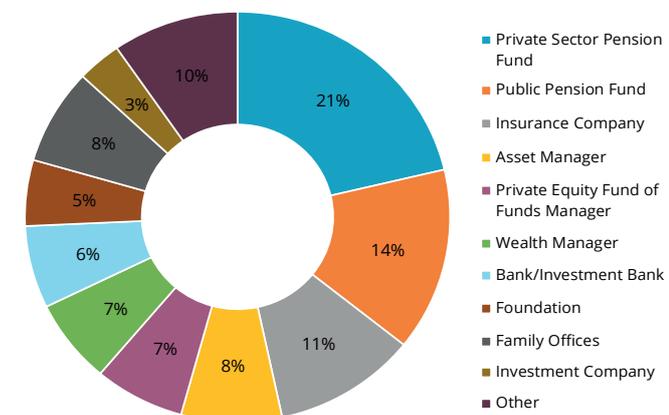
Source: Preqin

Fig. 6.10: Private Debt-Backed Deals in Europe by Location, 2010 - 2018 YTD (As at March 2018)



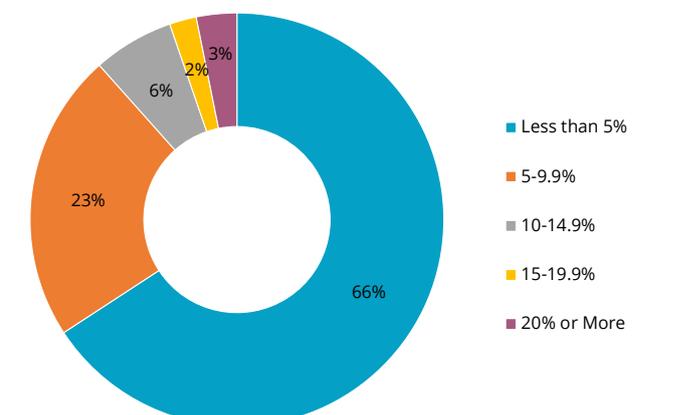
Source: Preqin

Fig. 6.11: Europe-Based Institutional Investors in Private Debt by Type



Source: Preqin

Fig. 6.12: Europe-Based Institutional Investors in Private Debt by Current Allocation (As a Proportion of Total Assets)



Source: Preqin

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(1) Amundi scope - No. 1 Continental European asset manager based on global assets under management (AUM) and the main headquarters being based in continental Europe - Source IPE "Top 400 asset managers" published in June 2017 and based on AUM as at December 2016.

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