



WHAT HAVE THE CAPITAL MARKETS EVER DONE FOR US? AND HOW COULD THEY DO IT BETTER?

ANALYSIS OF THE CENTRAL ROLE OF INVESTMENT BANKS AND ASSET MANAGERS IN DRIVING GROWTH

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by William Wright

Supported by



> *Capital markets are a strategic asset for the UK: they invest more than £4 trillion in assets, provide four times the level of funding as bank lending to companies, and channel the equivalent of 6% of GDP a year in investment into the economy.*

INTRODUCTION & BACKGROUND

What have the capital markets ever done for us?

Capital markets play a vital role in channeling investment into the economy to help drive growth and prosperity. In the UK, more than £4 trillion of capital is invested in capital markets through the pension funds, insurance policies and individual savings of more than 30 million people. Last year, companies in the UK raised more than £300bn in capital in the bond, loan and equity markets.

But what capital markets do and the value of what they provide can seem complex and confusing. And since the financial crisis, the role of capital markets has been overshadowed by controversy. New Financial believes that the UK and Europe need bigger and better capital markets to help drive their recovery and growth. We also believe that there is a big opportunity for the industry to get on the front foot and make a clearer and more constructive case for the value and purpose of what it does.

In this report we aim to demystify what capital markets do, outline how different sectors of the industry operate and how they fit together, and analyse what value they deliver to the economy, to society and to individuals. We also look at how capital markets have responded to criticisms from regulators, policymakers and the wider public, and we review the main challenges they face.

The report is divided into three sections:

- i) An overview of how capital markets work and their role in the economy (pages 3 to 8).
- ii) A summary of how individual sectors in the capital markets work, what value they deliver, and how they fit together (pages 9 to 19). These sectors include: pension funds, asset management, hedge funds, private equity, venture capital, stockmarkets, investment banks (mergers & acquisitions, debt capital markets, equity capital markets, trading), and the wider ecosystem.
- iii) An analysis of the main challenges that individual sectors need to address, how they have responded since the crisis, and how they could do a better job in future (pages 20 to 24).

Some parts of the report have been simplified, but we hope it is not simplistic. We hope it encourages policymakers, outsiders, and people who work in the industry to think about capital markets in a different way. A report like this is only a starting point: ultimately, it is up to the industry to demonstrate the value of what it does for its customers - and how it could do it better - every day.

The capital markets industry is good at talking about big numbers, but less so when it comes to smaller numbers. At the heart of the capital markets are individuals - you and me - who provide the bulk of capital that is put to work through contributions to pension funds and insurance policies, and who are the ultimate beneficiaries of the capital markets. It should be a sobering thought for anyone in the industry that the average pension pot in the UK is just over £43,000, which would produce a retirement income of around £2,000 a year.

Acknowledgements:

I would like to thank the team at New Financial for their hard work and contribution to this report; Dealogic and Preqin for providing much of the data; and Barclays for its support for this project. This report is a work in progress: summarising the role and value of capital markets in a little more than 20 pages is a tall order. Any errors are entirely my own, and I would welcome any feedback.

NEW FINANCIAL
Rethinking capital markets

New Financial is a think tank and forum that believes Europe needs bigger and better capital markets to help drive its recovery and growth.

We think this presents a huge opportunity for the industry and its customers to embrace change and rethink how capital markets work.

We are a social enterprise that launched in September 2014. We are funded by institutional membership.

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What have the capital markets ever done for us? And how could they do it better?

'But apart from the sanitation, the medicine, education, wine, public order, irrigation, roads, a fresh water system, and public health - what have the Romans ever done for us?' Monty Python - Life of Brian

Here is a 10-point summary of the main findings of this report:

1. **Capital markets play a vital role in connecting the providers of capital with users of capital.** They channel savings into productive investment and help companies, investors and individuals manage their risk. Capital markets provide a supplementary source of funding to bank lending, and act as a 'spare tyre' for the economy.
2. **Capital markets are a strategic asset for the UK economy,** providing an important source of funding. The combined value of corporate bonds and listed companies in the UK is more than four times the value of bank lending, and the amount of capital raised in the corporate bond and equity markets by UK companies each year is equivalent to nearly 6% of GDP.
3. **UK capital markets play a significant role in the European economy.** Capital markets in the UK are twice as developed relative to GDP as in the rest of Europe, and between 40% and 80% of all capital markets activity in the EU is conducted in the UK.
4. **Effective capital markets start with deep pools of long-term capital.** In the UK, pension funds and insurance firms have £3.4 trillion to invest in markets, and individuals have another £1 trillion that can be invested more productively than putting it in the bank, while also generating higher returns. Annual contributions to pension funds add up to more than £60bn each year that can be put to work in capital markets.
5. While capital markets are primarily for institutions, **individuals provide the vast majority of capital that is put to work in the capital markets** through contributions to their pension funds, insurance policies and direct investments. We are all the end users and ultimate beneficiaries of capital markets activity.
6. **Investment banks play a central role in capital markets,** advising companies and investors, enabling companies and governments to raise capital, connecting buyers and sellers in the secondary market, and helping companies and investors manage their risk.
7. **Asset managers play an important role in managing money on behalf of clients, allocating capital, making investment decisions,** and providing oversight and governance of the companies in which they invest.
8. **Since the financial crisis, the capital markets industry has faced significant challenges in rebuilding trust** with policymakers, customers and wider society, as well as changing its culture and addressing misconduct. While much progress has already been made, managing this important process could define the industry for decades to come.
9. **The capital markets industry has also faced significant structural challenges** such as adapting to a wave of regulatory reform, dealing with the implications of Brexit, responding to the rise of fintech, restructuring its business model, and addressing dominance of overseas market participants.
10. The capital markets industry is complex, but does not have to be so complicated. Given the important role that it plays in society, **different sectors of the industry should work together to rethink how to articulate and communicate a more constructive case for the value of what they do** that focuses on the benefits for customers and society. This report aims to make a contribution to that process.



A new social contract

Since the 1930s, there has been a social contract between banks and the communities we represent, designed to facilitate credit and economic growth.

It was a simple, easy to understand contract.

Banks take in deposits over the short term, yet lend over the long. This is an inherently risky business. But it's also crucial to growing the economy. So, for a long time, governments around the world have provided implicit backing for its continued activity, agreeing to supply liquidity to banks with public money, when needed, to keep the system flowing.

The financial crisis, and in some instances the behaviour of individual bankers in the years leading up to it, demonstrated that the financial system abused the trust implicit in that social contract. Now, as a result, taxpayers are rightly unwilling to provide this kind of blanket guarantee any longer and it is something we all need to recognise.

It is for this reason, among others, that we must shift away from relying on traditional bank lending and instead broaden the means through which businesses and entrepreneurs access capital and financing. The answer lies in healthy, diverse capital markets, a centuries old innovation, born in Europe, flourishing in America, but which remains underdeveloped and misunderstood here. I believe that needs to change.

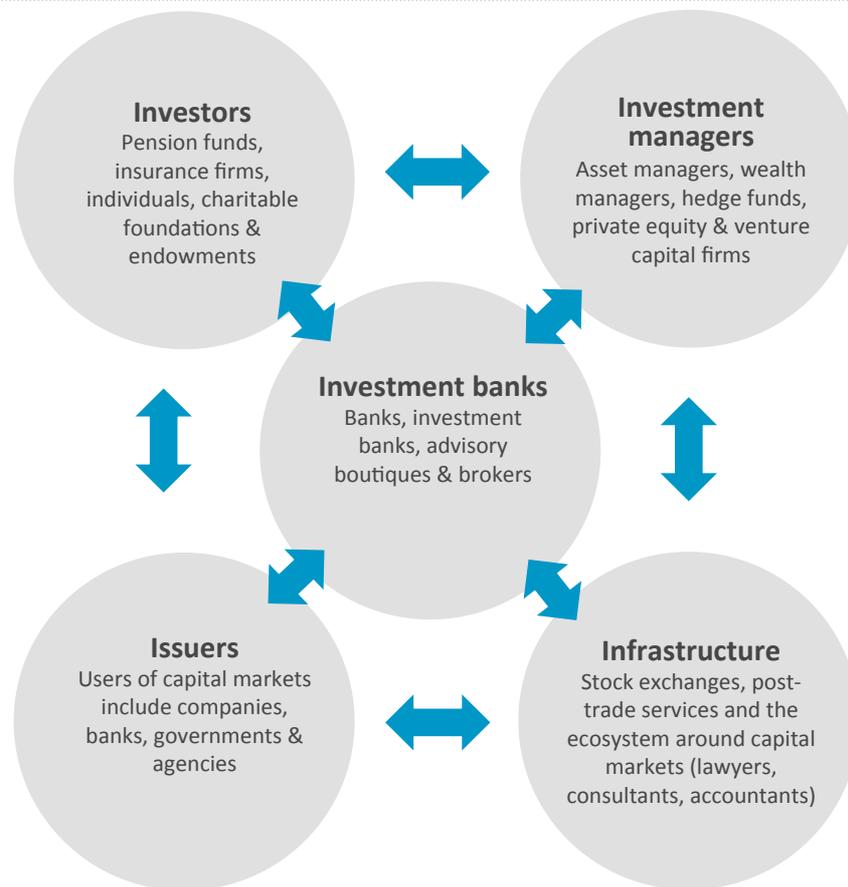
That is one of the reasons why I asked William Wright to take on this important piece of research. His findings are both fascinating and startling. He outlines the extent to which capital markets are an asset for the UK economy – the oxygen of commerce from which we all benefit. He explores the enduring lack of understanding and pervasion of half-truths that limit their proper use, and he offers up some interesting challenges facing the banking industry, the facilitators of capital markets around the world.

Since the financial crisis, Barclays has been on a long journey to address some of these issues. This report is another step forward in that process and, I hope, will stimulate yet further debate about how UK businesses can harness the global capital markets better than they have done to date.

Jes Staley
Group chief executive
Barclays plc

PART I - WHAT ARE CAPITAL MARKETS?

Fig. I The main participants in the capital markets and how they fit together



What are capital markets?

The purpose of capital markets is to match the supply of funds from investors with the demand for funding from companies and governments. They play an important role in complementing lending by banks, and allocate capital to where it can be most effectively deployed. The capital markets industry is large and complex, and can be confusing. While the industry is often described collectively as 'bankers' or 'the City', different market participants play very different roles. Fig. I is a simplified diagram of the main participants in the capital markets and the role they play in the chain from providing capital to investing it, based around five 'I's':

- **Investors**: these are the providers of capital. Pension funds and insurance firms pool funds from individuals and their employers to put to work in the capital markets. Other sources of capital include endowments, charitable foundations, sovereign wealth funds, and individuals investing directly.
- **Investment managers**: these firms manage funds on behalf of investors in different types of assets using different strategies. They include traditional fund managers, wealth management firms, hedge funds, as well as private equity and venture capital firms.
- **Investment banks**: investment banks play a vital role at the heart of the capital markets. They advise companies on acquisitions, help them raise capital from investors in what is known as the primary market, help investors buy and sell different assets in the secondary market, and help companies, investors, governments and individuals manage their risk.
- **Issuers**: these are the users of capital. Companies use the capital markets to raise funds to invest in their business that they can't borrow from banks, to manage their risks, and to buy and sell other businesses. Governments use the capital markets to raise money for investment and spending.
- **Infrastructure**: capital markets operate within a complex infrastructure of stock exchanges, trading venues, clearing and settlement houses, and securities services. There is also a large ecosystem of suppliers that supports the capital markets, including IT providers, law firms and consultants.

Making the positive case for capital markets

Capital markets are not a panacea for all of Europe's economic problems. They are not suitable for all investors or for all types of companies. Markets can be volatile. They often overshoot on the way up as well as on the way down. To outsiders they can often seem unnecessarily complex, and since the financial crisis they have often been overshadowed by controversy.

Here is a summary of 10 ways in which well-functioning and well-regulated capital markets can help drive growth and benefit society:

1. Capital markets provide a valuable additional source of financing for companies that complements traditional lending and provides companies with a wider range of sources of potential funding. It reduces the economy's reliance on bank lending, which can be cyclical. For example, since the financial crisis, the growth in corporate bond markets in Europe has offset more than 90% of the decline in bank lending.
2. Capital markets offer the right companies the ability to raise a larger amount of capital, for a longer period, and at a lower cost than borrowing from their bank.
3. Capital markets improve what economists call the 'allocative efficiency' of capital, by effectively crowdsourcing decisions about pricing and value to a wide range of investors and channeling investment to those companies that can make the best use of it.
4. The need to compete for capital and be accountable to investors helps improve discipline, governance and performance at companies (or governments) that issue securities.
5. While capital raising can come to an abrupt halt in the wake of market disruption, capital markets rebound faster than bank lending. The flow of gross new bank lending in the eurozone has fallen by roughly 40% since the financial crisis, but issuance in European bond markets has nearly doubled relative to GDP since 2007, and activity in the equity markets is back to the same relative levels as it was before the crisis.
6. While market performance is often volatile in the short term, investing in capital markets across a range of assets over the long term generates higher returns than keeping your savings under a mattress or in a bank account, providing a better income in retirement and reducing the future economic burden of pensions provision on taxpayers.
7. Capital markets provide investors with the ability to buy and sell assets more easily than markets such as property. And they provide companies and investors mechanisms to effectively manage their risks, such as future changes in exchange rates or credit worthiness.
8. Capital markets provide longer-term investors such as pension funds and insurance companies with a wider range of potential assets in which to invest that better match their liabilities, and enable them to offer financing over much longer periods than traditional bank lending.
9. Capital markets are not a realistic financing option for most small and medium-sized companies (SMEs), but wider use of capital markets by companies that are large enough to access them can help free up bank balance sheets and enable banks to focus their lending on smaller companies that need it most.
10. Capital markets help boost growth: analysis of 45,000 companies over 20 years by US academic Ross Levine found that companies which issued securities grew faster than those which don't. Efficient capital allocation mechanisms – as measured by the size of long-term pools of capital - are a better indicator of an economy's future growth than the overall size of the banking system.

A shot in the arm

Capital markets make a significant contribution to the UK economy by channeling money into productive investment. Fig.2 summarises this contribution relative to UK GDP and in absolute terms.

Capital markets in the UK are roughly twice as deep relative to the size of the economy as capital markets in the rest of the EU. This means that the UK is far less reliant on bank lending than most other countries in Europe, and that companies are able to access a more diversified range of funding.

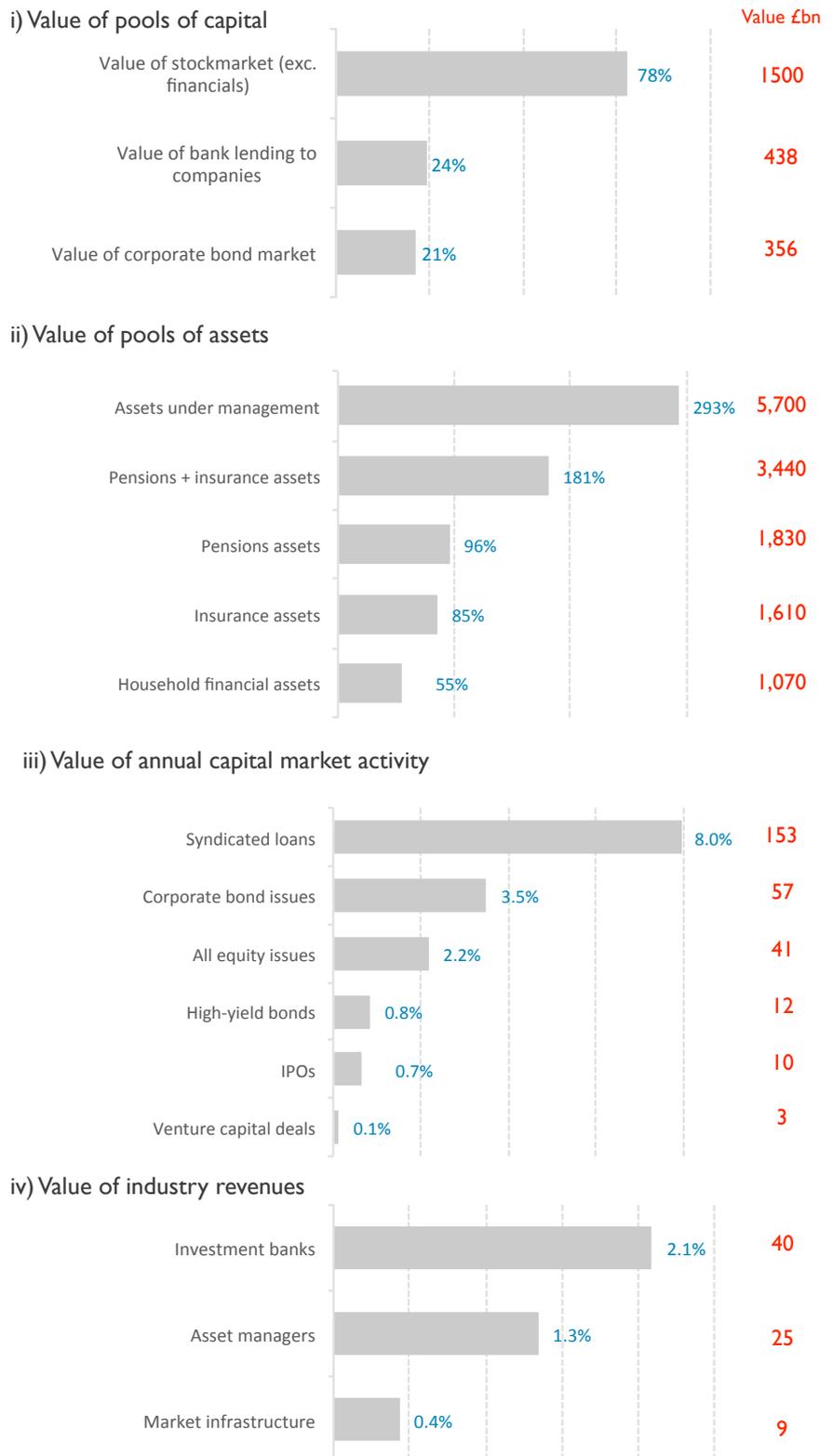
For example, the combined value of the corporate bond market and of non-financial companies listed on the stockmarket in the UK is £1.8 trillion, or more than four times the total value of bank lending to UK companies (see Fig. 2i: the equivalent figure for the rest of the EU is 1.5 times). And every year, UK companies raise more than £100bn in the capital markets from corporate bonds, equity issues, and venture capital. That's a shot in arm of for the UK economy equivalent to nearly 6% of GDP.

This high level of supply is possible because the UK has deep pools of long-term capital. Pension funds and insurance firms in the UK have combined assets of £3.4 trillion that they able to invest in the capital markets, or nearly twice the value of UK GDP. Individuals have another £1.1 trillion in financial assets invested directly in capital markets.

The capital markets industry also makes a significant direct contribution to the UK economy in terms of its economic output and hundreds of thousands of people that it employs. We estimate that the revenues from investment banking and capital markets in the UK add up to just under £40bn a year, while asset managers generate an additional £25bn a year. That adds up to more than 3% of UK GDP.

Fig.2 The contribution of capital markets to the UK economy

The value of UK capital markets activity as a % of GDP and in absolute terms £bn (Average over the three years to 2015)



Source: New Financial

A dominant role

The UK capital markets industry plays a vital role in the European economy. First, capital markets in the UK are by far the largest and deepest in Europe. On average UK capital markets are twice as developed relative to GDP as in the rest of the EU, and UK companies and investors account for around one third of all activity in the EU (see Fig.3).

In the bond and loan markets, UK companies account for about 20% of activity across the EU. In equity markets their share is much bigger: UK companies account for around one third of all IPOs, venture capital and private equity activity in the EU, and more than 40% of pensions assets.

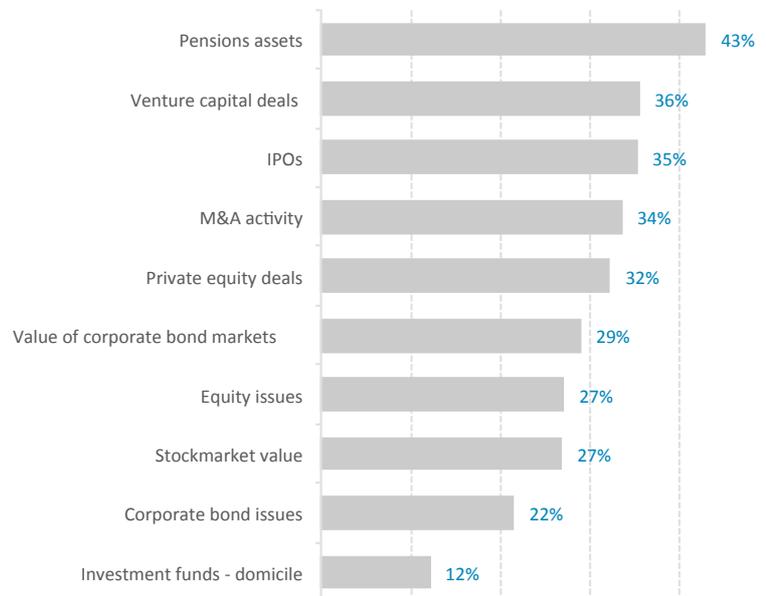
Second, the UK is the dominant financial centre in Europe and a significant amount of capital markets activity in the rest of the EU is conducted in London. The single market has encouraged firms to concentrate their EU activities in the UK (see Fig.4). For example, just over 40% of assets under management in the whole of the EU are managed in the UK, and around three quarters of trading, hedge funds and capital markets revenues in the EU are based in the UK.

This is reflected in the high level of interconnectedness between capital markets in the UK and the EU. Three quarters of firms in the EU that use passports in the capital markets are based in the UK, and EU companies account for roughly one third of all acquisitions of UK companies over the past five years.

While the City is often viewed with suspicion by other countries in the EU, the UK's expertise and experience in capital markets means that it plays a leading role in influencing and shaping the framework for capital markets at a European and global level. Unpicking this interdependence as a result of Brexit will be challenging and is likely to cause significant uncertainty and disruption.

Fig.3 The central role of UK capital markets in the EU

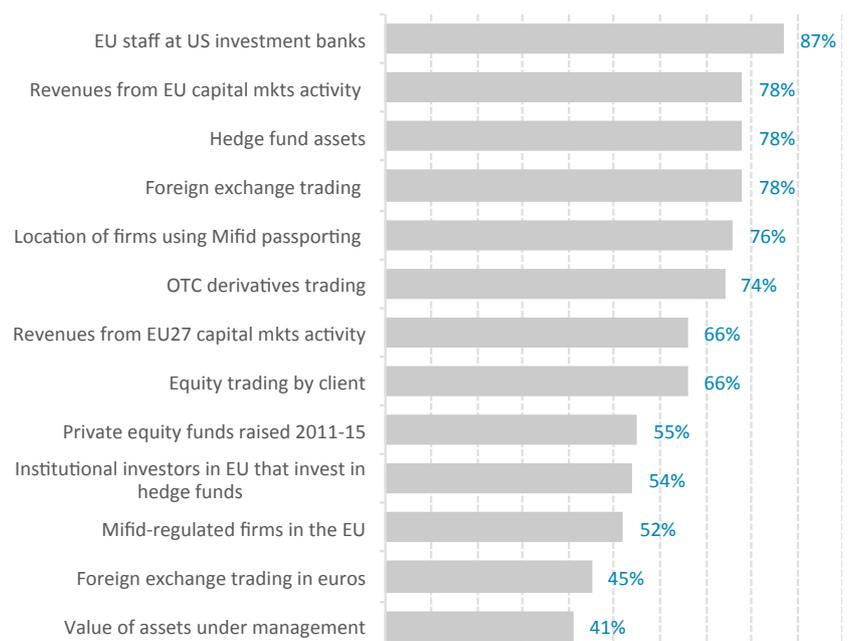
The value of UK capital markets activity as a proportion of EU capital markets activity % (Average over the three years to 2015)



Source: New Financial research

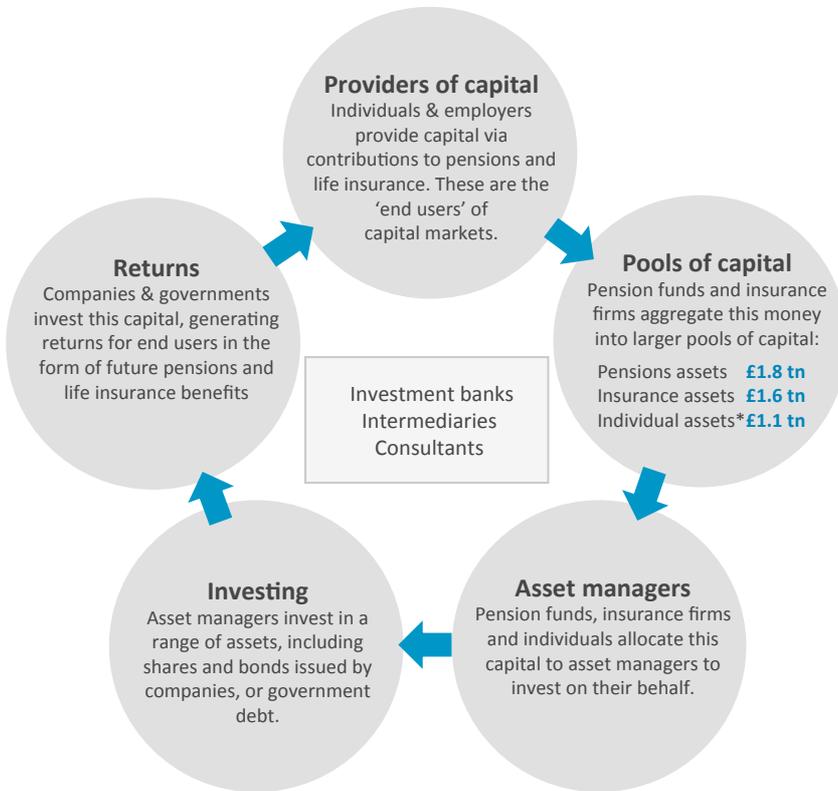
Fig.4 The location of capital markets activity in the EU

The proportion of EU capital markets activity that is conducted in the UK %



Source: New Financial research

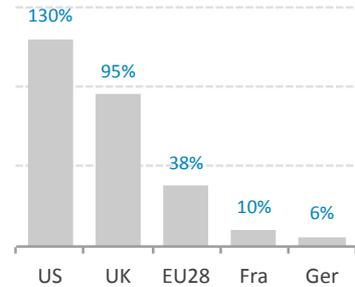
Fig.5 How pools of capital work



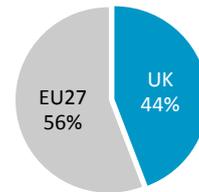
* Household financial assets excluding pensions, insurance & bank deposits

Fig.6 Pensions assets in the UK

Pensions assets as a % of GDP 2015



UK pensions assets as a % of EU pensions 2015



Source: OECD, Insurance Europe, Eurostat

64%

% of UK workforce enrolled in a workplace pension scheme
Source: ABI

£43,300

Average value of a pension pot in the UK in 2015
Source: ONS

21 million

Number of individual pensions policies in place in the UK
Source: ABI

The starting point for capital markets

The starting point for effective capital markets is deep pools of long-term capital. The largest and most important pools of capital are funded pensions schemes, insurance companies, and individual investors, which between them provide £4.5 trillion in capital in the UK (see Fig.5), which means the UK has the largest and deepest pools of capital in Europe. This money can be invested over the long-term in markets, and compares with roughly £1.5 trillion that individuals hold in deposits and savings with banks.

Pensions schemes broadly fall into two main categories. Funded pensions schemes pool contributions from employers and employees and invest them via fund managers in a range of different assets depending on their risk appetite and future liabilities, to generate long-term returns and provide a future retirement income for their members. The contributions to unfunded 'pay-as-you-go' schemes such as the state pension or the NHS pension scheme are not invested and therefore future retirement incomes in those schemes are paid out of future tax revenues.

Nearly two thirds of all workers in the UK are members of an occupational pension scheme, and this level has increased since the introduction of auto-enrolment in 2012.

Funded pensions have a number of advantages over unfunded schemes. They can provide higher returns over the long term (and therefore a higher income in retirement) than individuals could make by putting their money in a savings account. They provide large pools of capital that can be put to work more productively in the economy over a longer timeframe than lending by banks. They reduce the future economic burden of paying for pensions out of tomorrow's tax revenues. And the annual contributions to pension funds in the UK add up to a flow of more than £60bn a year which can be invested in the economy.

Fig.7 How asset management works

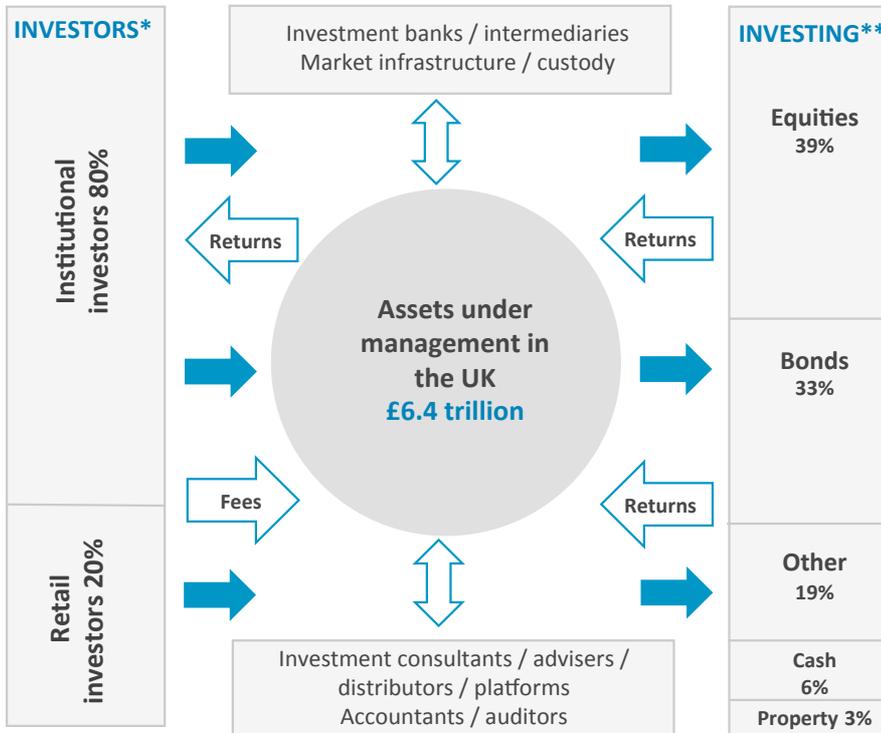
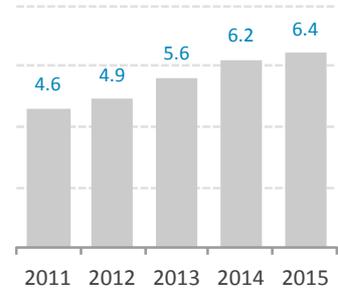
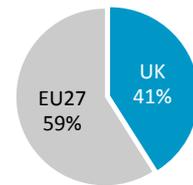


Fig.8 Asset management in the UK

Value of AuM in the UK 2011-2015 £ trillion



UK AuM as a % of EU total 2015



Source: OECD, Insurance Europe, EFAMA, Eurostat, Investment Association

1.59%

Average annual costs on a UK active equity fund

47%

% of assets managed in the UK by North American asset management groups

£97m

Median size of a UK fund

Source: Investment Association

Other people's money

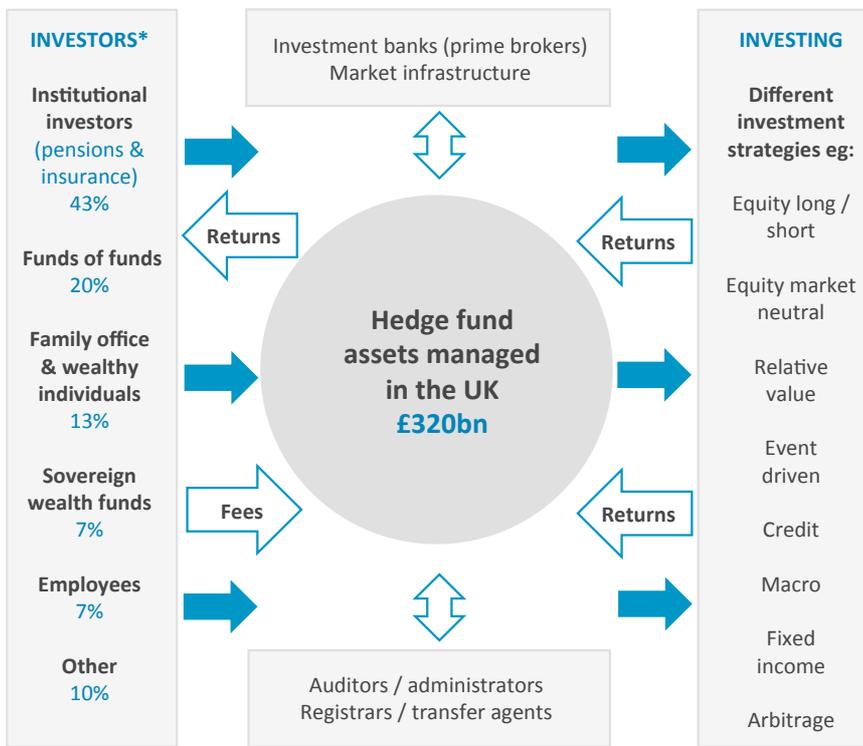
Asset managers look after their clients' money and invest it in a range of assets according to their clients' risk appetite and expectations of return. The UK has the largest asset management sector in Europe, with a total of £6.4 trillion of assets under management (see Fig.8). Roughly 80% of the funds managed by asset managers in the UK are on behalf of institutional clients such as pension schemes or insurance companies, while 20% are managed for retail investors.

Asset managers play an important role in matching the supply and demand for funds and in channeling capital into productive investment in the economy by choosing which companies and assets in which to invest (see Fig.7). For example, UK-based asset managers bought more than 40% of all of the flotations in the UK in 2014 and nearly 60% of all corporate bond issues, and they own around one third of the UK stockmarket.

The asset management industry in the UK is very diverse, ranging from huge asset management firms managing hundreds of billions of pounds around the world to much smaller specialist boutiques which operate in a particular sector. Active asset managers select individual companies in which to invest and aim to outperform the market, and charge their clients fees of between 1% and 2% a year. Passive asset managers aim to replicate the performance of stockmarket indices and charge much lower fees.

As shareholders, asset managers provide oversight and stewardship of the way in which listed companies are managed. For example, they vote at annual shareholder meetings on issues such as the election of directors, pay, and strategy. And by pooling their clients' money they can provide a cheaper and more efficient way of investing for individuals than investing in markets directly.

Fig.9 How hedge funds work



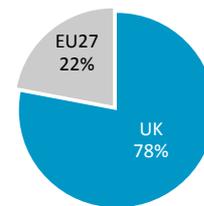
* Investors in European hedge funds 2015

Fig.10 Hedge funds in the UK

Value of UK hedge fund assets 2011-2015 £bn



UK hedge fund assets as a % of EU in 2015



Source: Preqin, HFR

800

Estimated number of hedge funds in UK
Source: TheCityUK

-1%

Average performance of hedge funds in 2015
Source: HFR

1.6% and 19.3%

Average management and performance fees on European hedge funds
Source: Preqin

Masters of the universe?

Hedge funds are specialist investment funds that invest in a wide range of different assets and markets using different investment strategies. While hedge funds are often lumped together as a group, the industry is very diverse: the research firm Hedge Fund Research breaks them out into 31 distinct categories and different investment strategies (see Fig.9 for some examples). Hedge funds often use derivatives in their investing, and many hedge funds employ 'short-selling' – effectively betting that the value of a particular asset will fall.

The industry began to grow in the late 1980s and has become much more mainstream in the past few decades. Nearly half of all hedge funds assets come from pension funds and insurance firms, although they only allocate about 2% of their funds to them. The UK dominates the industry in Europe, with around 800 firms managing 78% of all EU hedge fund assets (see Fig.10). The industry is tiny compared with the traditional asset management industry, and attracts a disproportionate amount of media and political interest: total hedge fund assets in the UK were £330bn at the end of last year, or less than 5% of the total assets under management in the UK (see Fig.10).

Hedge funds aim to generate superior risk-adjusted and diversified returns for their clients. Strategies such as short-selling, relative value, or arbitrage can improve the efficiency of markets and impose discipline on companies. Hedge funds also play a significant role in activist investing, where they take a small stake in a company and push for changes in its management or strategy. They traditionally charge their clients a fee structure of 2% of assets under management and 20% of performance, although competition has pushed headline fees down. The industry is also very Darwinian: investors often withdraw money from funds that perform badly, and hedge funds frequently shut down.

Fig. 11 How private equity works

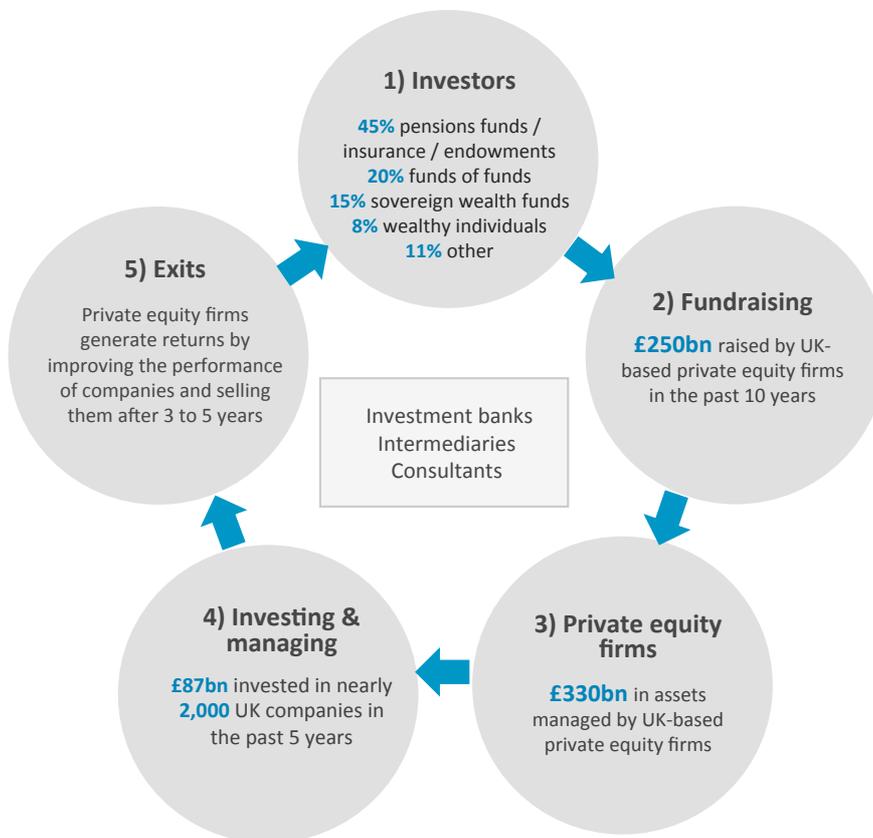
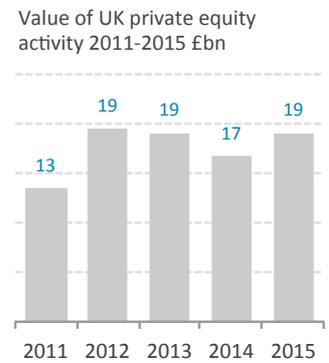


Fig. 12 Private equity in the UK



Private equity funds raised by UK firms as % of EU total 2011-2015



Source: InvestEurope, Preqin

60%

UK share of private equity assets managed in the EU
 Source: Preqin

12%

Annualised return on European buyouts funds 2006-2015
 Source: Cambridge Associates

64%

% of investors in private equity who are concerned by management fees
 Source: Preqin

Barbarians at the gate?

Private equity firms are specialist investment firms that buy underperforming or potential high growth companies, ideally with predictable business models and revenues. They raise money from investors and aim to deliver returns by working closely with the management of the companies in which they invest to improve operational performance and restructure the business - away from the public glare of the stockmarket - before selling the companies back to the stockmarket or to other buyers three to five years later (Fig. 11).

Over the past five years, private equity firms have invested nearly £90bn in UK companies, and they have raised more than £250bn to invest over the past decade. Investment banks advise private equity firms on buying and selling companies, and help them raise money to finance deals. Many household names in the UK, such as Boots, Halfords, Odeon Cinemas and Saga, have been backed by private equity.

The UK dominates the European private equity industry: half of all funds raised in the EU were raised by UK private equity firms (see Fig. 12), and private equity activity in the UK accounts for more than a quarter of all deals in the EU. They charge their investors a management fee (usually 2%) and a share of the profits they make on their investments (this is known as 'carry' and is usually 20%).

Private equity firms – also known as buyout firms – are able to take a longer term and more active approach to the companies they invest in because they do not have to publicly report their performance and progress every quarter. This approach can lead to a more disciplined approach to management, successful turnarounds of struggling companies, and to faster growth. Investment returns from private equity tend to beat stockmarket performance in the long term: European private equity returns over the past 10 years have averaged 12% a year, according to Cambridge Associates.

Fig.13 How venture capital works

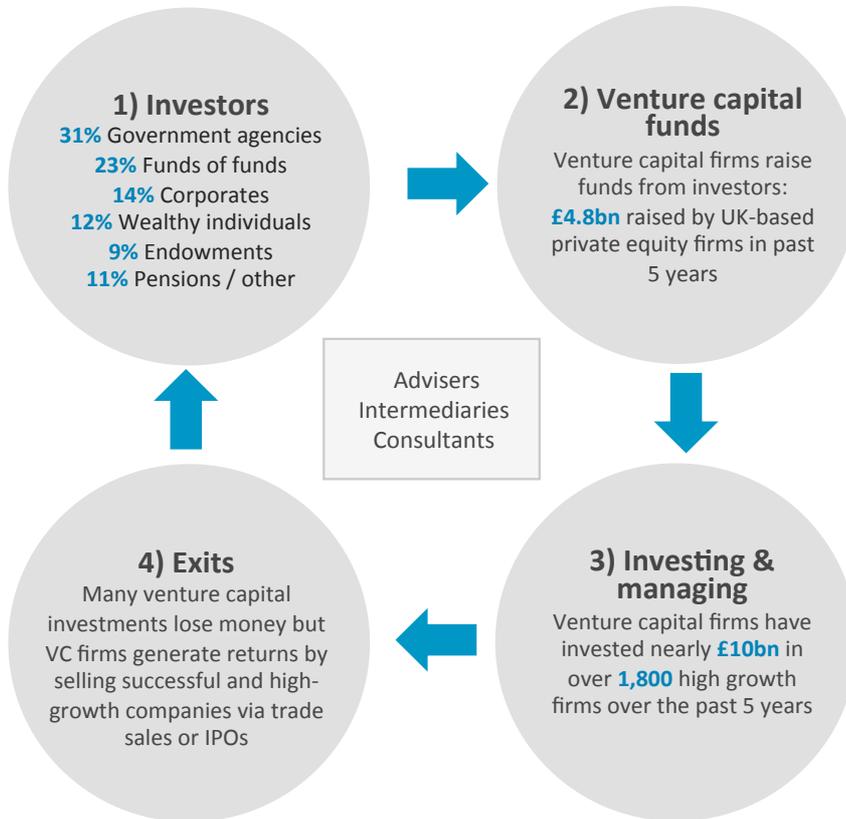
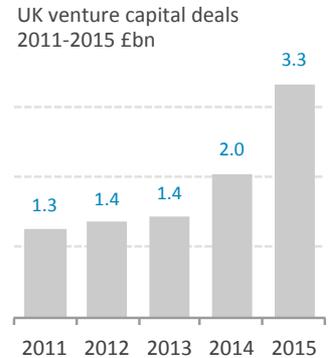
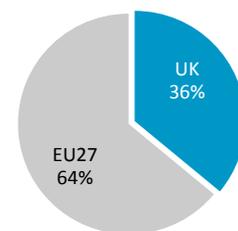


Fig.14 Venture capital in the UK



UK venture capital deals as a % of EU total 2011-2015



Source: InvestEurope, Preqin

7.5%

Annualised return on European venture capital funds 2006-2015
Source: Cambridge Associates

\$1bn

The value of a venture-backed technology company to qualify as a 'unicorn'

3,228

Number of technology firms per sq km around London's Silicon Roundabout in EC1
Source: Stirling Ackroyd

Searching for unicorns

Venture capital firms are specialist investment firms that invest in early stage start-up companies with high growth potential, usually in the technology and life sciences sectors. They raise money from investors to put to work over a five to 10 year timeframe providing financing and business expertise to entrepreneurs who would struggle to raise the money from their bank or from traditional investors (see Fig.13).

The sums involved are often small – ranging from a few hundred thousand to a few million pounds, and the overall size of the industry in the UK is tiny. Venture capital is a high risk activity: most start-ups fail, but venture firms generate returns if only a small number of their investments achieve their potential. A small number of venture-backed companies become 'unicorns': companies worth more than \$1bn.

The UK has the largest venture capital industry in Europe: nearly £10bn has been invested in nearly 2,000 companies in the UK over the past five years, accounting for 36% of all EU venture investment in the past five years. Many of the big US tech companies like Google and Facebook were backed by venture capital, as were successful UK tech firms like ARM Holdings, Autonomy, JustEat and King Digital (the makers of Candy Crush). Venture capital clusters in Cambridge, Oxford and 'Silicon Roundabout' in London (the centre of the financial technology or 'fintech' industry), lead their field in Europe.

Venture capital firms take an active approach to their investments: executives at venture firms are often experienced entrepreneurs, and they provide advice to the companies they invest in on how to expand the business, and sit on their boards. Successful venture-backed companies generate rapid employment growth and high-quality jobs, while consumers benefit from the innovative products and services they create. Like private equity firms, they charge a management fee of around 2% and a share of any profits of around 20%.

Fig.15 How stockmarkets work

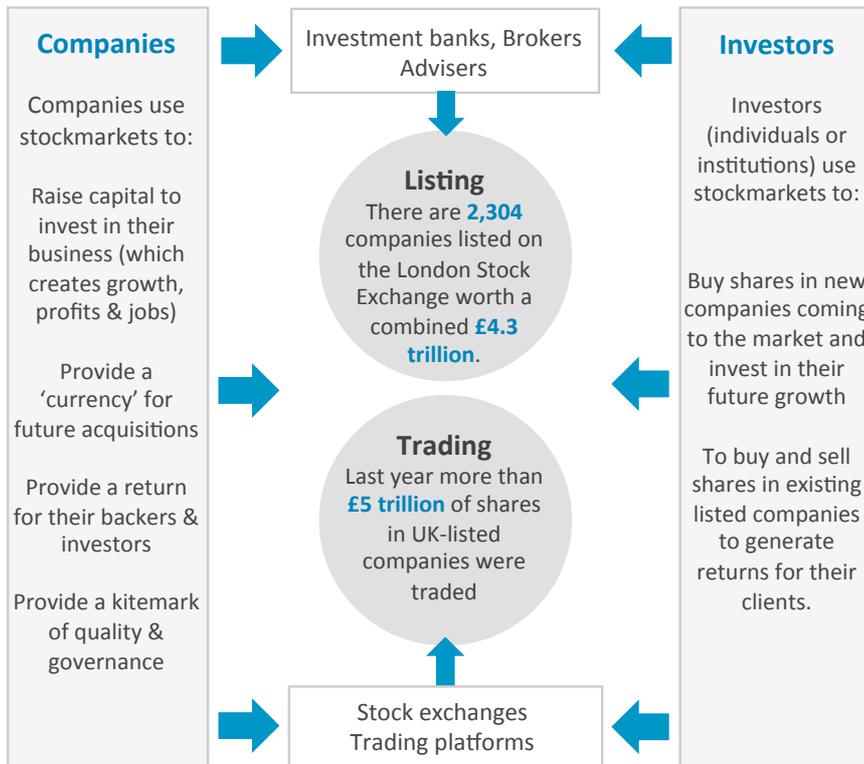
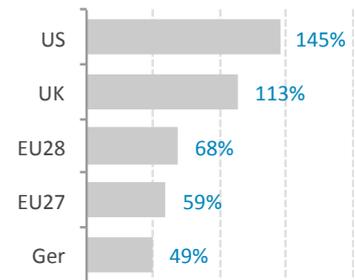
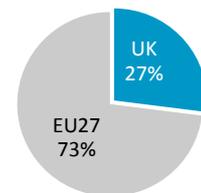


Fig.16 UK stockmarkets

Stockmarkets as a % of GDP



Value of UK stockmarket as % of EU total - 3 yrs to 2015



Source: LSEG plc, Fidessa, New Financial

£133bn

Amount raised by companies listed on the London Stock Exchange 2011-2015
Source: LSEG plc

1,010

The number of companies listed on the smaller company market AIM
Source: LSEG plc

27%

Value of UK stockmarket as a % of EU stock markets
Source: New Financial

The heart of the capital markets

Stockmarkets are what many people imagine when they think of the City of London. While the amounts raised on stockmarkets are relatively small compared with the bond and loan markets, stockmarkets still sit at the heart of the capital markets.

Stock exchanges provide a central market to connect companies that want to raise capital to invest in their business with investors who are looking to put their capital to work. They also act as a central venue for buyers and sellers to trade shares in different companies. The UK has the largest and deepest stockmarket in Europe: more than 2,300 companies with a combined value of £4.3 trillion are listed on the London Stock Exchange, representing 27% of the combined value of all stockmarkets in the EU.

Investment banks help companies raise money on stockmarkets in a process known as an IPO, going public, listing or floating, and they also play a central role in the trading of shares in companies that are listed on stockmarkets. In 2015, shares worth more than £5 trillion were traded in UK companies.

Increasingly stock exchanges have diversified away from their traditional business: the London Stock Exchange Group makes less than a quarter of its revenues from listing and trading shares, with most coming from data, indices, clearing and technology. And in recent years, traditional stock exchanges have faced much more competition from rival electronic trading platforms. The old stock exchange floor closed in the 1980s, and virtually all trading is now conducted electronically.

Stockmarkets play a valuable role in raising capital for companies. Between 2011 and 2015 companies raised more than £130bn on the London Stock Exchange, and more than 1,000 companies are listed on AIM its dedicated market for smaller and high growth companies.

Fig.17 How mergers and acquisitions work

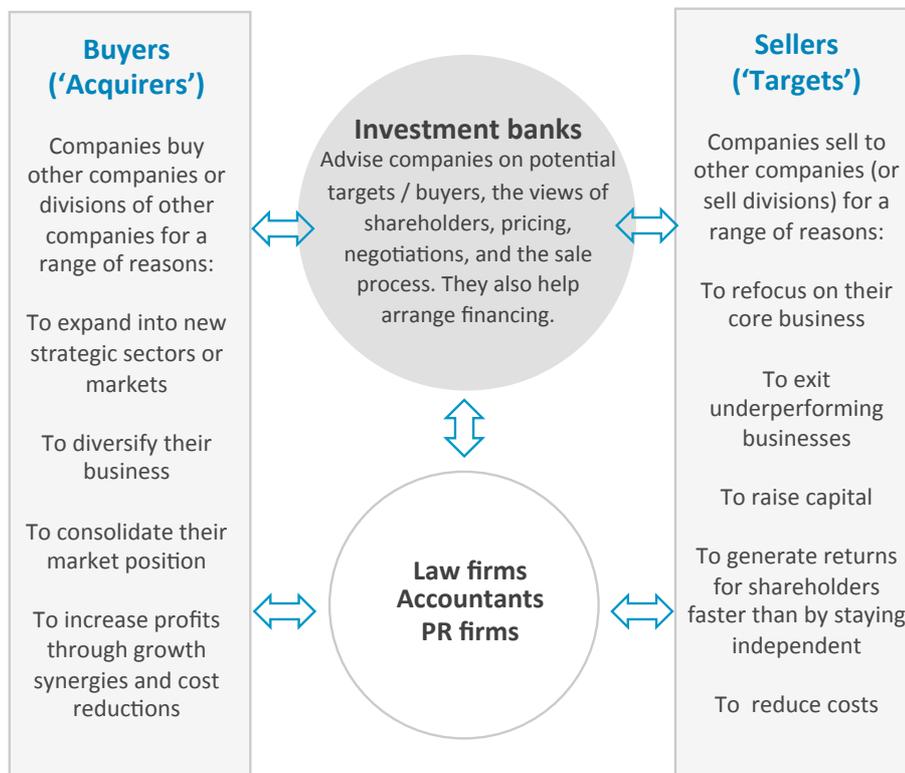
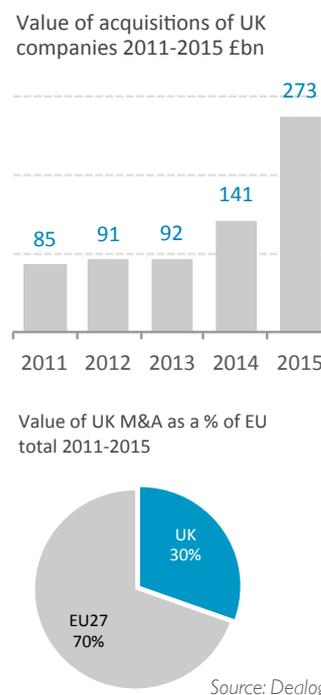


Fig.18 M&A in the UK



12,919

Number of acquisitions by UK companies 2011-2015

Source: Dealogic

£682bn

Value of UK companies acquired 2011-2015

Source: Dealogic

£38m

Average deal size of acquisitions by UK companies

Source: Dealogic

Buying and selling companies

Mergers and acquisitions (or M&A) is the generic term for companies buying and selling other businesses. Over the past five years UK companies have spent nearly £500bn on about 13,000 acquisitions, split roughly equally between buying businesses in the UK and overseas.

Investment banks play a central role in this process. They advise companies on potential acquisitions or on which companies might be interested in buying them or part of their business. They also advise companies on how their shareholders will respond to the deal, on the pricing and structure of deals, as well as on the negotiations and sale process. They defend companies against hostile takeover approaches, often helping them negotiate a better price. Investment banks also help companies raise financing for acquisitions in the bond, loan or equity markets.

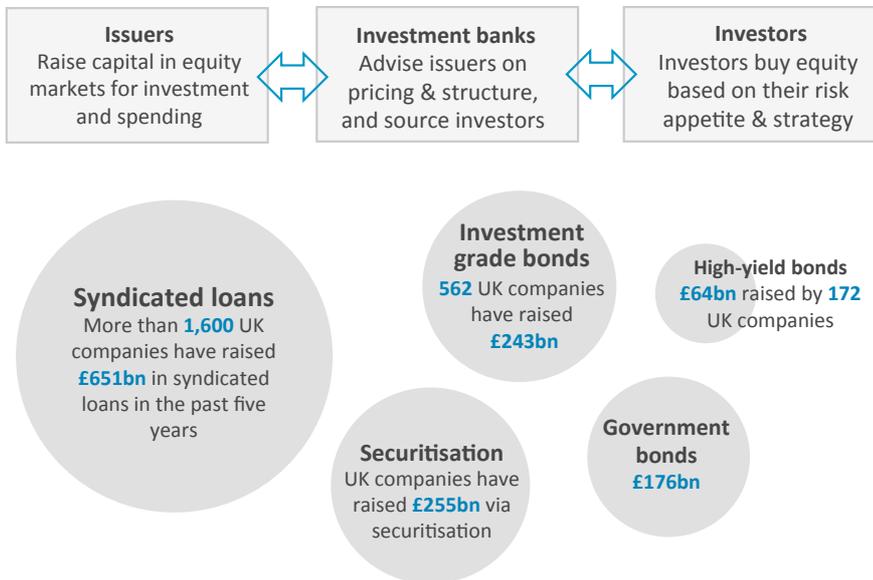
Investment banks charge companies an average fee of just over 1% of the value of a deal for advising on M&A deals, although fees are much lower on big deals, and higher on smaller deals. Investment banks are supported by an army of lawyers, accountants, PR firms and other advisers.

There is a wide range of reasons why companies buy other companies, including expanding into new markets or sectors, diversifying their business, and increasing profits through growth and consolidation. Equally, companies have lots of reasons to sell businesses, including rethinking their strategy, selling an underperforming business, reducing their costs or raising capital. While megadeals grab the attention of the media, the average deal size of companies involving a UK buyer is just £38m: a medium-sized business with a few hundred employees.

The main value to the shareholders of the company being acquired is that the buyer pays a premium for the company, usually of 20% or more. Often shareholders get to vote on whether or not to accept an offer for a company whose shares they own.

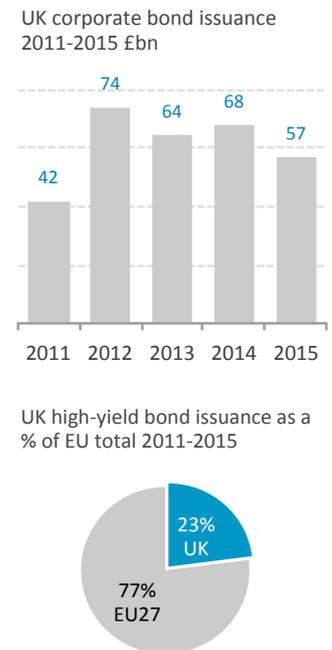
PART 2 - INVESTMENT BANKS - DEBT CAPITAL MARKETS

Fig.19 How debt capital markets work



- **Syndicated loans:** loans issued by companies and sold on to investors
- **Securitisation:** bonds that bundle together individual contracts like mortgages
- **Investment grade bonds:** bonds issued by mature companies with lower risk
- **High-yield bonds:** bonds issued by high-growth companies with higher risk

Fig.20 Debt markets in the UK



Source: Dealogic

£360bn

The combined value of the UK corporate bond market
Source: ECB

103%

Increase in corporate bond issuance by UK companies in the past decade relative to GDP
Source: New Financial

£420m

Average value of a UK corporate bond issue 2011-2015
Source: Dealogic

The bond market gorilla

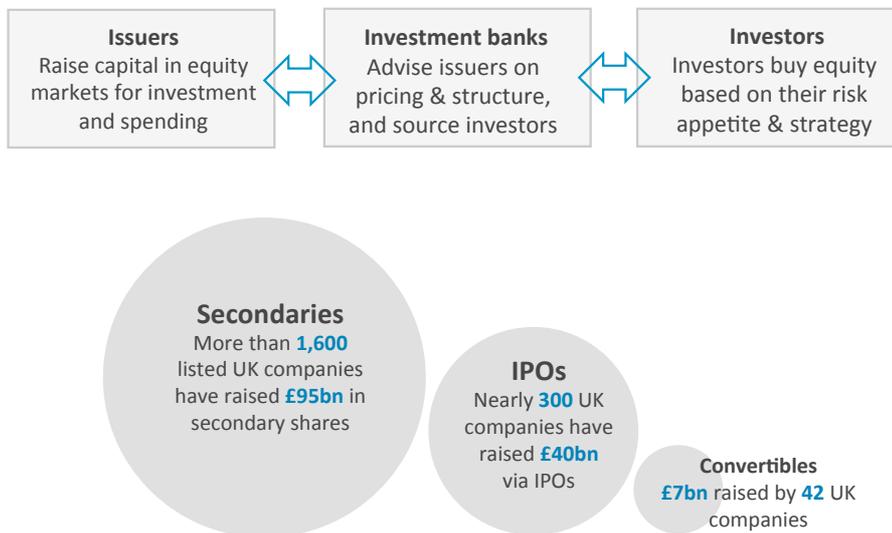
Debt capital markets are where companies and governments borrow large amounts of money in the bond and loan markets for a defined period of time from a wide range of investors. The interest rate on the bond or loan (known as the coupon) depends on the perceived riskiness of the issuer and can be set at a fixed or variable level for the duration of the issue. Government and stable 'investment grade' companies pay a lower rate of interest, while 'high-yield' bonds for faster growing and riskier companies pay a higher rate.

Debt markets raise much more capital for companies than equity markets. Over the past five years, UK companies have borrowed just over £1 trillion in the syndicated loan, corporate bond and securitisation market, compared with less than £150bn in the equity market. Investment banks play a central role in the debt markets: they advise companies on their capital structure, and on the timing, size, structure and pricing of deals; they market the sale to potential investors, allocate the bonds, and set the price. Most corporate bonds are not listed on an exchange, so investment banks make a market in the bonds to enable investors to buy and sell them.

Bond markets enable companies and governments to access much larger sums of money than they could borrow directly from banks. The industry took off in Europe in the early 1960s when the Italian motorway company Autostrade raised \$15m from a range of international investors. Raising money in the debt market is often cheaper for companies than borrowing from banks, particularly given low interest rates over the past few years.

The need to make regular and fixed interest payments to investors encourages better discipline at companies and governments. Investors, particularly pension funds and insurance companies, like investing in bonds because they generate relatively safe and predictable returns.

Fig.21 How equity capital markets work



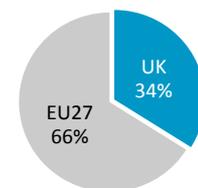
- **IPO:** initial public offering – when a company lists on an exchange for the first time, also known as ‘going public’ or floating
- **Secondaries:** when a listed company raises additional capital via the stockmarket
- **Convertibles:** a type of bond that converts into equity under certain circumstances

Fig.22 Equity markets in the UK

UK equity issues 2011-2015 £bn



UK IPOs as a % of EU total 2011-2015



Source: Dealogic

£138m

Average value of a UK IPO 2011-2015
Source: Dealogic

2% to 3%

Fee paid to investment banks on UK IPOs in 2015
Source: Dealogic

396

Number of companies that listed on AIM 2011-2015
Source: LSEG plc

Investing in growth

Equity capital markets is the generic term for the process where companies raise capital by issuing equity on the stockmarket and selling it to investors. Much of the focus of media attention is when a company (known as an ‘issuer’) raises capital on the stock market for the first time, known as an initial public offering (IPO), flotation, or listing. From 2011 to 2015 nearly 300 UK companies have raised £40bn from this process, but it is only a small part of activity. A further £95bn was raised over the same period from secondary or follow-on share sales by companies already listed on the stockmarket (Fig.21).

Investment banks play a central role in helping companies go public. They prepare the prospectus, advise companies on the timing, structure and pricing of the sale, and organise a roadshow to introduce the companies to potential investors. In a process called bookbuilding, investment banks collect orders from investors, allocate shares to them, and set the final price of the shares.

The banks’ sales and trading business then handle a lot of the trading volumes in the company’s shares in the secondary market. Bank face a difficult juggling process balancing the interests of their corporate customers (who want to raise as much money as possible but don’t want the shares to drop or soar in price once they start trading) and their institutional customers (who want the price of a new issue to be lower).

Companies choose to list on the stockmarket for a number of reasons, including: raising capital to invest in their business, providing a currency for future acquisitions, or enabling their existing investors to exit. The high levels of transparency required of listed companies also means that listing is a kitemark of good governance and it can be a useful marketing exercise. Investors buy new issues because they are often priced at a discount to comparable companies already listed, and because they think they have good growth prospects. Buying shares gives investors an ownership stake in the company and vote on how it is run.

PART 2 - INVESTMENT BANKS - TRADING

Fig.23 How trading works

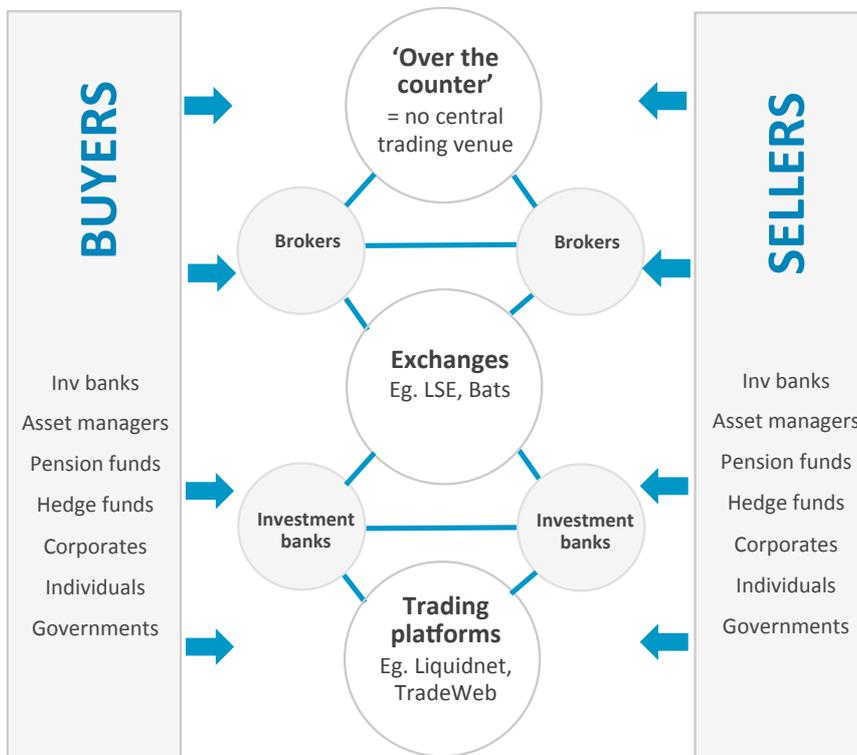
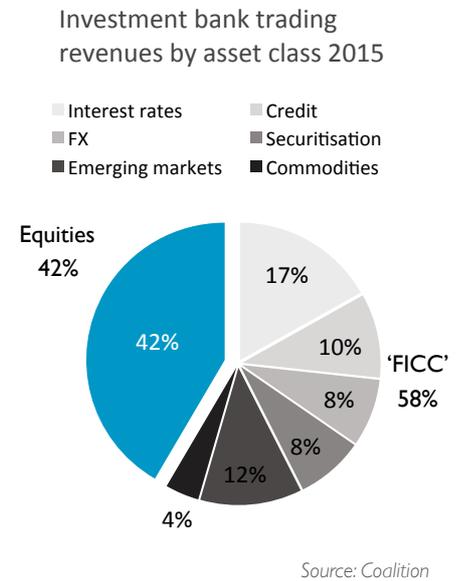


Fig.24 The value of trading



£5 trillion

Value of UK shares traded on the London Stock Exchange 2015
Source: Fidessa

\$2.5 trillion

Daily value of FX traded in the UK
Source: BIS

74%

UK share of derivatives trading volumes in the EU
Source: BIS

Trading places

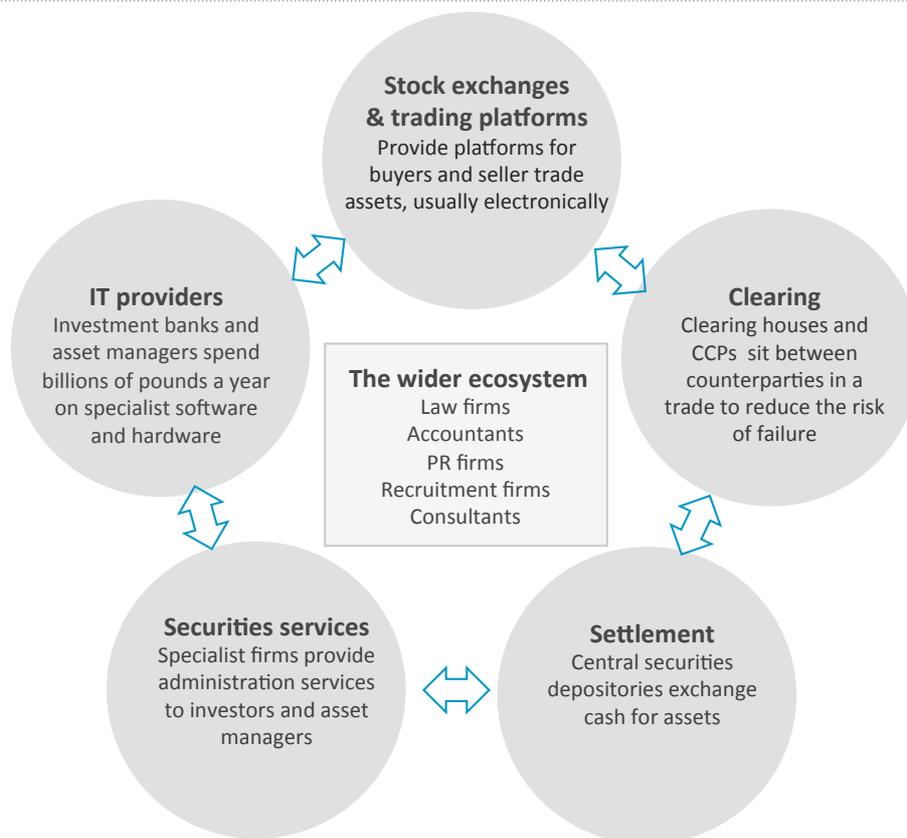
Trading is the generic term for the buying and selling of assets in the secondary markets and represents the majority of activity in capital markets today. Trading helps set the price for different assets and securities, and affects everything from the cost of mortgages to personal loans. It also helps companies, investors and governments manage their risks, such as future changes in exchange rates, interest rates or commodity prices. Trading activity enables investors to buy and sell assets more cheaply and efficiently, which reduces their costs, which is known as liquidity (although too much trading by investors can eat into their returns).

Trading ranges from buying and selling shares, to trading in highly complex derivatives instruments. In some markets such as the stockmarket and commodities, trading takes place on central venues like stock exchanges and electronic trading platforms (the trading floors of most exchanges closed decades ago). In other markets - particularly bonds, derivatives, and foreign exchange - the majority of trading takes place 'over the counter' between investment banks and brokers with no central exchange, although more trading in these markets is shifting towards electronic platforms.

The numbers involved are staggering: the value of trading in UK companies listed on the London Stock Exchange in 2015 was more than £5 trillion, or nearly three times the value of those companies. Every day \$2.5 trillion is traded on foreign exchange markets in the UK and \$1.5 trillion in derivatives. Most trading takes place between banks themselves, with hedge funds and electronic trading firms known as 'high frequency traders' accounting for a significant proportion.

Investment banks and specialist brokers sit between buyers and sellers of securities, and they generate roughly three quarters of their revenues from trading activity. Agency trading is when a bank or broker executes a trade on behalf of a client and principal trading is when the bank uses its capital to make a market in a particular security to execute a trade. Since the financial crisis, regulatory reforms mean that banks have stopped proprietary trading, in which they use their own capital for speculation.

Fig.25 The range of infrastructure and support services



The plumbing

Capital markets rely on a complex market infrastructure and ecosystem of support services to function. A full analysis of this ecosystem is beyond the scope of this report, but the main elements include:

- **Stock exchanges & trading platforms:** these markets bring buyers and sellers together to trade different assets. While most trading used to be conducted face-to-face on trading floors or over the phone, an increasing amount of trading is now conducted electronically.
- **Clearing:** clearing houses or central counterparties sit between the buyer and seller in a trade to ensure the trade is completed if one party defaults. They mutualise the risk of failure by requiring users to post a margin on all of their trading activity to create a pool of capital that can prevent the failure of one market participant causing a domino effect. Since the financial crisis, regulators around the world have required more trading to be cleared through centralised clearing houses.
- **Settlement:** the settlement process is conducted by central securities depositories and involves the actual exchange of assets for cash, allowing the trade to complete.
- **Securities services:** specialist firms provide investors with a range of services to look after and manage the assets they own after they have bought them. These include custody, securities lending, and fund administration.
- **IT suppliers:** the capital markets industry spends billions of pounds a year on IT systems to support their trading, investing and capital raising activities.
- **The wider ecosystem:** in addition to the main market participants discussed in this report, there is a large ecosystem of companies providing support services to the capital markets, including lawyers, accountants, PR firms, recruitment firms and other consultants.

And how could they do it better?

The first two sections of this report have provided an overview of the role of capital markets, how different sectors work and fit together, and the value they deliver to companies, investors, individuals and the economy. This section looks at some of the challenges faced by each sector, how they could improve what they do, and questions they need to address as part of making the case for the value of what they do.

In the first part, we highlight specific challenges facing individual sectors. And in the second part, we review some of the broader challenges faced by the industry, how it has responded, and what work still needs to be done.

A sector-by-sector approach

- **Pensions:** While the UK pensions system is highly developed, it could be significantly improved. In recent years, the UK pensions system has slipped down the annual Melbourne Mercer Global Pensions Index. One reason is cost: there are more than 40,000 occupational pension schemes in the UK and most are very small. This reduces their efficiency and raises costs for members. In some countries, such as Australia, Denmark and the Netherlands, pensions funds have been successfully pooled to create larger funds with lower overall costs. Another challenge is participation and contribution rates: how can the industry increase participation in pensions schemes and boost low employer and employee contribution rates?
- **Asset management:** The asset management industry has faced scrutiny from regulators and clients over the transparency, comparability and level of their fees. Most recently, the Financial Conduct Authority in the UK is conducting a review of the industry, with a particular focus on competition and fees. The average fee on an actively managed equity fund in the UK is 1.6%, with other costs taking the all-in cost to closer to 2% a year. This is a significant drag on the long-term returns of their clients. Many active asset managers fail to beat the average market returns over the long term after fees.

Over the past decade, the value of assets under management has grown significantly, but revenue, pay and profit margins as a percentage of assets under management have remained broadly constant, according to research by New Financial. This suggests that there is scope for asset managers to share more of the benefits of growth and scale with their clients and shareholders.

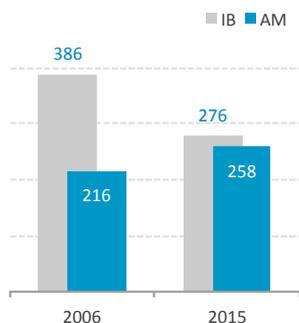
- **Hedge funds:** Hedge funds have faced a lot of scrutiny over the value they deliver; most recently from big US pensions funds such as Calpers which have stopped investing with them. A lot of these concerns have focused on the relationship between the traditional fee structure and the returns generated by hedge funds. Performance has been disappointing over the past few years (in 2015 it was -1%, although that covers a wide spectrum) and performance can be volatile year-on-year. Another concern around hedge funds (for example in the UK government-commissioned Kay Review in 2012) is that they have contributed to an increase in short-termism in markets that can be disconnected from the underlying economy.
- **Private equity:** Private equity firms have struggled to play down their reputation from before the crisis as corporate raiders and asset strippers. They have also faced scrutiny over the level, structure and transparency of their fees, most recently by regulators and clients in the US. There is an active debate over how much value private equity adds through better management of the companies they invest in and how much through financial engineering. While it can be hard to compare performance with other asset classes, some research suggests that performance is little better than stockmarkets after it has been adjusted for risk and leverage.

A sector-by-sector approach (continued):

- **Venture capital:** Returns to investors on European venture capital of just over 7% a year over the past decade are lower than in the US and lower than investing in smaller listed companies. The fee structure of a 2% management fee and 20% performance can eat into returns for clients. Another problem is the lack of scale (the average fund in Europe manages just £50m) and the large amount of funding that comes from government agencies – who represent a third of all investment in the sector in Europe – which can distort the market.
- **Stockmarkets:** Stockmarket performance - particularly in the short term - can be volatile and can seem random, while trading activity is dominated by hedge funds and high frequency trading firms (who account for two thirds of daily trading volumes between them). There is also a danger that high levels of disclosure and reporting designed to protect investors become too much of a burden and encourage companies to seek capital elsewhere.
- **Investment banks – M&A:** While fees for advising on M&A deals - which are ultimately paid for by shareholders - are very small in percentage terms they can quickly add up. M&A can also be a sensitive political issue, particularly when overseas companies buy successful UK companies (such as the recent acquisition of ARM Holdings by Softbank). Over the past five years, UK plc has been a net seller of companies to overseas buyers: UK companies have spent £270bn on overseas acquisitions, while overseas buyers have spent £470bn on acquisitions in the UK.
- **Investment banks – debt capital markets:** With interest rates at such low levels, borrowing money in the bond markets is cheaper than ever. The main concern around bond markets is that some companies and governments take on more debt than they are ultimately able to manage in the long term. One area where banks and investors could focus for the benefit of smaller companies is in the development of 'mini-bond' markets to help smaller issuers raise capital.
- **Investment banks – equity capital markets:** Average fees charged by investment banks on IPOs in Europe are between 2% and 3% (compared with 7% in the US) although fees are often lower on bigger deals and higher on smaller issues. The process of managing new issues and allocating shares to investors has also come under scrutiny from investors and regulators: for example, the FCA recently warned that the transparency around the allocation process of new issues, particularly to hedge funds, could be improved.
- **Investment banks – trading:** The importance of trading to investment banks raises several challenges for the industry. While markets need a certain level of liquidity – a measure of how easy it is to buy or sell an asset without affecting its price – there is no fixed definition of what level of trading is optimal. The majority of trading volumes are between banks themselves and banks could make a better case as to how this trading ultimately benefits end users. High levels of trading have also raised concerns among policymakers and investors about an increasingly short-termist approach in capital markets.
- **Ecosystem & market infrastructure:** While market participants in the wider ecosystem and in market infrastructure play an important role in the chain of capital markets, they add cost and complexity to the process. Over the coming years they will face more challenges from new rivals, particularly from London's thriving fintech cluster, applying new technology such as blockchain to reduce the cost and complexity of what they provide.

Fig.26 Getting pay right (1)

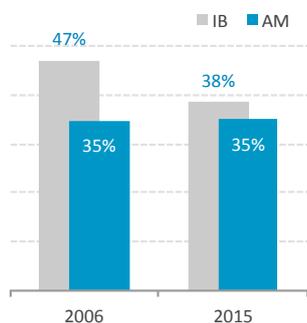
Compensation cost per employee at asset managers & investment banks \$'000



Source: New Financial

Fig.27 Getting pay right (2)

Pay as a % of revenues at asset managers & investment banks %



Source: New Financial

This section looks at 10 of the generic challenges that the industry has faced since the financial crisis, how it has responded to them, and how much work it still needs to do. It is divided into two parts: improving trust and culture, and industry challenges.

A) Improving trust and rethinking culture

1) Addressing conduct and culture

The drip feed of scandals in the banking industry since the financial crisis has shone a harsh light on the culture in the industry. These scandals have cost shareholders tens of billions of pounds in fines and have been a significant factor in the wave of regulatory reforms since the financial crisis.

In the UK, the industry and government have taken some positive steps to address the challenge of culture and conduct in banking, such as the creation of the Banking Standards Board and the FICC Market Standards Board, and many of the senior management have changed since the crisis. The industry is also embracing diversity in its broadest sense, in hiring and promoting more women and minorities in terms of ethnicity, sexuality, and social and educational background, to help accelerate cultural change. While progress has been made, there is still more to do.

2) Rebuilding trust

Asset managers and investment banks cannot properly perform the important role that they play in the economy if they are not trusted by policymakers, customers and wider society. It is concerning that eight years after the financial crisis, and despite progress by the industry to address culture, levels of trust are still low.

Trust forms the social framework in which politicians set the direction of policy and regulation for the industry. It is important that industry works with clients and policymakers to demonstrate how it has raised its game. Ultimately, if individuals had more confidence that they could trust the firms that operate in capital markets, they would be more likely to invest money in capital markets rather than leave it in the bank.

3) Getting pay right

Pay and bonuses at asset management firms and investment banks have been a lightning rod for criticism of the industry. Concerns focus on the high levels of pay and the structure of bonuses. In absolute terms, average pay per employee at investment banks is just over £150,000 a year, a little higher than average pay at asset management firms and nearly six times average earnings in the UK. More than 3,000 people in the banking industry in the UK earned more than €1m in 2014.

Pay has fallen at banks in relative and absolute terms since the crisis (although it has increased in asset management – see Figs 26 and 27), and bonuses have been reformed with the bonus cap, longer payout periods, and clawbacks. Banks and asset managers have to manage the difficult balance between the need to retain and reward staff in a competitive market with the need to share rewards with shareholders and clients.

4) Better alignment with customers

One of the best ways of rebuilding trust with customers and policymakers could be for the industry to focus more on aligning its interests with those of its customers. Many fee and incentive structures in the industry are based around activity or scale rather than necessarily outcomes for customers. The industry is facing more pressure from regulators to be more transparent about fee levels and fee structures to enable customers to make more informed decisions.

>>> continued

5) Making a better case for capital markets

This report argues that capital markets play a vital role in driving growth. However, the capital markets industry can and should do a better job of making that case for itself. This is not about putting a positive PR spin on what it does. The industry should identify the main concerns that policymakers and society have, and demonstrate a willingness to address them.

While the number of people employed in the capital markets and the tax they pay is important, the real value of the capital markets is in how they benefit investors, companies and society. Concrete examples of these benefits – particularly to the individuals who provide the majority of capital that is put to work in the capital markets – would make a more compelling case.

A particular challenge for the industry is articulating the case for the economics of what it does. Raising capital for companies and managing money for investors is an important function, but the industry can do a better job of explaining (and where necessary reforming) the fees and costs involved to customers, end users and policymakers.

B) Industry challenges

6) The regulatory framework

Perhaps the biggest challenge for the asset management and investment banking industry is handling the high volume of regulatory reform since the financial crisis and adjusting to a new regulatory framework. For example, in the EU there have been 43 different reform initiatives in financial services since the crisis (such as Mifid II and CRD4), on top of reforms introduced by local policymakers in many countries.

In the past few years many investment banks have radically restructured their activities to adjust to the new environment by increasing the capital they use to fund their business, reducing pay, cutting staff, and exiting different businesses such as proprietary trading. However, the investment banking industry still suffers from overcapacity in some sectors and a lack of profitability (although profitability is beginning to recover at many firms).

The changing regulatory landscape could lead to more structural change in the industry, more firms exiting different activities, revised fee and pay structures, and more consolidation. It is important for policymakers and the industry to work together to develop a regulatory framework that gets the right balance between consumer protection and financial stability on the one hand, and healthy capital markets on the other.

7) Dealing with Brexit

The full implications of Brexit on the capital markets industry and its customers is beyond the scope of this report, but it is already clear that it will have a significant impact. As we showed on page 9, a significant proportion of capital markets activity in the rest of the EU is conducted out of London.

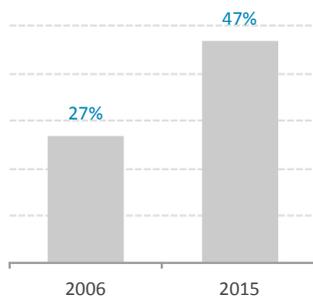
One of the main reasons for this is that the EU-wide regulatory framework – particularly passporting – enables firms to concentrate their activities in one financial centre as their base for operating across the rest of the EU. Perhaps the best measure of that concentration is that 87% of the total EU workforce at US investment banks are based in the UK.

Uncertainty over the future relationship between the UK and EU will consume a significant amount of management time in the coming years and is likely to restrict cross-border activity by investors and companies. Over time, asset managers and investment banks will likely have to move some of their operations from the UK to the EU, adding cost and complexity to their business and to their clients' activities.

>>> continued

Fig.28 Market share (1)

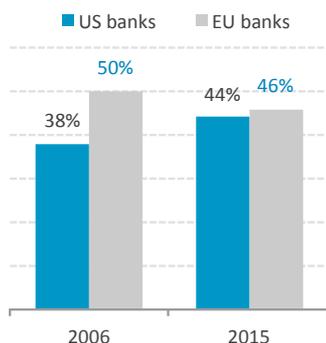
North American firms' share of assets under management in UK % 2006 to 2015



Source: Investment Association

Fig.29 Market share (2)

Market share of top 20 investment banks in EMEA % 2006 to 2015



Source: Bruegel

8) Capital markets union

Brexit comes at a bad time for the capital markets union initiative that aims to reduce the barriers to cross-border investment and capital raising in the EU, increase the range of funding options for European companies, and reduce the EU economy's dependence on bank lending.

The UK was in the driving seat on the CMU project, with Lord Hill, the UK's former Commissioner, in charge of the project. While he has resigned and the UK will not play a direct role in the CMU project in the long term, it is important that market participants in the UK continue to make the case for deeper capital markets across Europe and lend their expertise to policymakers in the EU. The European Commission has said that Brexit has increased the urgency of CMU, but the project is likely to run into political opposition in some capitals in Europe now that the UK is leaving.

9) The growing dominance of overseas firms

The financial crisis and the process of regulatory reform have savaged the European investment banking industry. Many European investment banks have been forced to significantly reduce their activities. This has meant that the big five US investment banks – Bank of America Merrill Lynch, Citi, Goldman Sachs, JP Morgan and Morgan Stanley – have increased their market share of the fees generated by the top 20 investment banks in Europe from 38% before the crisis to 44% last year, while the share of European banks has fallen from 50% to 46%, according to analysis by the think tank Bruegel. A similar effect is visible in asset management, where North America-owned asset managers run 47% of the assets under management in the UK, and in private equity, where the biggest players in Europe are American.

While capital markets and the City of London have traditionally been agnostic about the nationality of market participants, this trend raises several potential risks. First, it could complicate the regulatory process, with US companies having a dominant voice in EU and UK regulation. Second, smaller companies in the UK that could benefit from access to capital markets are less likely to hit the radar screen of larger and more global investment banks. Third, it could lead to a dangerously concentrated market for capital markets services. And fourth, there are already signs that European banks are becoming more national in their focus than regional, undermining the development of capital markets in Europe and the efficient flow of capital across borders.

10) The challenge and opportunity of fintech

One of the biggest success stories in UK capital markets in recent years has been the development of the financial technology (fintech) industry, with London as the dominant centre in European markets. While the growth of fintech in the UK should be welcomed, it poses a significant challenge to existing market participants. Fintech companies aim to identify and eliminate inefficiencies across the capital markets, including trading, investing, lending, capital raising and market infrastructure.

Successful fintech companies could significantly reduce the cost and complexity of doing business in the capital markets, and would bring the providers of financial services much closer to their customers and end-users by reducing the chain of intermediation in the industry.

This could force existing asset managers and investment banks to further rethink their business model and reduce costs. While this would be a welcome development for customers, it poses a significant challenge to incumbents as they grapple with regulatory changes and existing structural issues in their own industry. It could also pose questions in future for levels of trust in the industry. Many market participants fear that some consumers and investors could have their fingers burned if or when some early-stage fintech companies fail.