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The Importance of Asset Management to the European Economy

Didier Davydoff *Laetitia Gabaut* *Grégoire Naacke*

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48 rue de Provence • 75009 Paris • France • Tél. : +33 (0) 1 43 12 58 00 • Fax : + 33 (0) 1 43 12 58 01
E-mail : contact@oee.fr • www.oee.fr
Siret : 424 667 947 00024

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Executive summary

The asset management industry is a key part of the financial services industry, acting as a central means by which capital flows from those who wish to invest to those who require investment. Acting as agents, asset managers provide a crucial service across the savings and investment markets. The asset management industry includes the management of funds bought by institutions or individuals and the running of mandates for investor accounts. It offers a large range of products and services with varying objectives and different levels of regulation, both of which are customised for different kinds of investors.

Depending upon the nature of the underlying objective, asset management can involve a complex series of activities, both in terms of the investment process and its associated functions, such as valuation and client reporting. Investment objectives vary widely, from passively replicating stock market indices, to actively seeking to outperform those indices, to capital protection or to matching specific liabilities.

Although the asset management industry is part of the financial industry, it does have fundamental differences when compared to other financial services, such as investment banking (particularly in the context of the current financial crisis). The operating model of asset management separates management companies from assets, ensuring that assets are supervised and held independently via depositories and custodians.

This basic feature has been reinforced by regulation. The UCITS directive, adopted in 1985, was the first significant step in the financial industry towards a truly pan-European single market. The European asset management industry is today highly regulated and secure. Among other features, asset management companies are not allowed to trade for their own account. Hence, they do not generate any systemic risk.

Professionally managed assets in Europe amounted to EUR 12.800 billion in 2009, in other words around 30% of the global asset management industry.

Thanks to the asset management industry, individual savers are able to access financial markets they were previously unable, or unwilling, to access directly.

In some countries, asset management plays an increasingly important role in corporate governance of investee companies, thus monitoring firms on behalf of investors. Buy-side financial research has also proven to contribute in a very significant manner to the price discovery process on financial markets.

On the other side of the economy, namely economic players that need financing, 37% of the free float market capitalisation of listed European companies is held by investment funds or institutional investors in the framework of a mandate. We estimate the contribution of the asset management industry to the overall equity financing of listed and non-listed non-financial European companies as 21% at the end of 2009.

Moreover, at end of 2009, 36% of debt instrument holdings issued by the general government were held by investment funds or under a management mandate.

With European UCITS, the European asset management industry has developed a brand which is widely recognised around the world and which is a strong contributor to European exports.

As a specific industry, the total revenue of asset management companies reached EUR 84 billion in 2007. The decrease of assets managed after the financial crisis translated into a parallel decrease of revenues in 2008 and 2009. Revenue was 28% lower in 2009 than in 2007. The value added[1] of European asset management companies reached EUR 38.6 billion in 2007. In 2009, it was 32% lower than in 2007. Asset management companies employ 72,000 employees directly and they generate at least 43,000 additional jobs in tasks outsourced by management companies, excluding distribution networks.

[1] Value added of a company or an industry is equivalent to revenue less purchases

1. Introduction

The purpose of this study is to analyse and estimate the contribution of the asset management industry to the real economy.

There is existing economic literature on the link between growth and the development of financial activities in general. For example, Levine (2004)[2] analyses the added value of financial systems. He considers that financial systems[3]:

1. Produce information *ex ante* about possible investments and allocate capital.
2. Mobilize and pool savings, and facilitate trading, diversification and risk management.
3. Monitor investments and exert corporate governance after providing finance.

Our report is organized as follows; we begin by analysing the services provided by the industry. The second section assesses the importance of these services to savers. In the third section, we measure the professionally managed financing resources provided to companies and public administrations. In the fifth and final section, we measure the direct contribution of the asset management industry to the GDP and employment in various countries and we describe the benefits of UCITS as a global exported brand.

[2] Ross Levine, "Finance and Growth: Theory and Evidence", NBER Working Paper No. W10766, September 2004

[3] Levine adds that financial systems also ease the exchange of goods and services but this contribution is not relevant to the asset management industry.

2. What is asset management?

Financial services are often divided between the “sell side” players (brokers, dealers, investment banks...) and the “buy side” players, i.e. investors acting either directly for their own account or through asset managers. Asset managers invest on behalf of a range of investors.

The asset management industry offers a large range of investment funds with very different objectives, different levels of regulation and which are designed for different kinds of investors. Therefore, the ways whereby they can fulfil these functions and contribute to economic growth are also very diverse. An assessment of the contribution of the asset management industry to economic growth has to take this diversity into account.

a. The final users of the asset management industry

Most stakeholders in the European economy benefit from the asset management industry services. But ultimately most clients are individuals who thus are the final users of asset management services. Through pensions, insurance and retail investment, millions of individuals across Europe are ultimately dependent upon the asset management industry.

Direct holdings of individuals

In quantitative terms, individuals are the most important users of those services. They are significant holders of UCITS and other categories of investment funds, and even more through their accumulated capital in pension funds and life insurance contracts.

The average share of direct holdings of investment funds in total financial assets of European households was 8.7% from 1998 to 2008. An historical decrease was observed at end of 2008, in the aftermath of the financial crisis, which translated into a negative market valuation of existing holdings and negative subscriptions. However, average figures do not take into account the differing trends in each country. In some countries, a shift was observed from investment funds directly held by investors to the same investment funds held through “wrappers”, like life insurance contracts. For example, in France, direct holdings of investment funds by households slightly declined between 2005 and 2009 but this was more than offset by the increase in unit-linked life insurance contracts which are invested in investment funds (table 1).

Table 1: Direct and indirect investment funds holdings of households in France (Bn EUR)		
	2005	2009
Direct investment funds holdings*	306.7	297.8
Unit-linked life insurance contracts**	177.5	208.9
Total	484.2	506.7

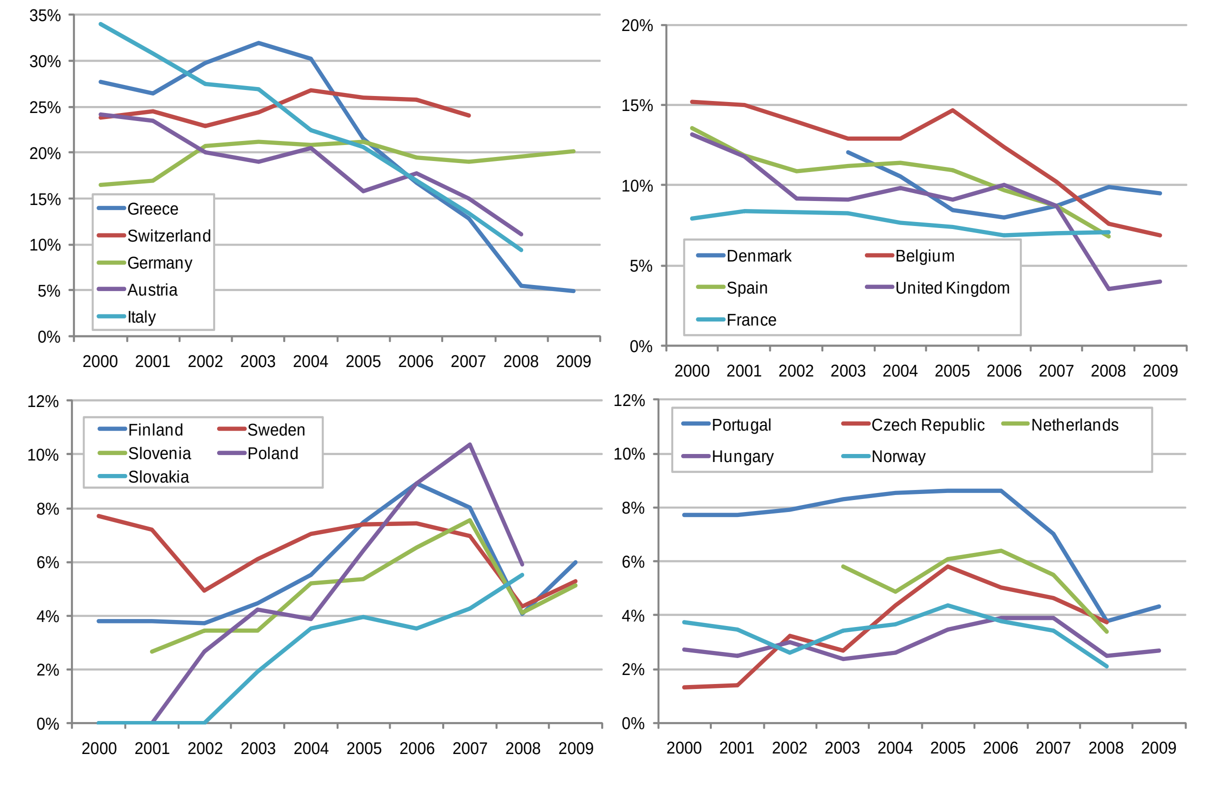
* Source: National accounts

** Source: EIOPA

As shown on graph 1, countries can be classified into four categories:

- In the first group of countries, the share of investment funds was higher than the European average in the early 2000s. It then either decreased to join the average (Greece, Austria, Italy), or it remained high (Switzerland and Germany). The position of investment funds in Germany is all the more significant considering the fact they have been under especially intense competition from structured products (certificates, warrants etc.).
- The second group are those that fall in the European average, whereby funds represent between 7% and 10% of financial assets (Denmark, Spain, Belgium, France and the United Kingdom). A slight decrease in the share of investment funds was observed in most of these countries over the last decade. A more significant slippage was recorded in Belgium, and, after the crisis, in the United Kingdom.
- The third group started with a lower market share of investment funds. These were Nordic countries as well as countries from Eastern and Central Europe. The majority of them have caught up to the European average, though the financial crisis hit them severely. In the case of Sweden the dominating part of investment funds is held through wrappers and altogether investment in funds comes to 24 percent of household assets.
- Finally, the fourth group includes countries below the European average who presently do not show a clear trend of catching up to the European average (Portugal, Hungary, Czech Republic, the Netherlands and Norway).

Graph 1: Share of investment funds directly held by households in the total value of their financial assets



Indirect holdings of individuals

In some European countries (especially including the United Kingdom and the Netherlands), the origin of the asset management industry can be found at the beginning of the nineteenth century, when employers began offering pension benefits to their employees[4]. Accounting rules required sponsors to set aside assets to match liabilities and the fiscal rules worked as an incentive in the same direction, with contributions being deducted from the taxable revenue of companies. With no experience in financial investment decisions, sponsors thus delegated asset management to external service providers[5].

Until the 1960s, these portfolios were mainly invested in bonds. Later on, academic theories of markets initiated by Harry Markowitz convinced plan sponsors that it was possible and efficient to reduce the risks by diversifying portfolios. Empirical data showed that, in the long run, equity outperformed bonds and monetary products, thus, the interest of pension funds members were

[4] For a detailed description of the emergence of the industry, read chapter 1 of Anton van Nunen's "Fiduciary management", a book published by John Whisley and Son (2007)

[5] In some other countries, however, such as Germany, employers operated pension schemes on a book reserves basis.

found consistent with an increase in the weight of equities. Modern financial portfolio theory also created the intellectual conditions for an increased share of equity in portfolios by demonstrating that the total returns approach was the most efficient one; a plan sponsor could now also rely on the capital gains of its equity portfolio, instead of just revenues drawn by its bond portfolio, to meet its liabilities.

The diversification concept was then developed by several segmentations of the equity market into narrow sub-sets with relatively low correlations: small caps versus Blue Chips, value stocks versus growth stocks, sector allocation. Specialised investment managers hired by pension funds were given the task of managing specific investment universes.

The growth of life insurance has historically been the second cause of the emergence and development of a specific asset management industry. For example, in France near 70% of insurance reserves are managed by specialised third party companies. In several countries, the share of life insurance contracts in households' savings continuously grew over recent years. There are two categories of life insurance contracts: contracts in Euro that provide the subscriber with a warranty of minimum revenues on his/her investment, and unit-linked contracts, whereby contributions made by subscribers are invested in securities without any guarantee from the insurance company. In other words, subscribers with unit-linked contracts bear the risk of the investment. Securities sold within the framework of unit-linked contracts are most often investment funds managed by external specialised investment management companies. The share of such contracts increased during the 1990s until 2000, decreased in 2001 after the dotcom bubble burst, and grew again from 2003. At end of 2009, investments for the benefit of European life-insurance policyholders who bear the investment risk amounted to EUR 1 490 billion, i.e. 35% of total investment assets of life insurance companies (source: CEIOPS, statistical annex of the financial stability report, December 2010).

Companies

Non-financial companies are important users of services provided by the asset management industry in several countries. The core objective of non-financial companies is not to invest on financial markets. However, when a company has cash available on its balance sheet, it will seek to get revenue from it. In several countries, cash is invested in monetary funds managed by investment companies. Such funds are almost always short-term investments with a low credit risk. In some countries, non-financial companies have highly contributed to the development of the money market by outsourcing their cash management. Non-financial companies held 27% of money market funds at end of 2009 (source: EFAMA).

b. *The alignment of asset managers interests with those of investors*

The asset management industry is an agency business. Investors contract with a management company that is responsible for the management of their portfolio in return of a fee. The management company employs and pays one or more managers who are responsible for the selection of securities in the portfolio. The specific added value of asset managers derives from their ability to collect and interpret the necessary information to compose the best portfolio selection, consistent with the degree of investors' risk aversion.

Several factors ensure the alignment of asset managers' interest with those of investors.

First of all, the remuneration of asset management companies is usually calculated as a percentage of assets under management. Their remuneration increases in proportion of capital gains generated to the benefit of clients.

Moreover, asset management contracts include provisions to align asset managers' attitudes towards risk on the risk aversion of their clients, e.g. derivatives use, short selling or liquidity of securities held. Institutional investors are also increasingly more demanding with regards to the quality, reliability and the timeliness of the reporting of asset management companies. The reporting should be designed so as to include the origin of poor performances (if any). Consultants play an increasingly important role in assisting institutional investors on compliance, asset allocation, procedures, control of financial and operational risks and performance reporting.

Ex-post, if an investor is not satisfied with the performance or the attitude towards risk of the asset manager, he/she can either sell the concerned fund or not renew the mandate of the asset management company. On the other hand, managers who deliver the best performance are able to increase the volume of subscriptions to their funds and get more mandates, thus increasing their remuneration. Asset management companies that compete to win tenders for the management of institutional portfolios also must report on their historical performances. This reputation effect is important not only so far as professional clients are concerned, but also retail clients. Several ratings of funds by independent institutions like Fitch, Standard and Poor's and Morningstar are broadly disseminated by financial magazines.

Increasing competition to attract business from more and more demanding clients incite asset managers to deliver a performance superior to the average of the market. In the 2000s, numerous independent boutiques were created by managers formerly employed by large asset management companies who offer specialised expertise. More and more financial intermediaries choose an "open-architecture" model, by which savers and investors can get products and services offered by asset management companies not belonging to the same group. Asset management companies, especially those offering pan-European funds, compete to access distribution networks.

c. Diversity of products and services

Asset management companies invest on behalf of a range of clients, both institutional and retail. (see above). They can provide this service in the framework of a mandate given by an individual or an institution. A fund can be dedicated to one single investor, in which case its nature is similar to that of an investor's mandate. Other funds are known as 'collective investment funds' or 'open funds'. When they buy shares of an open fund, investors are pooling their money to collectively invest in a portfolio of securities, real estate, metals, currencies etc.

Some open funds are sold to retail investors while others are sold to institutional investors only. Some funds offer different share classes in various currencies or dedicated to various categories of investors (retail/institutions), while others are open for retail as well as for institutional investors and do not segregate share classes.

Funds are classified into categories depending on investment objectives and predominant class of assets held. The main categories of funds are:

- Equity funds
- Fixed income funds
- Balanced funds
- Money market funds
- Structured funds
- Real estate funds
- Alternative investment management funds, including hedge funds, private equity funds and commodity funds.

There are often restrictions on the selling of alternative investment funds to retail investors, and this category of funds is not included in the scope of the present report.

Funds can also be classified depending on other criteria such as geographic, sector, style, level of risk...

Portfolio management can be active or passive: in the case of active management, the portfolio manager selects assets on the basis of his/her anticipation on the performance and risk of those assets. In that case, portfolio performance is often compared to a benchmark, which may be an index or a combination of indices. In the case of passive management, quantitative algorithms will automatically trigger purchases or sales of an asset in the portfolio. A majority of quantitative products consists in the replication of an index.

For an active portfolio, a manager's decision to buy or sell a given security depends on the availability of various information:

- Mandatory information on listed securities includes periodic information (annual accounts, interim reports etc.),
- Major macroeconomic and mesoeconomic data drives the development of each sector of economic activity,
- Financial analysts employed by broker firms ("sell-side" analysts) or within asset management companies ("buy-side" analysts) conduct research on listed companies and securities.

Asset managers can be in charge of diversified portfolios or specialised portfolios.

Diversified portfolios include several asset classes, like equities, bonds, monetary products, real estate, metals and currencies. The concept of diversification can also apply to geographical zones of investment or sectors of activity of invested companies. Funds can also be classified according to their level of risk.

In the case of diversified funds, the investment management company is in charge of strategic and tactical asset allocation. Strategic asset allocation determines the target proportion of each asset class. Tactical asset allocation consists of temporary diverging from the strategic asset allocation when the portfolio manager believes that an asset class is over or under-evaluated. Asset allocation is often prepared by financial economists and decided by specific investment committees.

In the case of a mandate, the client may manage the strategic allocation in-house. Typically, an institution defines the weight of each asset class (equity, for example) and then launches a call for tenders to specialised managers of each sub-component of each asset class (such as European small capitalisation stocks).

The specialisation of equity managers is often geographical and is also determined by the size of capitalisations. However, asset managers also increasingly specialise according to sector activity, in the same way that financial analysts are directed toward certain industry groups on a global basis rather than specific countries. Indeed, global economies are correlated and the largest listed companies have clients and production units all around the world.

Specialised asset managers often select securities within a list of recommendations established by financial analysts of the asset management company ("buy-side" analysts). The final selection depends on preferences related to each portfolio or client, in terms of risk aversion, authorised tracking error etc. In the fixed income area, specialised asset managers' selection of securities is based on the credit risk authorised for each portfolio in addition to their anticipation concerning the yield curve.

In some cases (especially Exchange Traded Funds) the mandate given to the asset manager is to replicate a stock index. Such "passive management" can be achieved either through a full replication of the index (each security included in the index is included in the portfolio with the same weighting) or a synthetic replication (only the main components of the index are included in the portfolio and the return is guaranteed by a swap with a bank). Synthetic replication decreases costs as there are fewer securities to be traded. However, this is partly offset by the cost of the swap.

d. A secure and highly regulated activity

At the heart of the asset and fund management industry lies the separation of operating companies and assets (externally supervised and held), which means that clients are offered a very substantial degree of protection. The failure of an individual asset management company or fund operator should have no impact upon the ability of the end investors to reclaim their assets. All asset management companies in the European Union have a highly regulated status for their activities, with each being:

- either a 'UCITS management company' (defined in the UCITS directive[6]),
- or an investment firm that provides portfolio management services as defined in the Markets in Financial Instruments Directive (MIFID[7]),
- Or a firm only authorised under national legislation (management of private equity, real estate or alternative funds.)

UCITS management companies need to get official authorisation from the authorities of their home member state before running their business. In principle, management companies are specialised on fund management and related services (administration and marketing). The only service in addition to fund management they may provide is portfolio management and, as non-core services, investment advice and safekeeping in relation to UCITS.

Portfolio management is one of the investment services and activities covered by the MIFID directive. The directive defines portfolio management as "the management of portfolios in accordance with mandates given by clients on a discretionary client-by-client basis where such portfolios include one or more financial instruments". As for any service covered by the directive, persons who provide portfolio management services are subject to authorisation by authorities in their respective member states.

Both management companies and investment firms authorized for portfolio management benefit from a European passport; authorisation in their home country is sufficient for managing portfolios in all EU countries without being subject to a further authorisation in those host countries.

[6] Council Directive 85/611/EEC of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS)

[7] Annex 1 of Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC

The financial crisis raised questions in the public debate on the behaviour and responsibility of investment banks and rating agencies. These questions led to a strengthening of market regulation and market surveillance in all developed countries around the world.

In that view, the nature of asset management services should be distinguished from that of other types of intermediation, namely commercial banks, investment banks and insurance companies:

- Investment banks and insurance companies commit their own capital to generate considerable market exposure, whereas asset management companies do not undertake any proprietary trading. There are two outcomes in that respect:

    - Firstly, the absence of own account trading eliminates credit risk and market risk in their own books. The only remaining risk of asset management companies tackled by the international capital requirement standards is the operational risk. As far as the largest banking institutions are concerned, not only an individual risk but also a systemic risk has to be tackled. Asset management companies do not expose the rest of the financial sector and the economy as a whole to systemic risk.

    - Secondly, asset management firms are by law authorised to trade exclusively on their clients' behalf, thus eliminating any source of conflict of interest that would result from the intermediary being a counterpart of the client in a transaction, or having open positions in financial instruments, the price of which could be impacted by transactions initiated by the client's account. The operating model of asset management companies is not transactional: it is predicated on long-term alignment of client and manager interests.

- Asset management companies do not provide services to issuers of securities on a large scale, thus eliminating a second potential source of conflict of interest.

- The financial crisis put emphasis on flaws in the corporate governance and risk control of banks, not on asset management companies. The High-Level Group on financial supervision in the EU chaired by Jacques de Larosière highlighted the misconception of interaction between credit and liquidity, the unexpected freezing of the inter-bank market, the risk models based on too short statistical horizons and insufficient capital requirements on proprietary trading transactions as the major drivers of the financial crisis that started after the Lehman collapse in September 2008. It also shed light on the so-called "too big to fail" dilemma. As far as investment funds are concerned, the only difficulties mentioned in the report was the temporary difficulties of a small number of them in meeting investor redemption demands, and necessary improvement in the regulatory regime of depositories. As stated by the European Commission "*The UCITS asset management sector was not one of the root causes of the financial crisis*". [8]

[8] Working document of the Commission services (DG Internal market and services) : consultation paper on the UCITS depository function and on the UCITS managers' remuneration, 14 December 2010.

e. Market sizing

The total value of managed assets in Europe was estimated to amount to EUR 12 800 billion at end of 2009 according to the European Fund and Asset Management Association (EFAMA).[9] According to the Boston Consulting Group's market sizing research, European asset managers hold a 30% market share in global professionally managed assets[10].

Table 2: Professionally managed assets in Europe at end of 2009		
	EUR billion	Global market share
All professionally managed assets*	**12 800**	**30%**
*Of which mutual funds***	*5 299*	*35%*

* Source: Boston Consulting Group

** Source: EFAMA/International Investment Funds Association

To compare, the assets managed in Europe represent 1.6 times the total value of capitalisation of listed European companies and is of the same magnitude as the total European GDP.

[9] See "Asset Management in Europe: Facts and Figures – EFAMA's Fourth Annual Review" May 2011.

[10] The coverage of this statistics includes all third party professionally managed assets in an exchange for a fee.

3. Importance of asset management to savers

This section describes the benefits of asset management to individual savers, to whom investment funds provide an access to capital markets and contribute to, among other life projects, preparing for retirement. The performance of these services should be assessed in terms of risk / return output. Asset managers also participate in a clear organisation of the investment process of institutional investors and they provide the added value of their specific expertise. In addition, they contribute to the dissemination of information and a smooth price discovery process that benefits all investors.

a. Providing individual savers with an access to capital markets

Retail investors get standardised asset management through investment funds and managed savings plans. There are several benefits to get such services:

- Less wealthy savers can access capital markets. Through asset management and investment funds all investors (large and small, private and institutional) have equal chance of participation in all markets (equity, bond, derivatives, real estate …). For example, in Germany there were 6.1 million holders of investment funds and 3.9 million shareholders in 2010 (source: Infratest survey for Deutschen Aktieninstituts, 2010).
- Unsophisticated savers are given the opportunity to access capital markets.
- Savers unwilling to spend time in selecting individual securities are able to access the capital markets.
- They provide economies of scale on trading costs. This is especially true for less wealthy savers, whose performance would be hampered by trading fees, given the small value of their portfolio.
- They manage small but diversified portfolios; once again, less wealthy savers cannot afford to directly hold a diversified portfolio of securities.

Box 1: An example of portfolio diversification by asset managers: Investing in emerging countries

Diversified portfolios need to be invested in various asset classes, geographical areas and management styles, some or all of which investors often don't have the internal resources for.

An adequate diversification requires allocating a growing percentage of the portfolio to emerging markets. However, emerging markets are exposed to greater political and operational risks. Moreover, retail investors are unable to access locally managed funds for practical reasons, while many institutional investors also have a limited access to products managed in emerging countries for regulatory or statutory reasons.

Investors can nevertheless invest in European investment funds whose assets are located in emerging countries. Asset managers offer extensive research, risk management techniques and local insights which an isolated investor cannot easily obtain.

European investors can even access investment funds managed and located in emerging countries via European funds of funds.

b. Preparing for retirement

In Europe, pension systems are based on three pillars, even though the relative weight of each of them varies from one country to another. These are:

- The "pay-as-you-go" system, which relies on national solidarity; active workers pay contributions that go toward the pensions of retirees.
- Collective or occupational pension funds pool and invest contributions from active workers on financial markets. When they retire, members of the pension fund usually receive an annuity corresponding to the accumulated rights in the revenue and capital gains of their fund. In some cases, pension funds can also provide lump sums to retirees. The dramatic change in longevity expectation exposes plan sponsors of defined-benefit schemes to the risk of unfunded commitments. With plan sponsors becoming more and more reluctant to take this risk on their books, there has been a shift in trend from defined benefit pensions to defined contribution schemes. This has resulted in the transfer of responsibility to asset managers, especially in the case of target-date funds. In a defined benefit scheme, the plan sponsor or the fund promoter is committed to pay a pension calculated on the basis of the salary of each employee and the number of years he/she contributed to the fund. When the employer wishes to externalise this commitment, insurance companies are the natural providers, even though they often delegate asset allocation to external portfolio managers. In a defined-contribution scheme, the pension only depends on the value of the fund when the employee retires. Asset managers are at the forefront of such schemes.

- The third pillar consists of individual savings for retirement. Due to a longer life expectancy and the near-to-retirement age of baby boomers, first pillar pension and defined-benefit occupational pension schemes face growing imbalances. Governments in all countries incite individuals to save with tax incentives and/or subsidies. Asset management companies play a key role in this structural social trend. Ageing baby boomers are now around 60 years of age and therefore an increasing number of investible assets are controlled by retirees and near-retirees. At retirement age, most pension products give right to a lump sum, at least for a certain percentage of the accumulated capital. However, depending on the regulation and habits of each country (see box 2), third pillar products are also intended to provide annuities to savers. As shown by McKinsey's research on the US market, financial products demanded by investors has shifted "from an almost exclusive focus on savings and accumulation, to a much heavier emphasis on income generation and principal protection."[11] The necessary protection not only consists of limiting market risk, but also that of inflation, taxation and health care.

[11] McKinsey & Company, "The Asset Management Industry in 2010", 2006.

Box 2: Examples of national individual pension savings schemes

In Germany, enhancing individual savings to prepare for retirement is a priority for the federal government. Promoters of individual pension savings compare the replacement rate, which has severely degraded over time, to the situation of households subscribing early enough to a regulated product with public incentives. There exist two categories of products:

- Riester products (introduced in 2002)
- Rürup annuities (introduced in 2005)

Riester products are individual savings products that include a pension scheme. Upon retirement accumulated capital is converted into life-long annuity or in the case of mutual funds into a capital withdrawal plan reverting into a life annuity at age 85. There is a public grant which complements the subscriber's contribution and increases also with the number of children in the family. Contributions are deducted from taxable income.

The third pillar of the pension system accounts for more than, on average, 10% of retirees' income and the percentage is expected to increase gradually with the retirement of people who subscribed to Riester products.

From 2002 to the end of the third quarter 2010 more than 14 million Riester-Contracts were signed in Germany of which more than 2.7 million were based on investment funds (source: Federal Ministry for Labour and Social Affairs). At end of September 2011, the assets of Riester investment fund products alone reached EUR 7.4 billion.

Several types of products are eligible to Riester grants: life insurance contracts, banking deposits, investment funds and mortgage contracts. All providers must ensure that at retirement the capital converted into annuity or withdrawal plan is at least equal to the sum of client payments and government bonuses. Riester plans may include a dynamic allocation of the savers capital in various funds. For example, the share of volatile assets, like equities, can decrease gradually when approaching retirement or capital gains can be crystallized at a specified age (e.g. 55-years-old).

In Switzerland, the outstanding amount of third pillar products amounts to around CHF 250 billion. The government encourages the locking up of individual savings until five years before retirement by deducting such investments from taxable income. In most cases, third pillar products provide a lump sum to subscribers at the age of retirement. Banks and insurance companies offer plans that invest in investment funds, which provide an exposure to financial markets, and, in many cases, at least some protection of the invested capital.

In Ireland, the third pillar of the pension system includes three types of regulated products: the universal Personal Retirement Savings Account (PRSA), the Personal Pension Plan (PPP) for active workers and Additional Voluntary Contributions (AVC) for employees willing to complement their Company Pension Plan with additional personal contributions. Contributions to all these schemes are deductible from taxable income and capital gains are not taxable. When they retire, the members of these funds can either obtain a lump sum (maximum of 25% of the accumulated capital or 150% of the last salary), or convert it into an annuity or reinvest in an "Approved Minimum Retirement Fund" (AMRF). Financial firms offer a wide range of funds in which subscribers can choose from, depending on their risk aversion and their preferred methods of payment (lump sum, reinvestment or annuity).

In the United Kingdom, the third pillar of the pension system consists in three categories of schemes: the Personal Pension, the Stakeholder Pension and the Self Invested Personal Pension. Anyone can opt out of the State Second Pension by subscribing to a collective pension fund or to a personal pension with a financial firm. Subscribers receive a public grant equal to 25% of subscriptions and get a tax reduction depending on their tax rate. Subscribers can select various investment fund menus, either “hands off” or “hands on”. Invested capital is locked up until the subscriber is 55 years old. He/she can then get a lump sum equal to a maximum of 25% of the capital, with the rest being converted into annuities.

In France, there are two types of individual or semi-individual pension products, the PERCO and the PERP. As a component of employee savings scheme, PERCO is an occupational pension product subscribed on a voluntary basis by individuals. PERCO offers access to at least three investment funds, with benefits paid out as a tax-exempt lump sum or as a lifetime annuity. In 2010, companies are entitled to contribute up to €5,539 per employee. At 31 December 2009 almost 111,500 companies offered access to a scheme. The number of companies offering their employees access to these voluntary retirement schemes increased by 41% at that date. 2.5 million employees are covered by PERCO. Close to 38% of employees have opted for life-cycle management, a strategy that automatically scales down the risk exposure of the PERCO's asset allocation as the account holder nears retirement age. PERP (Popular Retirement Savings Plan) is an individual pension plan proposed by insurance companies, with a reduction of taxable income. It is open to all individuals.

In the Netherlands, individuals are encouraged to subscribe to individual pension products by a reduction in taxable income. The maximum reduction is calculated so as to ensure that total revenues at retirement are at least equal to 70% of the latest yearly income. Eligible products include annuities (Lijfrenten), banking savings plans (Banksparen) and flexible products (Levensloopregeling). Any of them can include investment funds in order to benefit from the performance of financial markets.

c. *Delivering performance*

Investors are driven by their risk aversion and their expectations of risks and returns on each investible asset. Asset managers should provide the best performance taking into account these constraints.

The risk aversion of an investor depends on his/her liability constraints. The asset-liability management (ALM) is a key factor for determining his/her strategic allocation (see box 3).

Box 3: Asset-liability management

Asset-liability management (ALM) is intended to match assets held by an investor while ensuring due future payments are met. For example, a pension fund will take into account the flow of payments it will have to undertake each year, given the current demographic characteristics of its members (age at which they will retire and their life expectancy). ALM determines the breakdown of the portfolio in broad asset classes: equity, bonds, private equity, real estate etc. If the investor is subject to outflows in the short-term, the share of the most risky assets should be decreased. Inversely, if its commitments need to be fulfilled in the long-term, investors should accept more risky assets in order to get a higher return. For any given payment scheduled, the asset mix depends on investors' risk aversion: A risk-loving individual accepts the possibility of not being able to fulfil its future commitments, while a risk-averse individual would only take a share of non-risky assets in the portfolio. In that respect, high risk aversion might explain why investors with long-term liabilities may choose a less risky asset allocation. The weight of various asset classes also depends on anticipated risk relating to each asset class. Investors' belief change over time. In example, in the aftermath of the financial crisis, many institutions decreased the share of equity in their strategic allocation. This phenomenon is well-known in the literature on behavioural finance, and is known as "over-estimation of low probabilities"[12].

ALM is now commonly used by institutional investors and, increasingly, by individuals. Noël Amenc *et al* (2009)[13] analyse how asset managers could apply the techniques of asset-liability management to deal with private clients' objectives, constraints and risk aversion. The paper argues on how asset allocation should focus on the liability-hedging properties of various asset classes. For example, many clients have a pension-related objective and they need protection against inflation; some may be interested in investing in inflation-linked bonds, while others might have a real estate acquisition objective. Many other factors also need to be taken into account, such as tax regimes and bequest motives. More generally, "*asset managers move from a single source of added-value – namely, delivering a performance that is benchmarked against indices and subject to risk control limits – to a more customised approach that takes the objectives and constraints of each client into account*."[14]

[12] Kahneman, D., Tversky, A. (1979). "Prospect theory: An analysis of decisions under risk", Econometrica, 47, 313-327.
[13] Noël Amenc, Lionel Mantellini, Vincent Milhan, Volka Ziemann, 'Asset Liability Management in Private Wealth Management', an EDHEC Risk publication, September 2009.
[14] Barb McKenzie, Neeraj Sahai and Amin Rajan, "Exploiting Uncertainty in Investment markets", 2010.

These constraints being given, the standard theory of financial markets highlights the “efficient frontier”. This refers to the most optimal portfolios, whereby there are no other portfolios with a higher return at the same level of risk or with a lower risk and the same return.

The asset manager’s objective is not simply to perform better than the market. It is, of course, always possible to have an expected return higher than the market, however, this is at the price of a higher risk. On efficient markets, the asset manager aims to be on the efficient frontier, i.e. to deliver the best return for a given level of risk. Furthermore, the asset manager may generate returns by exploiting market inefficiencies through arbitrage transactions.

Best performing asset managers can be defined as follows:

- Their anticipations are better than other market participants’, with the effect of raising individual efficient frontiers. The theory of the efficient frontier assumes that all available information is reflected in the market and equilibrium price of investible assets. In practice, the experience of the asset managers can make a difference; they are able to generate gains by either over or under weighting specific asset classes (the source of return is called ‘beta’) or by over or under weighting specific securities (generating of ‘alpha’).

- Efficiency is determined by the selection of products across all categories of assets. However, an investor is unlikely to buy every product available around the world so a trade-off has to be made between the benefits of diversification and the costs of acquiring information and trading. While a limited number of products can be included in any portfolio, inclusion of new asset classes can improve its performance. The last decade has witnessed a major trend in asset management, namely the growing demand of institutional investors for “absolute return” products or hedge funds.

- One who delivers a portfolio that matches clients’ risk aversion, which can be determined by the mandate given to the portfolio manager. When dealing with private investors, it is the distributor’s responsibility to request information to clients so measure their risk aversion and make recommendations on the selection of investment products in line with clients’ profile.

d. Addressing the needs of institutional investors

In a survey of European institutional investors, Investment Pension Europe (IPE) found that in 2009, 64% of their respondents[15] used external asset managers (source: IPE European Institutional Asset Management Survey 2010). The criteria, below in order of importance, used for the selection of external managers by investors highlights the value added of the former:

- Outsourcing investment management brings clarity to the investment process.
- External managers are expected to deliver higher performance. Interest rates are historically low and equity markets are uncertain. Stock picking should provide a better performance than the market average (provision of "alpha"). Introducing alternative asset classes are expected to provide higher returns and risk diversification.
- In the aftermath of the financial crisis, risk management has become a major component of the value added by external asset managers. This can be achieved either through diversification and risk control or by subscribing contracts that enable a transfer of risk from one entity to another.

The asset class for which external management is perceived to add the most value in comparison to that provided by the internal management of institutions is equity. If external asset management was not taken into account, equity would not represent more than 5% of surveyed institutions' investments.

Table 3: Asset allocation by internal and external management (Average % of assets)

	2008		2009		2010	
	External	Internal	External	Internal	External	Internal
Cash	1	6	2	7	3	6
Fixed income	25	17	27	19	26	21
Equity	27	11	23	9	25	5
Other	9	4	7	6	10	4

Source: IPE European Institutional Asset Management Survey

Three types of vehicles are used by institutions outsourcing their investment management to external providers; external managers can run a mandate to manage segregated accounts, they offer pooled investment vehicles, which are often open to a limited number of investors (in some cases, only one). Finally, external managers can run advisory mandates with institutions, allowing them to

[15] The large majority of respondents to this survey are pension funds and, to a lesser extend insurance companies. In 2009, respondents belonged to 121 institutions with total €333bn under management. The survey covered Benelux countries (30 respondents), GB and Ireland (23), Nordic countries (18), Central Europe countries (11), Switzerland (8), France, Italy and Germany (7 each).

remain hands on with regard to investment decisions. Although the vast majority of large institutions use both segregated accounts and pooled vehicles, an increasing number of small investors tended to shift their assets to pooled vehicles over the last years. However, IPE surveys did reveal that Nordic investors and those based in Great Britain and Ireland prefer investment pooled vehicles.

Table 4: Users of external investment managers by vehicles (%)

	2006	2007	2008	2009
Segregated accounts	87	68	72	70
Investment pooled vehicles	55	80	69	88
Advisory mandates	22	15	14	12

Source: IPE

A recent survey among market participants run by Fabozzi *et al* (2010)[16] shows that some European pension funds and wealthy individuals with a growing level of sophistication tend to bring asset allocation and management of assets in-house. On the other hand, several plan sponsors, especially those with relatively small funds, were found to transfer the management of pension assets to third parties. There is a need for more expertise due to increased regulation, difficult markets and the fact that only the largest pension funds have the necessary skills in-house. The largest funds may offer their services to smaller ones. However, their weakness is their lack of experience in servicing third parties. Asset management companies tend to provide fiduciary managers, who run the design, implementation and oversight of a fund's program, including asset/liability management (ALM), asset allocation, liability-driven investment (LDI), insurance, accounting and administration. Asset management companies have risk management and risk reporting tools that enable highly detailed mandates from investors. Reacting to consultants who took their traditional field of expertise one step further and proposed "implemented consulting", asset managers began providing advice that would build a sustainable relationship with their clients. Fabozzi *et al* (2010) quote a consultant in Northern Europe, "*It is easier for a manager to incorporate asset allocation functions than for a consultant to build an organization to implement strategies*."

[16] For a complete presentation of these trends, see Frank Fabozzi (Yale School of Management), Sergio Focardi (EDHEC Business School) and Caroline Jonas (The Intertek Group): "Investment Management after the Financial Crisis", CFA Institute, October 2010.

e. Monitoring investments

Part of the service of asset management is to engage with investee companies on issues of corporate governance. In several countries, asset managers are expected to vote for the shares that are in their portfolios. In contrast to "venture capitalists", whose aim is to leverage the investee company and then sell off the shares at a higher price, asset managers often hold assets over a longer period. While corporate governance is often discussed between asset managers and investee companies, such efforts are kept out of the public domain. A smaller number of asset managers take the floor in AGMs or engage publicly with other investors with the aim to improve corporate behaviour in specific companies. In addition, there exists a dynamic movement of dialogue between different counterparts (companies, shareholders and international institutions, such as the Commission of the European Communities or the OECD…) that permits improvements of corporate governance.

i) Corporate governance: definition and principles

While institutional investments in equity markets have grown considerably over the last few decades, corporate governance spread particularly in the US in the 1980s and in Europe in the 1990s. Corporate governance is a multifaceted subject that relies on a large number of components and that has different underlying legal frameworks. It also varies from one country to another. The traditional definition of corporate governance refers to relations between a company's senior management, its board of directors, its shareholders and other stakeholders, such as employees and their representatives.

The relationship between companies and institutional shareholders as part of corporate governance is governed by two types of codes. One such code is at a national level, whereby countries have implemented corporate governance codes that companies are expected to comply with. In 1999, the OECD published its Principles of Corporate Governance[17], which became the main reference for principles applied to companies. There exists a degree of convergence in these national codes and there are five recognised key principles. States are mandated to implement the necessary legislation and promote the application of these principles:

1. Accountability and integrity of officers and directors
2. Independence of the Board of Directors
3. Transparency and disclosure
4. Respect of Shareholders' Rights
5. A strategic long-term vision

These key principles were defined so that companies who implemented them should better perform and thus have better value.

[17]In 1999, OECD published its Corporate Governance Principles, followed by a revised version in 2004 that evolved in various ways and took new concerns into account.

On the other hand, several asset management associations and institutional institutions have developed their own code, which puts an emphasis on shareholders' duties. These codes provide guidance on internal governance, conflict of interest management, engagement with companies and voting. In the United States, the ICGN[18] was one of the first organisations to develop a code for institutional shareholders' responsibilities. Its 'Statement of Principles' on Institutional Shareholder Responsibilities has become the main reference for shareholders.

Both OECD principles and the ICGN 'Statement of Principles' have been reviewed in order to take into account evolutions on financial markets, especially considering the fact that institutional investors have become more important and are expected to be increasingly engaged in company activity.

The following studies give insight into the link between corporate governance and firm performance.

Gompers, Ishii and Metrick (2003)[19] created a governance index by taking into account 24 governance features, with an emphasis on the level of shareholder rights of 1,500 firms during the 1990s. Their main results showed that firms with stronger shareholder rights had higher values, higher profits, higher sales growth and lower capital expenditures.

In order to examine the benefits of corporate governance on firm performance, Brown & Caylor (2004)[20] created a governance index. They investigated features that had rarely been examined prior to the existence of independent governance and nominating committees that are required to hold review meetings at least once a year. They computed correlations between six performance measures and 51 corporate governance features, such as board structure and processes, corporate charter issues (i.e. poison pills), management and director compensation and stock ownership. Their results revealed that firms with better governance have better operating performances, measured by return on equity, profit margins, cash dividends and share repurchases. The executive and director compensation category is most often associated with good performance, whereas the charter/bylaws category is the least.

Bhagat & Bolton (2008)[21] made additional contributions following their consideration with their examination of the relationship between corporate governance and performance. Contrary to other models, which use a single measure of governance, they use seven different governance measures for comparison. Taking into account the inter-relationships among corporate governance, corporate performance, corporate capital structure and capital ownership structure, they found that stock ownership of board members and CEO-Chair separation correlated positively and significantly with

[18] The International Corporate Governance Network (ICGN) is a not-for-profit body, founded in 1995, which has evolved into a global membership organisation of over 500 leaders in corporate governance in 50 countries, with institutional investors representing assets under management of around US$9.5 trillion. It released a Statement on global governance principles in 1999.

19 Gompers, Ishii and Metrick (2003), "Corporate Governance and Equity Prices", Quarterly Journal of Economics , Vol .118, No.1, pp 107-155

20 Lawrence D. Brown, Marcus L. Caylor (2004), "Corporate Governance and Firm Performance", Georgia State University

21S. Bhagat, B. Bolton, «Corporate Governance and Firm Performance», Journal of Corporate Finance 14, 257-273 better operating performances. Their study supports the idea that efforts to improve corporate governance should focus on stock ownership of board members.

ii) Asset managers' engagement in investee companies

Over the last few decades, there has been an emphasis on strengthening shareholders' rights in order to allow them to actively engage with investee companies. The majority of codes and principles now give much attention to the effectiveness of shareholders in the monitoring of companies. Institutional investors and fund managers now have greater incentives to acquire information and monitor executives, thanks to their voting rights. Moreover, service providers and associations have been created in order to help identify the issues associated with each voting proposal. This section aims to present the existing codes that concern fund managers' practices when engaging with investee companies, adopted at national level in certain European countries.

In Europe, detailed best practice guidance on the behaviour expected from asset management companies has been developed on a country-by-country basis. The focus is most often the role played by fund managers, particularly how they monitor investee company performance, resolve conflicts of interest and evaluate and report their activities.

In the Netherlands, the concept of corporate governance was used to develop the 'Dutch Corporate Governance Code', which became effective in 2004, followed by a revision in 2009. Dutch listed companies and asset management companies are required to disclose and explain any deviations from the best practice provisions stated in this code of conduct. This has become the more widely-used reference.

In the United Kingdom, institutional investors used to refer to the Statement of Principles published by the Institutional Shareholders' Committee, which focuses on the responsibilities of institutional shareholders and agents[22]. In July 2010, the Financial Reporting Council (FRC) published the UK Stewardship Code, which is based on the Statement of Principles and aims to encourage shareholders to be actively engaged in investee companies.

In France, as early as 1997, the French Asset Management Association (AFG) recommended in its Code of ethics that its members exercise the voting rights attached to the shares they manage. Legislation then evolved and the Law of Financial Security (six years after the AFG's incitation) made it mandatory for asset management companies to exercise their voting rights for the funds they manage. The Code of ethics updated in 2009 offers an ethical framework to investors. The AFG Corporate Governance Commission also regularly publishes corporate governance recommendations (the 2011 edition is the 9th version).

The French Asset Management Association (AFG) and the Investment Management Association (IMA) in the United Kingdom regularly carried out surveys on fund managers' engagements with companies. AFG focused mainly on the exercise of voting rights by asset management companies,

[22] Created in 1991, the Institutional Shareholders' Committee is presently composed of the Association of British Insurers, the Association of Investment Companies, the Investment Management Association and the National Association of Pension Funds. In June 2007, an updated version of "The Responsibilities of Institutional Shareholders and Agents – Statement of Principles" was published.

while IMA's survey covered a variety of areas of fund managers as shareholders, with an emphasis on voting rights. From these surveys, it seems that most asset management companies have their own voting policy. Fund managers do not hesitate to vote against resolutions that do not respect shareholders' rights, for instance, dilution of ownership.

In Sweden, the Swedish Investment Fund association played a key role in the implementation of the 'Swedish Code of Corporate Governance' in 2005. They also played a role in initiating the adoption of guidelines for investment fund managers as shareholders. The guidelines were adopted in 2002 and were then revised in 2007. The Swedish Investment Fund Association also adopted the Swedish Code of Conduct for Fund Management Companies (the Fund Management Company Code), implemented in 2005. This code aims to provide general rules concerning, among other things, the control of fund management operations, good ethics, fund managers as shareholders and handling conflicts of interest.

In Denmark, the Danish Commerce and Companies Agency has published a practical guide on responsible investments. It explains the basic principles of responsible investments, lists the Principles of Responsible Investment and the ways in which the principles can be used. The Danish Federation of Investment Associations intends to provide recommendations to institutional investors via the code of conduct offered to its members.

EFAMA and the national investment associations are in favour of democratising shareholders' rights, with the "one share, one vote" principle. In May 2011, EFAMA published its Code for External Governance[23] that provides a framework of high-level principles and best practise recommendations. The principles focus on the engagement between investee companies and investment management companies. They aim to improve the quality of communication between both sides. While being fiduciaries acting on behalf of their Clients / Investors, investment management companies are encouraged to create value by taking into account concerns over companies' performance. The principles, designed by EFAMA, are derived from the following features:

- strategy and performance,
- conventional corporate governance issues such as board construction, election, succession and remuneration,
- risk management,
- approach to corporate social responsibility.

In addition to its Code for External Governance, EFAMA investigated Responsible Investment ("RI")[24] in the investment management industry and published a report on this subject in May 2011. This

[23] For more information, the EFAMA code for 'External Governance – Principles for the exercise of ownership rights in investee companies' (May, 2011) is available on the EFAMA website at the following link:
http://www.efama.org/index.php?option=com_docman&task=cat_view&gid=53&Itemid=-99

[24] For more information, the EFAMA Report on Responsible Investment is available on its website at the following link:
http://www.efama.org/index.php?option=com_docman&task=cat_view&gid=493&Itemid=-99

report analyses and describes recent specific developments in RI in European countries. As investor demand for RI products is soaring in Europe, reaching a total AuM of EUR 5 trillion by the end of 2009 (Eurosif[25]), there is a need to set standards and label RI products, as well as for tools and approaches to RI in investment portfolios. In its report, EFAMA aims to lead the development of RI guidelines among asset managers in Europe. Thus, in its report EFAMA provides suggested actions that should be implemented in the European Union. In addition, it highlights that there is a need for transparency of the processes used in products promoted as RI. EFAMA in turn aims to develop methods that will overcome this lack of transparency by allowing investors to evaluate and compare how investment managers meet demands for RI.

f. Acquisition and interpretation of information

As mentioned in first section, asset managers exploit a large amount of information in the investment decision process. They contribute to the price discovery process of financial products, using all the available information as the basis for their decisions.

It is not only investment management companies that have the dedicated means to acquire and interpret financial information on companies and financial products. There are three categories of financial analysts:

- Sell side analysts are employed by brokerage firms. They provide research to these firms. Such brokers get remunerated by transaction fees as opposed to the provision of the research.
- Independent analysts sell research to investors or asset managers.
- Buy-side analysts are employed by investment management companies and make internal recommendations to managers. Buy-side analysts have the research undertaken by sell-side analysts at their disposal, but their added value goes beyond simply aggregating information emanating from brokers.

Although sell-side analysts are expected to produce high quality research in order to preserve their reputation, their research has an optimistic bias. Indeed, securities firms get a trading fee or underwriting fees when their client is convinced that a specific security should be bought. Several studies also found that research produced by sell-side analysts who have an investment banking relationship with the company being researched was biased. Independent analysts are not biased by such conflicts of interest but they are not numerous in the market, so their influence in the price discovery process is therefore limited. Hence, buy-side analysts play a key role in the price discovery process by producing influential and unbiased research on issuers and financial products. Employing

[25] Every two years, Eurosif conducts the European SRI Market Study. All studies are available on the Eurosif website at the following link: http://www.eurosif.org/research/eurosif-sri-study
The 2010 European SRI study was published in October 2010.

a dataset of US equity funds, Yingmei Cheng *et al* (2006)[26] found that on average buy-side analysts' research is significantly more important in shaping the investment decisions of money managers than sell-side analysts' research. Money managers place an average weight of 70% on buy-side analysts' research, 25% on sell-side and only 5% on independent research. The positive impact of buy-side research is also demonstrated by the fact that money managers rely more on buy-side analysts for companies that are characterized by an average error in earnings forecasts – i.e. their bias - that is higher than the average of other issuers. The weight of buy-side research is also higher when the fund charges performance-based fees; the more money managers are expected to deliver high performance to their clients, the more they rely on buy-side analysts.

Buy-side analysts also play a complementary role to sell-side analysts for listed companies with a small capitalization, which does not generate sufficient trading for brokers. Finally, the authors found that the performance of funds that rely more heavily on buy-side analysts is above the average.

[26] Yingmei Cheng, Mark H. Liu and Jun Qian, "Buy-Side Analysts, Sell-Side Analysts, and Investment Decisions of Money Managers", Journal of Financial and Quantitative Analysis Vol 41 March 2006.

4. Importance of asset management to economic growth, welfare

Our research program aims to combine various sources of information to measure the overall contribution of asset management companies to the financing of the European economy, taking into account both investment funds and mandates received from institutional investors. More precisely, the goal is to estimate the share of asset management in:

- Equity financing of European companies
- Debt financing of European companies
- Financing of public administrations

The calculation method consists in measuring equity investment of investors in the framework of management mandates or via investment funds and then estimating the relative weight of such equity issued by European companies. The same method is applied for calculating debt instruments financing, with an additional step to estimate the relative weight of companies and public administrations in total debt instruments held by investors. Statistics used in this process include among other data from the ECB which are disseminated since 2008.

Details of the sources and methodology are reported in appendix 2.

a. Financing companies

In this section we assess the relative contribution of the asset management industry to the financing of European companies. In order to do so, we measure the outstanding amounts of shares and corporate bonds held by investments funds and discretionary mandates and we compare these amounts to the overall liabilities in the balance sheet of European companies, including credits.

i. Financing in equity

Discretionary mandates

In order to estimate the outstanding amounts of shares held by institutional investors in the framework of discretionary mandates, we combine information from EFAMA, the national financial accounts (following the SEC 95 methodology) and information available from the annual IPE survey on the relative weight of externally managed assets of institutional investors in Europe[27].

At end of 2009, European shares held in the framework of an external management mandate amounted to EUR 1 227 billion.

Table 5:Outstanding equity managed by discretionary mandates (EUR bn)

Investments from…	2006	2007	2008	2009
United Kingdom	1 529	1 399	840	1 124
France	188	195	128	162
Netherlands	205	180	140	156
Italy	102	96	66	75
Germany	28	38	20	50
Belgium	153	152	104	78
Portugal	10	9	7	5
Hungary	2	3	3	5
Greece	1	1	1	1
Switzerland	142	125	57	76
Rest of Europe	72	135	103	184
Europe	**2 434**	**2 333**	**1 468**	**1 914**
Of which shares issued by European companies			**981**	**1 227**

Sources: EFAMA, Eurostat (national accounts), IPE survey, OEE calculations

[27] "IPE European Institutional Asset Management Survey in …", Investment & Pensions Europe.

Investment funds

Asset allocation of investment funds derives from EFAMA statistics, national accounts, ECB data and diverse national sources (see appendix 2).

At end of 2009, European shares held European investment funds amounted to EUR 1 127 billion.

Table 6: Outstanding amounts of shares held by investment funds (EUR bn)

Investments from...	2006	2007	2008	2009
Luxembourg	745	799	428	599
United Kingdom	555	546	298	425
France	481	457	326	400
Germany	409	394	203	262
Sweden	111	105	55	90
Denmark	52	54	30	39
Italy	87	65	31	33
Belgium	42	41	24	28
Austria	35	36	15	24
Portugal	4	6	4	3
Greece	11	6	2	3
Hungary	1	2	1	3
Other countries	647	653	349	414
Total	3 181	3 164	1 765	2 323
Of which shares issued by European companies	**na**	**na**	**719**	**1 127**

Source: Eurostat, ECB, EFAMA, BVI (DE), IMA (UK), FBF (SE), IFR (DK), OEE calculations

ii. Financing in debt instruments

<u>Discretionary mandates</u>

Using the same sources as those for equity, estimates of debt financing provided by institutional investors in the framework of discretionary mandates are reported below.

The estimated total of corporate debt instruments issued by European companies and held by institutional investors in the framework of discretionary mandates amounted to EUR 1.304 billion at the end of 2009.

Table 7: Outstanding amounts of debt instruments held by discretionary mandates (EUR bn)

Investments from…	2006	2007	2008	2009
UK	1 092	1 177	953	1 017
France	810	840	800	924
Italy	320	293	239	296
Germany	129	237	262	274
Switzerland	203	207	127	193
Netherlands	187	165	174	187
Belgium	140	139	130	93
Portugal	39	38	39	46
Hungary	9	9	10	11
Greece	2	1	2	1
Rest of Europe	79	93	200	230
Europe	**3 010**	**3 199**	**2 937**	**3 273**
Of which debt instruments issued by European companies			**1 212**	**1 265**
Of which debt instruments issued by Governments			**1 047**	**1 304**

Sources: EFAMA, Eurostat (national accounts), IPE survey, OEE calculations

Investment funds

As for equities, for each European country where data is available, we combined information and data from national financial accounts, EFAMA, ECB and questionnaires received from national associations on the relative weight of bonds in the total net asset of mutual funds.

At end of 2009, debt instruments from European investee companies held by European investment funds amounted to EUR 951 billion.

Table 8: Outstanding amounts of debt instruments held by mutual funds (EUR bn)

	2006	2007	2008	2009
Luxembourg	747	809	726	822
Germany	554	553	569	684
France	350	383	314	317
United Kingdom	112	137	99	138
Austria	106	94	80	76
Italy	136	104	74	72
Denmark	58	63	57	63
Belgium	47	42	29	34
Sweden	26	26	21	28
Portugal	22	16	8	9
Greece	9	5	2	3
Other countries	104	137	89	144
Total	**2 272**	**2 373**	**2 070**	**2 393**
Of which debt instruments issued by European companies	**na**	**na**	**791**	**951**
Of which bebt instruments issued by European governments	**na**	**na**	**829**	**897**

Source: Eurostat, ECB, EFAMA, BVI (DE), IMA (UK), FBF (SE), IFR (DK), OEE calculations

iii. Overall financing of European companies

Table 9 summarises the contribution of investment funds and externally managed institutional portfolios to the financing of European companies.

More than 37% of the free float market capitalisation[28] of listed European companies is held by investment funds or institutional investors in the framework of a mandate. The financing in debt instruments is also very significant: At the end of 2009, 18. 4% of debt securities issued by European companies were held by investment funds or institutional investors in the framework of a mandate.

Table 9: Financing of European companies by mandates and investment funds		
	2008	**2009**
Equity finance		
(Bn EUR)	**1 699**	**2 354**
% of European market capitalisation	27.6	28.9
% of free float market capitalisation	36.3	37.4
Debt instruments finance		
(Bn EUR)	**2 003**	**2 216**
% of debt securities financing	18.1	18.4
Overall contribution to the financing of European companies		
(EUR Bn)	**3 702**	**4 569**

Tables 10 and 11 focus on the contribution of the asset management industry to the overall financing of non-financial companies (including credit provided by banks). We estimate that contribution to the overall equity financing[29] of listed and non listed non-financial European companies to be of 21.2% at the end of 2009.

When all capital raising instruments are taken into account – namely equity, debt securities and loans – the asset management industry contribution is estimated to amount to 9.1% as of 2009. It increased by near 2 percentage points in 2009 in comparison to the preceding year, due to the decrease of outstanding loans to companies. The asset management industry contributes to the financial stability of companies by providing equity financing when the supply of credit diminishes, as seen in the aftermath of the 2008 banking crisis.

[28] The free float market capitalisation is calculated by applying the percentage of the free float market capitalisation of the STOXX TMI index components to the total market capitalisation of European listed companies: 76.2% in 2008 and 77.3% in 2009.

[29] The overall equity financing of non-financial companies is calculated as the total equity of non-financial companies minus the equity portfolio of non-financial companies. Indeed, the equity portfolio of non-financial companies accounts for a large proportion of the equity of subsidiaries in groups of businesses. Moreover, the present study's objective is to assess the share of asset management in the overall external finance of investee companies.

Table 10: Financing of European non-financial companies by mandates and investment funds		
	2008	**2009**
Equity finance		
(EUR Bn)	1 056	1 431
% of equity financing of non-financial companies	18.0	21.2
Debt instruments finance		
(EUR Bn)	226	263
% of bond securities financing	18.1	18.4
Overall contribution to the financing of European non-financial companies		
(EUR Bn)	*1 282*	*1 694*
% of overall financing of non-financial companies(Bonds+equity+loans)	7.3	9.1

Table 11: Financial means of non-financial companies (EUR bn)		
	2008	**2009**
Equity (net of equity holdings of non-financial companies)	5 879	6 754
Equity managed by the asset management industry	*1 056*	*1 431*
Debt instruments	1 247	1 426
Debt instruments managed by the asset management industry	*226*	*263*
Loans	10 536	10 389
Total	**17 662**	**18 570**

b. Financing the public sector

Applying the same methods as the ones for corporate bonds enables us to estimate the public sector total financing (the 'General Government' sector in the SEC 95 classification of national accounts).

At end of 2009, 36% of debt instrument holdings issued by the public sector were held by investment funds or under a management mandate.

Table 12: Public sector financing		
	2008	**2009**
(EUR Bn)	**1 876**	**2 201**
% of the debt instruments issued by public administrations	30.8	36.0
% of the overall financing of general public administrations	23.3	24.4

c. Contributing to financial markets' efficiency

There is a traditional separation between "sell-side" firms with a direct membership in financial markets and the" "buy-side" institutions, that might be investing institutions or asset management companies operating for the account of the latter. Both categories are complementary to ensure a smooth functioning of securities markets.

Asset managers contribute to the price discovery process, they provide liquidity to the markets and contribute to moderate the market volatility.

The contribution of buy-side analysts to the price discovery process on financial markets has been reviewed in the above section 3.f.

The buy siders are those who ultimately provide liquidity to the market. Moreover, they can trade directly using the so-called "direct market access" which allows an institution which is not a member of an exchange to technically access the markets through the legal status of an authorized broker.

Over the last years, the buy-side has become more demanding on the quality of reporting, especially cost analysis (including market impact) of their investments. They put pressure on brokers to diminish market impact of their orders and measure the overall cost of trading. In doing so, they help diminish market volatility.

Asset managers also play an important role in enabling to develop trading and arbitrage across various asset classes and trading venues. All segments of financial markets benefit from their activity, not only shares and bonds. For example, money market funds play a key role in providing liquidity to all money market segments. With EUR 1.2 tn assets under management, they account for 13,5% of money supply (M3) in the euro area. As demonstrated in a recent study of the Institutional Money Market Fund Association[30], this role is especially vital for the commercial paper market, where short tem debt instruments are issued. Money market funds are also significant players on the market of certificate deposits issued by banks.

[30] « The contribution of IMMFA funds to Money Markets », a report commissioned to PwC by the Institutional Money Market Fund Association (IMMFA, 3 February 2011)

5. Importance of asset management as a leading industry in Europe

The growth of asset management strongly contributed to the development of financial services clusters like London, Paris, Frankfurt, Luxembourg and Dublin.

This section first describes the role of European integration on products and services supplied by the industry and their attractiveness in the rest of the world, especially in Asia.

We provide an estimation of revenue and the added value generated by European management companies. We also give an estimation of the number of staff directly and indirectly employed by management companies.

a. A truly pan-European industry

Ten years after the launch of the European Commission's "Financial Services Action Plan", banking, insurance and pension products remain at a domestic level; they are basically designed for and sold to domestic savers. Asset management services are a successful exception in the sense that pan-European funds account for a significant share of the European market and this trend is accelerating. Pan-European funds domiciled in Luxembourg or Dublin account for 35% of total assets under management. Moreover, some funds domiciled in one country are successfully 'passported' across Europe.

This success is the result of the European legislation; UCITS' directive was the first framework that enabled financial service providers to sell a product domiciled in any one European country (the "home country") to investors in all others (the "host countries") without having to solicit a new authorisation from authorities.

US-based asset managers cannot export their domestic investment funds for fiscal reasons. Other countries are trying to, especially those in Asia, but face difficulties to compete with their European counterparts, who have been developing their offer since the first UCITS directive was approved in 1985. However, this advantage cannot be taken for granted; American asset managers have created European-based subsidiaries and they are among the first beneficiaries of the European UCITS passport. This demonstrates that the European asset management industry is open to foreign competition. Symmetrically, several asset management companies headquarted in Europe, like, Allianz, Axa or Unicredito have powerful asset management affiliates in the US.

Asset management in the framework of a mandate also have a strong international dimension. For example, one third of the assets managed in the United Kingdom are for overseas clients.

b. *Revenue generated by asset management companies*

Information is available on asset management companies' revenues in five countries:

- In the United Kingdom, the annual "Asset management in the UK in…" survey, conducted by the Investment Management Association (IMA), covers 90% of assets managed by IMA members. We extrapolate information on their revenue from the bespoke survey, based on the assumption that revenues are proportionate to managed assets. Hedge fund management is an additional important source of revenue to the UK economy. We assume that this revenue was not included as part of IMA members' revenue. The Asset Management Working Group (AMWG) report estimated that this particular sector of the industry generated £ 3.5 bn in 2008. We add this figure to the estimation of the revenue of IMA members.

- In France, the Autorité des Marchés Financiers (AMF) publishes an annual document entitled "Asset management for third parties" which includes an aggregate measure of French asset management companies' revenue derived from their balance sheets. This document covers the whole population of Management Companies and provides details on the different sources of revenues (fees on funds and mandates…) and their costs structure.

- In Luxembourg, an annual study conducted by Deloitte on "The impact of the financial industry on the Luxembourg economy" calculates a complete set of data, including the revenue generated by Luxembourg management companies. This information is drawn from balance sheet data reported to the Comité de Surveillance du Secteur Financier (CSSF). The last survey available relates to data of 2008. For 2009, we assume that variation rate was the same as it was in other countries where this information is available (-15%)

- In Spain, the Comisión Nacional del Mercado de Valores (CNMV) publishes annually the aggregate income statement of management companies. Gross commissions are the only component of the operational revenues of management companies.

- In Italy, each year the Commissione Nazionale per le Società e la Borsa (CONSOB) publishes the aggregate income statement of Italy's main banking groups. We used the revenue from "collective management" as a proxy of management companies' revenue in Italy. This figure underestimates the reality. Firstly, not all management companies are part of a banking group, although the relative weight of banks in Italy is higher than in most other countries. Secondly, the revenue from "individual management" is also partly generated by management companies.

- We have extrapolated estimates of the revenue of management companies in other countries based on the total net assets of investment funds in those countries. We have assumed that the ratio of revenue to investment fund assets is similar to the average observed in countries where the aggregate revenue of management companies is available. We are aware that the revenue of management companies also includes revenues from mandates. However, we believe that investment fund assets are a better indicator for this purpose because the revenue from investment funds is much higher than the revenue from mandates in terms of the percentage of managed assets. To calculate the average ratio, we exclude Luxembourg and France. Relatively to net assets of domiciled funds, Luxembourg management companies' revenue is proportionately lower than the European average as a high proportion of funds domiciled in Luxembourg is managed in other countries. The ratio is also lower in France, due to the relative importance of money market funds in total managed assets.

Table 13: Revenue of European asset management companies (EUR Bn)

Revenue	2005	2006	2007	2008	2009
United Kingdom	16.1	19.5	21.5	17.6	14.8
France	9.6	11.9	14.1	12.1	11.1
Luxembourg	1.4	4.2	4.9	4.4	3.8
Spain	3.0	3.4	3.3	2.5	1.8
Italy (management companies in banking groups)	5.0	5.0	4.4	3.3	2.6
Other countries	27.7	31.7	32.3	26.2	23.0
All countries	**65.9**	**79.1**	**84.1**	**69.6**	**60.7**

- **The total revenue of asset management companies reached EUR 84 billion in 2007.**

In the aftermath of the financial crisis, the decrease of assets managed translated into a decrease in revenues in 2008 and 2009, which was 28% lower in 2009 from 2007.

c. Value added of asset management companies

Several methods are used in Europe to measure the value added of asset management as an industry.

- In Luxembourg, the study on the "Impact of the financial industry on the Luxembourg economy" includes a proxy on the value added from Luxembourg asset management companies, which was calculated by adding net profit to staff expenses and taxes.
- In France, staff expenses and net operating profit are available from the AMF report.
- In the United Kingdom, total staff expenses are not directly available. We estimated this aggregate using the staff number from the IMA asset management survey and the average cost per employee observed in France. The net operating profit can be calculated using the net operating margin available in the IMA survey.
- In Spain, the net operating profit and staff expenses are available from CNMV report.
- For other countries, we apply the same value added ratio to revenue.

Table 14: Value added of European asset management companies (EUR Bn)					
	2005	2006	2007	2008	2009
United Kingdom	8.7	10.6	11.5	9.2	8.1
France	3.7	4.8	5.5	4.1	4.2
Luxembourg	1.0	2.4	3.0	1.9	1.7
Spain	0.8	1.0	1.0	0.7	0.4
Other countries	15.4	17.7	17.6	12.9	11.8
All countries	**29.6**	**36.4**	**38.6**	**28.8**	**26.2**

- **The value added of European asset management companies reached EUR 38.6 billion in 2007.**

  In 2009, it was 32% lower than in 2007.

d. Staff employed by asset management companies

- In the United Kingdom, France, Luxembourg, Germany and Slovenia, the number of people employed by asset management companies is available from 2005 to 2009.
- In some countries, we only have one year estimates; Belgium (2008), Denmark (2009). In Luxembourg, 2009 was not available. We extrapolated unavailable years from the yearly variation calculated for countries where the information is available.
- For countries where no information is available, we assume that the ratio of UCITS assets to the number of employees in 2008 is the same as in other countries where information is available. The same assumptions were made for previous years.

Table 15: Number of employees directly employed by European asset management companies					
	2005	**2006**	**2007**	**2008**	**2009**
United Kingdom	24 500	25 000	25 500	24 750	24 000
France	12 273	12 903	14 858	15 034	14 852
Luxembourg	1 571	2 022	2 348	2 386	2 308
Germany	10 000	10 000	15 000	15 000	15 000
Belgium	1 469	1 612	1 833	1 684	1 655
Denmark	337	370	421	387	380
Slovenia	222	249	284	315	286
Other countries	11 902	13 061	14 856	13 645	13 407
Total	**62 274**	**64 332**	**74 307**	**73 224**	**71 911**

Sources: National associations, national authorities, OEE calculations.

- **Management companies employ directly almost 72 000 people in Europe.**

Our estimate is thus close to that of EFAMA (73 000 in 2008).

Asset management also creates indirect employment in the provision of various related services.

For example, in Luxembourg, Deloitte estimates that activities generated by investment funds – including management and also administration, depository, custody among all service providers – employed 10 476 people in 2008.

In France, AFG classifies third party asset management employment into four categories:

- Category A: Jobs which can be either internalised by asset management companies or outsourced (complete information for the former; survey data for the latter)
- Category B: Services required by regulation which can never been internalised, such as audit, custody and account management (Estimates from revenue data issued by management companies' financial statement) .
- Category C: Trading provided by broker-dealers for the account of asset management companies (Estimates on the base of flows and average fees).
- Category D: Distribution of investment funds, an activity which is mainly outsourced to independent financial advisors, banks and insurance intermediaries (Estimates on the basis commissions paid to distribution channels),.

Using all available sources of information lea leads to an estimation of 43.000 jobs being generated in Europe by tasks outsourced by the asset management industry, excluding staff employed on fund distribution (details of calculation are in appendix 2).

Appendix 1: Sources and methodology on asset management contribution to the financing of the economy

In theory, complete flows of funds are available from national financial accounts. However, there is a need to combine this information with complementary sources:

- In national accounts, investment fund units are a financial transaction. For example, national accounts measure the total holdings of investment funds by households in a given country. Yet, asset allocation of investment funds is not available in national accounts. Furthermore, investment funds are not considered as a separate institutional sector. They form a part of a broader sector, the so-called "Other financial intermediaries, except insurance companies and pension funds" (S123). Hence, there is a need to combine this information with asset allocation data provided by EFAMA and its national association members.

- At Euro area level, aggregated data on funds' asset allocation is provided by the European Central Bank.

- Investments from institutional investors are available in national accounts, however, some of them are internally managed. Hence, we combine this information with the results of EFAMA[31] and IPE surveys on the use of external management by institutional investors.

<u>Financing of the economy by institutional mandates</u>

- In the annual publication "Asset Management in Europe", EFAMA publishes figures on total assets under management in discretionary mandates in 2006, 2007, 2008 and 2009 for 9 countries (United Kingdom, France, Netherlands, Italy, Germany, Belgium, Portugal, Hungary and Greece). The table also includes estimated figures for the whole of Europe and asset allocation in discretionary mandates in the bespoke countries, except for the Netherlands.
- The IPE survey provides a breakdown of internally managed and externally managed assets in several countries. This enables us to determine the relative weight of externally managed equity and fixed income in mandates in the Netherlands, which is missing in EFAMA statistics.
- National accounts provide information, on a country-by-country basis, on the total amount of equity held by the various sectors of the economy, including pension funds and insurance companies. This information is also used to estimate the amount of mandates in Switzerland.

[31] Asset Management in Europe – Facts and Figures, EFAMA's fourth annual review, May 2011

Financing of the economy by investment funds

When data is available, we estimated, for each European country, the contribution of investment funds to the real economy financing by combining information from national financial accounts (under SEC 95 methodology) on the total net asset of home domiciled investment funds to information available from EFAMA (Asset Management Report) and questionnaires received from national associations on the relative weight of shares and bonds in mutual funds total assets. More specifically, information was obtained from the following sources:

- Total assets of domiciled investment funds are available from EFAMA statistics for all countries.
- Asset allocation of investment funds is available for nine countries in the EFAMA Asset Management Report (as it is for mandates).
- The asset allocation of Luxembourg investment funds is available in the CSSF newsletter.
- We received information from the National Asset Management Associations on total assets and asset allocation of investment funds for the following four countries: Denmark, Germany, the United Kingdom and Sweden.

The weight of European issuers

Data on the relative weight of European issuers in managed portfolios is available from IMA on UK-based asset managers, and from the ECB on investment funds based in the euro area.

The share of European bonds in the overall UK asset management industry is very close to that of Euro area investment funds. But the share of European equity is much higher in the overall UK asset management industry than in portfolio of Euro area funds.

Funds are often used as a diversification tool in non-European countries, while mandates are more concentrated on European markets.

Since mandates in the UK are by far the largest in Europe, we have extrapolated the geographical breakdown of their assets (European/non-European) to all mandates in Europe. That same breakdown of assets held by Euro area investment funds (available from the ECB) has been extrapolated for the whole European fund industry.

% of European securities under management in Europe		
	2008	**2009**
% of European equity in UK equity portfolios (mandates plus investment funds)	66.8	64.1
% of European bonds in UK bond portfolios (mandates plus investment funds)	76.9	78.5
% of European equity in equity portfolios of Euro area investment funds	40.7	48.5
% of European bonds in bond portfolios of Euro area investment funds	78.3	77.2

The breakdown of corporate and government debt instruments

Debt instrument portfolios are almost equally divided between corporate bonds and government bonds. We extrapolate ECB data for the whole Europe (except for the UK) and we assume that the share of corporate bonds in mandates is the same as for investment funds in the Euro area.

% of corporate debt in total debt instruments		
	2008	**2009**
United-Kingdom (mandates and investment funds)	46.3	50.8
Euro area (investment funds)	48.8	51.5

Appendix 2: measuring direct and indirect employment generated by the asset management industry

Two methods are used to estimate the overall direct and indirect employment in the asset management industry: Danish and Swedish associations conducted surveys among market participants on direct and indirect jobs generated by the asset management industry, respectively in 2003 and 2009. AFG uses a combination of the results of a survey and estimations based on the expenses of asset management companies.

Additional qualitative estimates are proposed by BVI in Germany and IMA in the United Kingdom. In Luxembourg, the number of indirect jobs can be calculated as the difference between the overall employment related to investment funds and the staff employed by asset management companies.

A comparison of direct and indirect jobs is provided when available:

Direct and indirect jobs generated by asset management activities

	(1) Direct jobs	(2) Indirect jobs (excluding distribution)	Ratio (2)/(1)
Denmark (2009)	380	70	0.18
France (2008)	15 034	13 000	0.86
Germany (2009)	15 000	4 000	0.27
Luxembourg (2008)	2 386	8 090	3.39
United Kingdom	24 000	26 000	1.08
Ireland		10 796	

Pan-European funds domiciled in Luxembourg and managed in other countries generate a higher ratio of indirect jobs to direct jobs than that found in the other countries. The average ratio in other countries is 0.60. Applying this ratio to total direct jobs in Europe leads to an estimation of **43,000 indirect jobs** (excluding employment relating to the distribution of funds).