Ignazio Basile · Pierpaolo Ferrari *Editors*

Asset Management and Institutional Investors

Springer

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Foreword by Andrea Sironi

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ISBN 978-3-319-32795-2 ISBN 978-3-319-32796-9 (eBook)
DOI 10.1007/978-3-319-32796-9

Library of Congress Control Number: 2016945976

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG Switzerland

Foreword

It is a pleasure for me to present this book devoted to the investment management policy of institutional investors, which a group of friends and colleagues have written with great dedication and expertise, providing a methodical and in-depth perspective of a multifaceted topic that is in continuous evolution.

The book is composed of four parts. The first one analyses the different types of institutional investors, institutions which, with different objectives, professionally manage portfolios of financial and real assets on behalf of a wide variety of individuals. The development factors and benefits for the financial system generated by institutional investors are identified, and a comparison is made at the international level. The first part goes on with an in-depth analysis of the economic, technical and regulatory characteristics of the different types of investment funds, assuming the perspective of a European Union investor. Management strategies, restrictions to investment policies, public documentation and charges of investment funds are explored. This section also analyses other types of asset management products which have a high rate of substitutability with investment funds and represent their natural competitors.

The second part of the book identifies and investigates the stages of the investment portfolio management, dividing the investment process into the following stages: the identification of the objectives and the constraints of the investment policy, the formalisation of the investment strategy, the implementation of the financial strategy, the periodic rebalancing of the portfolio and the assessment of results and risk control. Given the importance of strategic asset allocation in explaining the *ex post* performance of any type of investment portfolio, this section provides an in-depth analysis of asset allocation methods, illustrating the different theoretical and operational solutions available to institutional investors. This section focuses on the concepts and applications of traditional approaches to asset allocation, based on mean-variance optimisation, but also deepens the new risk-based approaches for asset allocation, which eliminate estimation risks associated with the traditional approaches. Finally, the second part concludes with a presentation of the methods and instruments for portfolio selection

available to institutional investors for a more aware identification of the "optimal portfolio", taking into consideration management objectives and constraints.

The third part describes performance assessment, its breakdown and risk control. The first step in performance assessment is the calculation of return, with the identification of the most appropriate measure among the different methods of calculation available. Performance evaluation requires then the identification of the risk of an investment portfolio, in its different forms of absolute, asymmetric and relative risk, and the calculation of the related risk-adjusted performance measures, which will enable to assess the efficiency of the asset manager with respect to the benchmark, the competitors and the *ex ante* risk limits. When comparing the performance of competitors, it is essential that homogenous peer groups be created, made up of portfolios with the same management approach. To this end, the most common operational solution is to create a peer group based on the investment style, by using a deductive approach founded on the so-called returns-based style analysis. This section provides alternative methods and utilisation rationales of style analysis. In the case of non-indexed portfolios, an in-depth *ex post* performance assessment also requires the evaluation of the asset manager in terms of the ability to realise effective stock picking and market timing activities. For this purpose, this section presents the most appropriate performance attribution model aimed to shed light on those management choices that generated the gap between the overall result of the portfolio and the benchmark, breaking down relative performance into its determinants and attributing it to the various factors that contributed to its generation.

Finally, the fourth part deals with the subject of diversification towards alternative asset classes, identifying the common characteristics and their possible role within the framework of investment management policies. This section analyses hedge funds, identifying their operational characteristics, management strategies, the regulatory framework and the specific performance assessment techniques. The distribution of the hedge funds returns highlights some statistical anomalies that compromise the validity of normality assumption, which is a necessary condition for the application of classic performance measures. The section continues with a complete and exhaustive analysis of the other types of alternative investments: private equity, real estate, commodities and currency overlay techniques. A common characteristic of these alternative asset classes is to have returns that are often uncorrelated with those of traditional asset classes, although the direction and intensity of the correlation varies greatly over time and according to the specific category of alternative investment.

I believe it is worthwhile to highlight three strengths that enrich this work and make it an easy reading and of interest to a wide audience: First, an abundance of up-to-date data and numerical and graphic illustrative tables. This is a very important aspect that facilitates the understanding of even the most complex concepts. Second, the ability to analyse frontier themes in relation to investment management, without underrating the fundamental concepts that lie at the basis of the most advanced research. This feature makes the book of value and of service to experts, who are interested in cutting-edge models and techniques, and also to those who are less experienced on the subject. Lastly, there is the meticulous work done by the editors, who, thanks to the logical

coherence and sequence of the subjects, have succeeded in the difficult task of making a book written by different qualified authors comparable to a manual written by a single author.

To conclude, in its thorough and precise analysis of all these subjects, the book edited by Ignazio Basile and Pierpaolo Ferrari is a useful and effective tool for tackling the topic of the investment management policy of institutional investors.

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Part I
Institutional Investors: Typologies, Roles and Products

Chapter 1
Institutional Investors

Ignazio Basile

1.1 Institutional Investor Features

In the absence of a specific legal framework, the expression "institutional investors" identifies all the entities which, with different objectives, professionally manage portfolios of financial and real assets on behalf of a plurality of investors.[1]

The need to focus on the real evolution of the structure of financial systems, rather than on the relevant regulatory frameworks of financial activity, derives from the heterogeneity of the institutional players involved as well as the complexity of this phenomenon, which cannot be easily delimited.

Focusing our attention on the European Union, even the MiFID Directive, which laid the foundations for a comprehensive reorganisation of the asset management activities, does not provide deterministic indications about the definition of institutional investors, as it refers to the logical category under investigation only when segmenting customer clusters.

Institutional investors are indeed viewed as a subset of "professional clients", identified as follows: "professional client is a client who possesses the experience, knowledge and expertise to make its own investment decisions and properly assess the risks that it incurs".[2] In fact, not even the existing categorisation is a defined list, since, along with explicit references to insurance companies, collective investment schemes and management companies of such schemes, pension funds and management companies of such funds, there is a general reference to "other institutional investors", with the following specification: "whose main activity is to invest in

[1] Davis and Steil (2001).

[2] Directive 2014/65/EU, Annex 2.

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I. Basile, P. Ferrari (eds.), *Asset Management and Institutional Investors*,
DOI 10.1007/978-3-319-32796-9_1

financial instruments, including entities dedicated to the securitisation of assets or other financing transactions".[3]

Since the MiFID Directive puts its focus on the level of protection to be granted to the various categories of investors, it is obvious that an explicit reference to institutional investors was only incidentally made, as the lowest common denominator of professional clients is not identified with their functional specialisation, but with the level of financial expertise they have attained. This condition is also confirmed by the fact that these investors have the discretion to request non-professional treatment and benefit from a higher level of protection.

Actually, the lowest common denominator among all categories of institutional investors is represented by the professional management of assets on behalf of the plurality of individuals. Such management can be carried out on a collective basis, as in the case of investment funds, or on an individual basis, as in the case of discretionary mandates given on a client-by-client basis.

If we accept this assumption, we can consider the following as institutional investors:

- Collective investment vehicles (CIVs);
- Individual portfolio management, based on mandates given by clients on a single and discretionary basis;
- Insurance companies;
- Pension funds;
- Institutions for occupational or personal retirement provisions;
- Foundations and endowments.[4]

Notwithstanding, further considerations must be taken. In the case of collective and individual portfolio management, reference is commonly made to the activity rather than to the institution which provides the service, because, on the one hand, the three types of existing CIVs (common contractual funds, trusts and investment companies) have very different technical and legal characteristics, and, on the other hand, individual portfolio management can be provided both by specialised institutions (management companies, investment companies and other specialised financial intermediaries) and directly by universal banks.

Moreover, in several countries, pension funds and other institutions for occupational and personal retirement provisions, albeit sharing similar social security purposes, are subject to very different regulatory frameworks, which require distinct patterns of analysis.

Finally, in relation to foundations and endowments, the institutional and operating context in which they work allows to propose the necessary generalisation only in some cases, for instance with respect to grant-making foundations which

[3] Directive 2014/65/EU, Annex 2.

[4] Assuming a more extensive definition of institutional investor, we can include banks, given their need of managing securities in the proprietary book, and also sovereign funds, for their necessity of managing diversified asset portfolios.

should invest their assets to generate income for their institutional objectives characterised by collective interest and socially-oriented goals.

Under this premise, the institutional/functional profiles of the various types of institutional investors previously identified can be outlined here. In particular, the activities of each category are summarised in Table 1.1.[5]

In terms of regulation, we should highlight that in all European Union countries, each institutional investor category refers to specific regulatory framework, at either primary or secondary level. In many cases, these regulations are not incorporated within a unitary framework but derive from the stratification of successive measures adopted in time (laws, decrees, regulations, supervisory authorities' instructions).

Moreover, the organisational structure of supervisory functions does not provide for the distribution of responsibility that refers to a unique model. While at the European Union level an "objective-oriented model" is preferred, with the single authorities being assigned specific objectives (stability, transparency etc.), in some countries the so-called "institutional model" still prevails, with a single authority concentrating all functions on a given category of institutions. Furthermore, we can often detect a slow rationalisation and convergence process of the two models, resulting in the concentration of all power into a single supervisory entity.[6]

Taking into consideration management profiles, this topic can be investigated from two different perspectives, comparing the management and the organisational approach.

Table 1.2 highlights how when comparing of institutional investors' management strategies at least the following aspects need to be considered:

- Objectives;
- Risk attitude;
- Time horizon;
- Financial profile;
- Regulatory constraints;
- Management policies.[7]

In the case of individual and collective portfolio management, the frequent absence of a specific time horizon makes it difficult to define return targets in absolute terms; it also makes inevitable the comparison with market parameters, on the one hand, and with competitors, on the other hand. This leads to the widespread adoption of relative risk measures and *ex post* evaluation logics based on risk-adjusted performance indicators. From a financial perspective, for open-end CIVs and individual portfolio management, the absence of exit barriers imposes the need to maintain cash reserves and practically precludes any form of medium- and long-term financial planning.

[5] The different categories of CIVs will be discussed further in Chap. 2.

[6] Çelik and Isaksson (2013).

[7] Bushee (2001).

Table 1.1 Institutional investors: distinctive characteristics

Common contractual funds	Common funds are collective investment schemes (CIVs)—without legal personality—that allow a number of separate and unrelated investors to pool their capital in order to access to professional management and to achieve a broader diversification. They are run by a management company and represented by units
Trust funds	The trust form of CIVs is found in jurisdictions where the English common law system prevails other than the United States. The investment manager and trustee jointly sign the "trust deed", which determines how the trust is to be established. Investors are beneficiaries of the trust. The most recurring scheme within this category is that of unit trust, that is an open-end scheme. The pool of investments is divided into equal portions called units
Investment companies	Another alternative legal structure for collective portfolio management is that of open-end investment companies or closed-end investment companies, where the investment company is a separate legal entity and the investors are shareholders. This legal form is known in many countries, when the scheme is open-end, with the French expression "société d'investissement à capital variable" (SICAV), equivalent to "investment company with variable capital" (ICVC), and, when the scheme is closed-end, as "société d'investissement à capital fixe" (SICAF)
Individual portfolio management	Investment services in which the investor's assets are managed on a discretionary and customised basis, by allocating them to one or more financial instruments, under a mandate given by the investor to authorised intermediaries
Insurance companies	Companies that institutionally and systematically undertake and manage risks transferred by other companies and individuals, against insurance premiums whose amounts depend on the probability of the occurrence of the events to which risks are related
Pension funds	Pool of assets formed with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. Fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal personality (such as a trust, foundation or corporate entity) or a legally separated fund without legal personality managed by a pension fund management company or other financial institution on behalf of the fund members. Open pension funds support at least one plan with no restriction on membership. Closed

(continued)

Table 1.1 (continued)

	pension funds only support pension plans that are limited to certain employees
Other institutions for occupational or personal retirement provisions	Institutions that aim to provide social security service to their members. They may have a voluntary or mandatory membership, depending on the local regulations, and take different legal forms in the various countries
Foundations and endowments	Not-for-profit organisations that direct the income generated by their asset management activity towards collective interest and socially-oriented goals

The situation is clearly different for those institutions that have shaped their investment policy based on the undertaken quantity and time commitments, in a deterministic way or in a manner assessable with sufficient accuracy. This is the case of insurance companies, pension funds and other institutions for occupational or personal retirement provisions, which benefit from a greater programmability of their cash flow and a medium-term to long-term reference time horizon for their allocation choices. Here, the discriminating factor is the nature—defined or not—of the benefits provided to policy-holders/members. In the absence of defined benefits, the allocation policies are similar to those of CIVs and individual portfolio management, while in the case of specific commitments in terms of guarantees on capital or returns, it is necessary to implement asset-liability management policies.[8]

From an operational point of view, it is indeed essential to distinguish between institutional investors who can adopt asset-only management policies, and institutional investors who must implement asset-liability management policies.

In the first case, the institutional investor has no predefined performance commitments. Thus, this investor can adopt an investment policy based on the merely optimal allocation of assets, albeit minding the needs of liquidity required by the specific management model.

In the second case, the institutional investor needs to put an investment policy in place, in compliance with the commitments assumed towards final investors. In this case, it is necessary to conduct a strict monitoring of the surplus or deficit between the accrued value of investments on a certain date and the current value of outstanding liabilities and commitments on the same date.

Finally, the position of foundations and endowments is hybrid, as economic performance is not the ultimate management goal but serves to optimise the collective interest and socially-oriented function, considered a priority. Likewise, the need of periodic flow has to be mediated with the benefit of operating, as a rule, on a long-term time horizon, preserving the principal in real terms.[9]

[8] Blake (2006).

[9] Acharya and Dimson (2007).

Table 1.2 Investment strategies of the different institutional investor categories

	Objectives	Risk attitude	Time horizon	Financial profile	Management constraints	Management approach
CIVs and individual portfolio management	Maximising returns against a benchmark (if any) and against competitors, respecting given risk constraints	Variable, depending on the risk profile	Variable time period	Daily cash flows which generally cannot be planned	Stringent regulatory constraints	Asset-only management
Insurance companies	Investment of the premiums received in advance with the aim of generating financial resources to meet future policy-holders benefits and claims	Medium-low	Short, medium and long term period	Predictable liquidity needs	Stringent regulatory constraints	Asset-liability management
Defined benefit pension funds	Ensure a predefined benefit to members (also through the variation of contributions required)	Variable, depending on the level of coverage of liabilities and commitments	Long term period	Predictable liquidity needs based on members' working and chronological age	Stringent regulatory constraints	Asset-liability management
Defined contribution pension funds	Maximising returns for a given level of risk	Variable, depending on the fund category	Long term period	Predictable liquidity needs based on members' working and chronological age	Stringent regulatory constraints	Asset-only management
Other institutions for occupational or personal retirement provisions	Ensure social security benefits to members	Medium-low	Long term period	Predictable liquidity needs based on members' working and chronological age	Often less stringent regulatory constraints	Asset-only or asset-liability management, depending on institution characteristics
Foundations and endowments	Preserve the real value of investments whilst allowing spending at an appropriate rate either statutory or independently decided	Variable, depending on institution characteristics	Long term period	Recurrent and extraordinary liquidity needs	Often less stringent regulatory constraints	Asset-only management

The choice of the organizational model of the management activities is only partially independent from the objectives pursued and is strongly influenced by the regulatory environment. The possible options, which are articulated depending on the type of institution considered, are essentially two:

– Internal management;
– External delegated management.

The choice between these options, where not precluded by regulation constraints, is influenced by various considerations concerning:

– Skills and resources required to achieve the pursued objectives and those already available;
– Existence of any minimum organisational requirements demanded by supervisory authorities;
– Degree of diversification by asset class and market assigned in the strategic asset allocation phase;
– Size of assets under management, which is inversely related to the degree of operational risk associated to the implementation of direct management strategies.

In such a complex scenario, it is obviously difficult to generalise. Nevertheless, on an international level, there is a clear and irreversible preference towards a partial or total external delegation of the different stages concerning the portfolio management process and in particular:

– Strategic asset allocation definition, in accordance with given objectives and constraints;
– Selection of one or more managers for each asset class;
– Performance and risk monitoring for the selected managers and for the portfolio as a whole.

Also the advisory activity which accompanies institutional investors' portfolio decisions is often externalised.[10]

Externalisation can regard not only front office activities but also back office and internal control functions (risk management, internal auditing and compliance), notwithstanding the need for internal organisational control apt to ensure the full monitoring of functions not less crucial than the allocation decisions.

[10] Advisory and management functions are integrated into the fiduciary manager model, which is largely widespread in Anglo-Saxon countries, which manages the assets of an institution as a whole, sub-delegating the management of specific sectors to ad hoc selected managers. In this way, without stirring conflicts of interest, a unitary direction to all management activities and a more effective risk control are ensured. Refer to van Nunen (2007).

1.2 Development Factors

When investigating complex phenomena such as the interdependence between the morphological characteristics of a financial system and the internal role played by institutional investors, it is not easy to identify the cause and effect relationships in an unambiguous way. The same factors that fostered the growth of the sector in the first stage very often promoted, at the same time, a more significant presence of institutional investors in the system. Although in a real scenario a dynamic mutual relationship arises between institutional investors and the financial system, for greater clarity and synthesis, these relationships will be investigated separately as if they were one-directional relations.[11]

As mentioned in literature, a driving force of particular importance for the development of institutional investors is attributed, on the one hand, to factors related to both demand and supply of financial instruments and services and, on the other hand, to some factors which are exogenous to the financial system.[12]

The surplus spending units have indeed expressed investment needs that are increasingly articulated and sophisticated, showing growing difficulties to make fully aware investment decisions, in an increasingly complex and uncertain environment. Actually, the evolutionary stage reached by financial systems, with a particular emphasis on the presence of increasingly developed and efficient securities markets, has prompted final investors to delegate their investment decisions to individuals with higher professional skills.

In contrast, institutional investors have been able to perform some of the primary functions assigned to the financial system more effectively, providing greater opportunity for diversification and more efficient risk-return combinations. Their success comes both with a more favourable competitive environment and also thanks to the gradual fall of barriers to entry, with globalisation phenomena across the asset management industry.

Socio-political exogenous variables can also play a decisive role in accelerating the above mentioned virtuous process. In the context of an irreversible common ageing process of the population, due to lower birth rates and the lengthening of life expectancy, the global demographic changes have questioned the sustainability of the current social security systems and public pension schemes everywhere, leading to the comprehensive redesigning of the typical choices of the life cycle phases. There has been a widespread relative increase in the age classes characterised by a higher savings rate, these groups being more sensitive to social security issues.

[11] Vittas (1998).

[12] Davis and Steil (2001).

1.3 Benefits to the Financial System

When institutional investors achieve a significant relative weight compared to the total intermediation volumes of the financial system, albeit not automatically, the latter receives positive incentives in terms of competitive structure and efficiency.

Institutional investors can, in fact, have a tangible and significant impact concerning:

- Structural setting of financial systems;
- Strategies of financial intermediaries;
- Market organisation;
- Regulation and control of the financial activity;
- Asset management industry.

1.3.1 Structure of Financial Systems

In developed countries, the institutionalisation of savings is seen as a symptom and at the same time as a driving force for the evolution of financial systems. The latter are constantly seeking, in the performance of all their functions (payment system management, transfer of financial resources, risk management, pricing of financial assets), to respond better and more effectively at regulatory, organisational and purely operational levels, against increasingly more complex and sophisticated needs expressed by business players.

As a confirmation, all major measurement parameters of the structural characteristics of a financial system are in deed positively influenced by the growing weight of the institutional investors.[13] For example, the Financial Interrelation Ratio, which measures the relative size of the financial system compared to that of the underlying economic system, is much higher in the countries where surplus spending units tend to move towards the massive delegation of their investment decisions to specialised operators.

A significant impact of the presence of institutional investors on the financial structure of the economy is also measurable with the Financial Intermediation Ratio, that is the ratio between the assets of financial institutions and all financial assets in the economy, and with the Banking Intermediation Ratio, which derives from the comparison between the assets of banks and those of all the financial institutions as a whole. Both ratios tend to decrease, leading to the reduction of the incidence of intermediation costs, in the case of a rebalancing between direct and indirect financial circuits and the gradual and increasing development of the role played by institutional investors.

[13] OECD (1998).

With regards to the above, it should be noted that everywhere, both in market-based and in bank-based financial systems, an irreversible trend emerges in which flows managed by pure direct and indirect finance are gradually passing over to the so-called direct finance assisted by financial institutions, which enhance the typical functions of investment banking and asset management functions. In this perspective, an increasing spread of the processes of partial or total delegation of the investment decisions is more than physiological.[14]

1.3.2 Strategies of Financial Institutions

One of the most tangible effects of the gradual and growing expansion of the role of institutional investors is a sort of counterbalancing of the dominant power held by banks over individual financial decisions.

In terms of funding activities, in recent decades banks have witnessed the growing popularity of money market investment funds. These instruments have been in some cases almost a perfect substitute of traditional bank instruments such as current accounts and time deposits. The effect of the substitution of bank liabilities by market liabilities has only been partially offset by the investments made by CIVs, discretionary mandates, insurance companies and pension funds on senior and subordinated bonds issued by banks and other financial institutions.[15]

In relation to the lending activity, corporate financing policies have slowly emancipated from the banking system and turned with increasing frequency to the market to finance themselves through the placement of corporate bonds.

Also the spread of securitisation processes, which have seen institutional investors heavily involved, has been a threat as well as an opportunity for commercial banks at the same time. This business area, mainly controlled by investment banks, has allowed commercial banks to gain flexibility in the management of their assets and to develop new financing techniques for their corporate customers.

This briefly outlined scenario has obviously had a significant impact on the structure of the income statement of banks, which have seen a significant narrowing of spreads and interest margin, and a shift of their revenues mix towards non-interest income.

[14] De Hann et al. (2015).

[15] Bratton and McCahery (2015).

1.3.3 Market Organisation

The phenomenon of saving institutionalisation has also led to heavy consequences on the market structure and operations.[16] The relative increase in the weight of institutional investors demand has indeed stimulated a clearer segmentation of the capital market between retail and wholesale business.

As a matter of fact, wholesale markets primarily respond to the needs of liquidity and certainty of trading conditions, where liquidity is measured on the basis of best-known parameters of market operational efficiency: width (horizontal size of the trading activity), depth (vertical dimension of the same), price elasticity, certainty and speed of the execution process.[17]

For this reason, markets with an organisational structure centred on the figures of dealers and market makers have arisen and developed. This structure can ensure that the market retains the function of liquidity, sometimes even at the expense of efficiency. Not surprisingly, such an organisational form was originally typical of the London Stock Exchange, which is traditionally the marketplace privileged by institutional investors at an international level, and has only recently been adopted also by other regulated markets where retail demand has historically prevailed.

The impact was therefore much more pervasive in the bank-based financial systems of continental Europe, compared to the Anglo-Saxon systems, which are mainly market-oriented and, as such, more effectively equipped to respond to institutional clients' needs.

Last but not least, there has been the emergence of growing investors' demand for innovative investment and risk management solutions. In particular, a driving force for the derivatives market has always been attributed to the operators of the insurance and retirement segment who undertake binding commitments towards their clients, paying particular attention to the issue of risk management in terms of immunisation over a long time period.

From this point of view, the comparison between the asset allocation made directly by the surplus units and that defined through the delegation of institutional investors is symptomatic. In fact, the portfolio of the latter is characterised by:

- A prevalence of market instruments over bank instruments;
- Greater diversification in favour of riskier asset classes (equity, corporate bonds, asset-backed securities, alternative investments), at the expense of investments in cash and government securities;
- Longer time horizon;
- Adoption of dynamic management techniques and, consequently, higher portfolio turnover;
- Use of derivatives for hedging as well as speculative and investment purposes;
- A structured and continuous risk monitoring activity.

[16] Vittas (1998).

[17] Piotroski (2004).

Current changes, which were previously described in their basic trends at the secondary market level, are fully reflected also at the primary market level, where there is an easier access to capital markets by a broader base of corporate issuers, with the gradual replacement of the traditional hierarchical placement patterns, which were adopted in the past by main investment banks. Of course, all the domestic public sector security markets, which are in open competition in attracting large international institutional capital both inside and outside the Eurozone, have been deeply and positively affected.

Competitiveness and a strive towards efficiency have produced transaction cost savings, both in primary and secondary markets. In this respect, especially investment funds, but more generally all institutional investors who actively manage their portfolios, have provided a decisive contribution to increase the level of technological sophistication, transparency, safety, liquidity and efficiency of the trading systems adopted worldwide. The specific needs of institutional investors (*ex ante* knowledge of trading conditions and liquidity of investments) justify the existence of trading venues reserved to them with the presence of dealers/market makers.

1.3.4 Regulation and Control of Financial Activities

Wholesale and retail markets differ in terms of transparency and information standards guaranteed to investors by supervisory authorities. Having institutional investors provided greater ability to raise capitals and process private and public information available on the markets, they have proved to be less sensitive than retail customers to the issue of protection. Such a difference in judgement has been widely accepted in current regulations, starting from the European Union directives to the primary and secondary level regulations of each Member State. The competent authorities have been forced to regulate in a more timely manner also the issues of conflicts of interest and corporate governance, to which institutional investors have always paid special attention.[18] In this particular perspective, the role of independent directors gains major importance, and leads to claiming the right to participate actively, individually or as a group, in the management of participating companies.[19] This power goes hand in hand with the increasing importance that institutional investors have as shareholders of participating companies.[20]

At a different level of analysis, as the role of institutional investors has strengthened into all the financial systems, although with different timing, it was therefore necessary to define a more stringent regulatory and supervisory framework in terms

[18] Ryan (2002).

[19] Rubach (2009).

[20] About this widely investigated topic, see Webb et al. (2003), Ingley and van der Walt (2004) and Picou (2008).

of restrictions on investment policies, organisational adequacy, transparency and the mechanisms of internal and external control.[21]

1.3.5 Asset Management Industry

Many of the considerations developed in the previous paragraphs make it clear that the asset management industry has indeed been most significantly affected by the growing institutionalisation of savings. The supply side, partly for strategic choice and partly as a response to the pressing demand, has changed its market policies:

- Segmenting customers, resulting in product differentiation, where the retail component is more sensitive to the brand and the institutional component to the performance and to the efficiency of the manager;
- Causing an increasingly sharp distinction between global operators and niche players;
- Dedicating to institutional clients "high touch" distribution channels, characterised by high level of sophistication combined with precise customisation and greater flexibility, and developing cross-selling policies towards retail customers;
- Strengthening their internal control structures (risk management, internal audit and compliance) to guarantee full compliance with the complex mix of statutory, regulatory and management constraints typical of individual counter-parties;
- Ensuring higher standards in terms of reporting.

This is accompanied with the gradual fall of protective barriers that were historically raised for the benefit of domestic operators. To date, this process has been completed in the Eurozone with the UCITS IV Directive and the full implementation of the principles of freedom to provide services, freedom of establishment (single license) and mutual recognition, but it is also in an advanced stage with respect to non-European Union asset managers. Consequently, cross-border portfolio management activities are growing at an increasing rate, although mainly referring to certain asset classes. On the contrary, for some demand segments (i.e., insurance companies), burdened with more stringent investment limits, the phenomenon remains more circumscribed.

[21] OECD (2011).

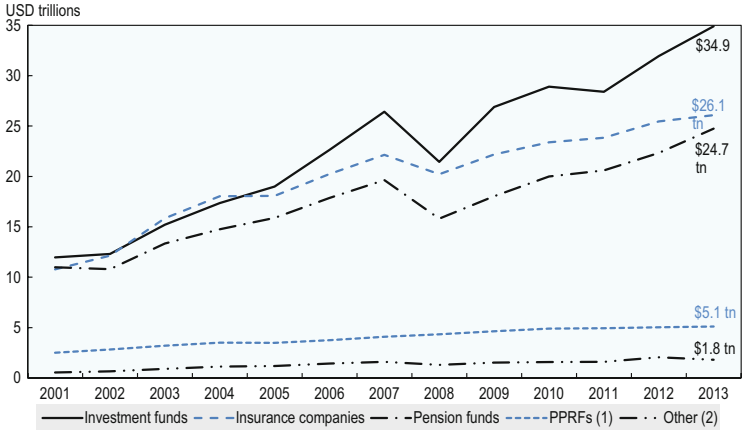

Fig. 1.1 Total assets by type of institutional investor in OECD countries. In USD trillions. *Note*: Book reserves are not included in this chart. Pension funds and insurance companies' assets include assets allocated in collective investment schemes, which may be also counted in investment funds. (1) Public pension reserve funds (PPRFs) are reserves established by governments or social security institutions to support public pension systems, which are otherwise financed on a pay-as-you-go basis. (2) Other forms of institutional savings include foundations and endowment funds, non-pension fund money managed by banks, private investment partnership and other forms of institutional investors. *Source*: OECD (2015)

1.4 An International Comparison

The key trends of institutional investors' total assets can be identified from regular publications by the OECD and other reputable sources.

All institutional investors in OECD countries, including investment funds, insurance companies, pension funds, public pension reserve funds (PPRFs) and other institutional investors, increased their assets during the recent years. Total assets amounted to US $92.6 trillion as a whole, including about US $35 trillion in investment funds, about US $26 trillion in insurance companies, almost US $25 trillion in private pension funds, US $5.1 trillion in public pension reserve funds and US $1.8 trillion in other institutional investors (Fig. 1.1).[22] Institutional investors' assets grew consistently in the period 2001–2013, except in 2008.

A specific analysis of the collective investment vehicles (CIVs) can be made using the data of the International Investment Funds Association (IIFA), which collects data on investment funds globally.

[22] Public pension reserve funds (PPRFs) include Australia's Future Fund, Belgium's Zilverfonds (2008–2013), Canada Pension Plan Investment Board, Chile's Pension Reserve Fund (2010–2013), Japan's Government Pension Investment Fund, Korea's National Pension Service, New Zealand Superannuation Fund, Government Pension Fund of Norway, Poland's Demographic Reserve Fund, Portugal's Social Security Financial Stabilization Fund, Spain's Social Security Reserve Fund, Sweden's AP1–AP4 and AP6, United States' Social Security Trust Fund.

The last available report indicates that the assets under management of investment funds as a whole amounted to almost 37 trillion dollars at the end of 2014. Out of these, 43.41 % was attributable to equity funds, 22.18 % to bond funds, 13.30 % to balanced funds, 12.54 % to money market funds and the residual share to other types of funds (Table 1.3).

Globally, the share of exchange-traded funds was 6.63 %, while the weight of investment funds dedicated to institutional clients amounted to 7.42 % (Table 1.3).

Table 1.4 shows the ten countries with the most important weight of CIVs on a global scale: the first country is the United States of America with a weight of

Table 1.3 Total net assets by category of investment fund. In USD billions and as a percentage at the end of 2014

	Net assets	
	Absolute value	%
All funds[a]	36,985	100.00
Equity	16,054	43.41
Bond	8205	22.18
Balanced/mixed	4918	13.30
Guaranteed/protected	110	0.30
Real estate	436	1.18
Other	2624	7.09
Money market	4639	12.54
Memo items included above:		
ETFs fund	2451	6.63
Institutional	2746	7.42

[a]Funds of funds are excluded where possible
Source: International Investment Funds Association

Table 1.4 Top ten countries in global investment funds industry. In USD billion at the end of 2014

Top ten countries	Total net assets	Market share (%)	Number of CIVs	Average size of CIVs
U.S.A.	17,827	48.20	9334	1.91
Luxembourg	3519	9.51	11,838	0.30
France	1940	5.25	11,273	0.17
Germany	1847	4.99	5509	0.34
Ireland	2020	5.46	5833	0.35
Australia	1601	4.33	n.a.	n.a.
United Kingdom	1437	3.89	2597	0.55
Japan	1172	3.17	8761	0.13
Brazil	990	2.68	8560	0.12
Canada	982	2.66	3164	0.31
Others	3650	9.87	31,958	0.11
World	36,985	100.00	98,827	0.37

Source: International Investment Funds Association