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demand for equity: an
international comparison

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Household portfolio and demand for equity: an international comparison

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May 2008

Abstract

Financial assets invested in equity by households are involving an increasing amount of resources. The paper provides, for a group of high financially developed economies, an estimation of the total demand for equity distinguishing direct investment in stocks from equity investment through mutual funds, insurance companies or pension funds. In spite of a scenario of growing financial integration, similarities continue to coexist with strong cross-country differences. In order to understand country-peculiarities, household demand for equity is put in relation to the overall household financial portfolio, to its role in domestic stock markets through listed companies shareownership and to the main features of national asset management industries.

Keywords: demand for equity, listed companies shareownership, household financial portfolio, asset management industry

JEL: F30, G11, G22, G23, G32

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Portafoglio delle famiglie e domanda di azioni: un confronto internazionale

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Maggio 2008

Abstract

La ricchezza finanziaria investita in azioni dalle famiglie è costituita da risorse considerevoli e crescenti. Il presente lavoro propone, per un gruppo di Paesi a elevato livello di finanziarizzazione, una stima della domanda totale di azioni distinguendo l'investimento diretto da quello effettuato attraverso i fondi comuni di investimento o attraverso i prodotti assicurativi e i fondi pensione. In uno scenario di crescente integrazione finanziaria, le similitudini tra Paesi continuano a coesistere con forti specificità. Per comprendere tali peculiarità, l'investimento in azioni da parte delle famiglie è messo in relazione con la struttura complessiva del loro portafoglio, con il ruolo svolto sui mercati azionari domestici e sulla struttura proprietaria delle società quotate, nonché con le caratteristiche delle industrie nazionali del risparmio gestito. Il lavoro dedica una particolare attenzione alla realtà italiana.

Keywords: investimento in azioni, assetti proprietari delle società quotate, portafoglio finanziario delle famiglie, industria del risparmio gestito

JEL: F30, G11, G22, G23, G32

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1. Introduction

In the last decade economies have become more and more financially based, with a strong growth in financial assets and liabilities, stock market capitalisations and turnover, international flows of funds. At the end of 2006 global issued financial assets reached \$167 trillion, more than three times the GDP (Farrell et al., 2008), the stock of international portfolio investments \$32.4 trillion (IFM, 2008 and Franzosi and Geranio, 2007) and global market capitalisation \$60.7 trillion in 2007 (WFE, 2007). Global continuous financial development is one of the most important factors shaping this tendency, fostered by the international integration of financial markets.

In this context, demand for equity is changing rapidly following economic agents' new behaviour toward investments and risky assets, legal and regulatory framework in continuous evolution, the ability of financial industry to affect private final investors' decisions. During the last ten years, stock markets have grown in value and the base of investors has been affected by the internationalisation of stock investments, the increasing institutionalisation of savings, the privatisation processes worldwide often followed by educational campaigns approaching final investors to shares, the country-based reforms of pension systems architectures, the growing merger and acquisition activity by private non-financial companies targeting other listed companies. Shareholding phenomenon has extended, becoming an important way of allocating financial wealth also among households; since the second half of the Nineties households' financial decisions have changed, often in favour of riskier assets, thanks to lower risk aversion and lower participation costs. Convergence among economies in terms of the importance of total households' financial assets is increasing (De Bonis, Fano and Sbrana, 2007).

In spite of all that, the current composition of households' financial wealth by instrument is still characterised by a certain degree of heterogeneity and shareownership is far from being a consolidated phenomenon for all countries and investors. Also listed companies' ownership structure, being strictly linked to the domestic institutional and financial framework, maintains strong country-specificities.

Given these premises, the paper is intended to quantify and describe the propensity to invest in equity and the demand for equity addressed by households of a group of countries which have in common a high level of financial development: France, Italy, Germany, Spain, Belgium, the Netherlands, Denmark, Sweden, Switzerland, the United Kingdom, the United States and Japan. Major interest is to point out both common features and diversities, although such a complex topic has to be faced from different perspectives in order to be deeply described. Amount and composition of households' financial wealth is only one of the relevant aspects of the phenomenon. Channels through which the demand for financial instruments is satisfied, such as directly or through institutionalisation of savings, is another important point bringing together the necessity of understanding the asset management industry structure in each country. Last but not least, demand for domestic and international equity reaches listed and unlisted companies fuelling their needs to finance growth and development. Being aware of the role played by the stock market in an economy and of the listed companies shareholding complete the



overall picture. The paper tries to go through all these topics covering the decade 1995-2005, a period sufficiently long to permit useful intertemporal comparisons and the synthesis of the main trends ongoing.

The reasons for being interested in the demand for equity are various. Financial assets and portfolio choices are playing an increasing role in macro and micro economic trends, affecting international relationships among countries as well as daily behaviour of enterprises and investors. The progressive ageing of population and the restyling of pension and social security systems will imply higher saving rates and growing assets invested in pension funds and insurance, as well as increasing importance attributed to wealth with respect to income (Draghi, 2007). Institutionalisation of savings is modifying the way in which savings are allocated and the composition of listed companies shareholders' meetings: demand for equity and ownership of listed companies are strongly affected by these changes. The competitiveness of a country, especially if it is a small and open economy, depends more and more on its capability to capture international equity demand and to obtain in this way resources to provide financial support to enterprises' growth.

Special attention is also devoted to Italy for which it has been possible to update the picture at the end of 2006, so that to use the latest available set of data. Italy is well known for having historically high households' saving rates and net financial assets as well as a stock market where domestic retail investors play a relevant role in terms of capitalisation holding and participation in trading. This second specificity is mainly due to active final investors directly trading through Internet (Alemanni and Franzosi, 2006). This relative importance of retail direct shareholding makes the Italian equity market almost a unique case in the international comparison.

The paper is structured as follows. Paragraph 2 presents a brief description of related literature. Paragraph 3 contains an international comparison of the main indicators measuring the degree of financial deepening across countries. Paragraph 4 focuses on the shareownership structure of listed companies. Paragraph 5 is devoted to describe the recent evolution of household financial assets stock and allocation. Paragraph 6 estimates household demand for equity and provides some hints on participation rates in the stock markets across countries. In the end, paragraph 7 summarizes some conclusions of the paper. The Appendix contains a focus on the asset management industry dimension and asset allocation for some selected countries.



2. A brief review of the literature

This paper could be included in the stream of the empirical analysis and academic literature regarding the demand for equity and more in general the demand for risky assets. This field of research still faces few drawbacks. Total wealth devoted to these investments, although growing, is still far from the amount considered efficient in the light of historical expected returns of different asset classes, and in particular of historical equity premium relative to riskless assets, and considering the life cycle theories. Furthermore, holding of stocks and risky assets does not concern all investors and this is true also among the richest part of the population. Finally, the percentage of stockholders varies significantly across countries, with higher rates of participation observed in Anglo-Saxon countries and Sweden and lower rates among Continental Europe ones. Theoretical and empirical explanations of these puzzles could be many even if, at the present stage, all partial and tentative. The existence of fixed entry costs or participation costs is one of the main explanations for insufficient participation in the stock market (Vissing and Jorgenson, 2003). Some participation costs are visible, such as transaction costs or fees paid to financial services providers (e.g. management and performance fees to mutual funds). Some other costs, very often intangible, are information costs measured by education and financial literacy (Guiso and Jappelli, 2005) or time devoted to monitor investments. Relatively small fixed costs could justify observed pattern of non-participation (Haliassos and Michaelides, 2003) as being at the base of observed lack of diversification. A further set of reasons comes from the existence of other forms of background risk faced by households. Labour income uncertainty reduces demand for risky financial assets due to the necessity to compensate less safe area of income (Cocco, Gomes and Maenhout, 2005); the risk related to possible future health expenditure could have the same effect. The presence of limits to short sales and borrowing constraints tends to exacerbate income and expenditure uncertainty, with a further negative effect on shareholding (Haliassos and Michaelides, 2003). Differences among individuals and across countries could have other rationales. Guiso, Haliassos and Jappelli (2003) provide a general overview of this topic. Individuals have subjective levels of risk aversion. Life cycle theories suggest some relationships among demographics and shareholding, not always supported by empirical results. Shareownership should be higher among young people, also if they have lower levels of wealth, because they can better exploit the long run equity premium; elderly people should include safer assets in their portfolio due to a substitution effect between safe assets and a reduction of the actual value of income flows considered safe as well (Haliassos, 2003). Empirical observation finds a peak during the last part of the labour life, and lower participation among young and elderly people; while assets invested in equity conditional to the stock market participation have no clear direction. Another possible variable driving shareownership is wealth. Empirically, a higher shareholding participation is observed among wealthy people, even if theory would instead suggest that a higher propensity to stocks occurs when current assets are small with respect to the future stream of labour incomes (substitutes for no risky assets); conditional stockholding is more in line with a negative shape relationship at least among less wealthy people.



Finally more educated people are more likely to invest in shares due to lower intangible fixed participation costs, while the ratio over wealth invested seems to be quite stable across education levels. Guiso, Haliassos and Jappelli (2001, 2003) have been among the first to show that there are also significant cross-country differences in investors' participation rates. Such differences have been explained with reference to the institutional and legal framework. Different corporate governance standards and levels of investor protection affect demand for equity and low investor protection is usually associated with low participation rates and high foreign stockholding (Giannetti and Koskinen, 2005). Heterogeneity, across countries and individuals, as well as not sufficient stockholding, could find a further justification in objective and subjective general mistrust. Guiso, Sapienza and Zingales (2005) point out how the subjective perception of an excessive risk related to the stock investment or the conviction of a generalised risk of being cheated by the stock market could be the background for an insufficient demand for equity. Finally, portfolio choices could be related also to behavioural attitudes. Individuals could be averse not only to risk but also to ambiguity, that is to the fact that future returns could be uncertain (Knox, 2003), to losses (Kahneman and Tversky, 1991) or to disappointment regarding the probability of unexpected bad results (Ang, Bekaert and Liu, 2005). Also regret theory (Loomes and Sudgen, 1982) could shed some light on this topic, referring to the aversion to deviations of the chosen portfolio returns from the return of the best forgone alternative.



3. How much economies are financially based?

Economies under analysis are all characterised by a high degree of financial development, as shown by a set of macro indicators (Table 1). Nowadays, financial assets are significant amounts of resources, at both total economy and household level; furthermore, they appear to be considerable in absolute terms as well as when compared to the indicators depicting the real economy (GDP or disposable income). Looking at the data at the end of 2005¹, the US hold the highest amount of total financial assets (€83,345 billion), followed by the UK (€22,335 billion), Japan (€22,078 billion) and other European countries such as France, Germany and Italy (respectively 20,556, 19,209 and 10,776)². In relative terms, total financial assets account for 6 times GDP in Japan reaching 16 times in Switzerland. Focusing on households' financial assets, the US remain the most important pool of wealth, with €32,610 billion, followed by Japan (€11,201 billion) and at a much higher distance the UK (€5,226 billion); among other European countries Italy is in line with France (more than €3,000 billion) and slightly surpassed by Germany (€4,260 billion). Per capita wealth shows that Swiss citizens are the richest. After them, Anglo-Saxon households have the highest amount of financial per capita wealth (between €87,000 and €110,000). In the other countries, per capita wealth ranges between €35,000 of Spain and €91,500 of the Netherlands; Italy stands at €56,231, a higher level than Germany, France or Spain. Cross-country households' financial situation can be further compared considering wealth to households' gross disposable income. The use of gross disposable income enables to adjust both for the size of the economy and its inflation. What emerges is that at the end of 2005 in Japan, Switzerland, the United States and the United Kingdom, as well as in Belgium and Denmark, households' financial wealth is more than 4 times disposable income. This ratio reaches its peak in the case of the Netherlands (over 6 times disposable income), while it assumes lower values, between 2.5 and 3.5, in the case of other European countries.

In order to have a better understanding of households' financial situation, it is important to look also at financial liabilities, with particular regard to their weight on households' financial assets and on disposable income. Danish households show the highest indebtedness (268.9 per cent of the gross disposable income). In line with evidence contained in previous studies, Italian and Belgian households have the lowest levels of indebtedness (respectively 16.6 per cent and 17.9 per cent of total financial assets). This is likely to be a consequence of historical reasons, rather than of current trends: Italy and Belgium in fact show higher debt as economy as a whole through its public component. Instead, UK and US households register a high level of debt if

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- (1) In order to adjust for the purchasing power of households from different countries, financial assets have been compared applying both current exchange rates and Purchasing Power Parity rates (Eurostat), as not all countries belong to the same monetary zone or have the same level of living standards.
 - (2) At the end of 2005 the total value of financial assets of the countries under analysis is about €200 trillion. This value results to be higher than the one (\$167 trillion) quoted in the Introduction, which refers to the value of financial instruments (equities, government and corporate securities and bank deposits) issued worldwide (Farrell, et al., 2008).

compared to disposable income. Furthermore, putting both assets and liabilities together, Italy has the highest amount of household financial net worth compared to Continental Europe countries (€2,726 billion). Households' behaviour is completed by saving rates. The situation at the end of 2005 is much less heterogeneous than some years ago, with rates ranging from 12.1 per cent of Italy to -2.5 per cent of Denmark. Italy, historically characterised by the highest level of savings, is now more in line with other Continental Europe countries. Since 1995, the average trend of saving rates has known a slight reduction. In the end, for what concerns the level of equitisation, the ratio market capitalisation over GDP is particularly high in Switzerland (206 per cent), in the United Kingdom (145 per cent) and in the United States (137 per cent), while it is equal to almost 90 per cent on average in Belgium, France and the Netherlands, lowering to 48 per cent in Italy and to 46 per cent in Germany.

The overall picture is quite various. The United States and the United Kingdom are highly financially based as they show a considerable incidence of total financial assets over GDP, of household financial assets over disposable income and a mature stock market (market capitalisation over GDP is close to 150 per cent). They also have low household saving rates (5.3 per cent in the UK and -0.4 per cent in the US) and high household indebtedness. Continental Europe countries (e.g. Italy, France, Germany and Spain), differently from Anglo-Saxon ones, have in common a less prominent incidence of total financial assets over GDP, of households' ones over disposable income, higher saving rates and a lower value of the domestic market capitalisation to GDP ratio (around 90 per cent for France and Spain, opposite to Italy and Germany both close to 50 per cent). Lower values of wealth are related to the major role of public pension pillar opposite to private pension funds. In household portfolios, credits against public pension system are in fact not accounted for³. Italy shows the highest households' net financial wealth, thanks to low indebtedness and a good level of wealth. Italian total economy financial assets are, on the contrary, less important suggesting a wealth distribution more in favour of households.

The Netherlands, Denmark and Sweden are similar to other European countries as incidence of market capitalisation over GDP (except for the higher level of Sweden) while they differ for a higher incidence of total financial assets as a percentage of GDP. Danish households have the highest level of indebtedness with the lowest saving rate. Finally, Switzerland and Japan result to be very similar to each other for what concerns the level of development of their financial systems, although Japan shows a less relevant incidence of the domestic market value of listed shares over GDP than Switzerland (109 per cent instead of 206 per cent).

(3) See Semeraro (2003) for a methodological discussion on the possibility of evaluating future pension obligations, such as the pay as you go first pillar pension schemes, in the financial accounts.

**Table 1 - Main financial indicators: international outlook (end 2005)**

BE - Belgium, CH - Switzerland, DE - Germany, DK - Denmark, ES - Spain, FR - France, IT - Italy, JP - Japan, NL - Netherlands, SE - Sweden, UK - United Kingdom, US - United States

	FR	IT	DE	ES	BE	NL	DK	SE	CH	UK	US	JP
Total economy financial assets⁽¹⁾												
- EUR billions	20 556	10 776	19 209	6 611	3 134	6 873	2 324	3 259	4 725	22 335	83 345	22 078
- PPP (EUR billions)	19 136	10 488	18 249	7 283	3 047	6 534	1 731	2 787	3 589	20 803	82 467	20 220
Household financial assets⁽¹⁾												
- EUR billions	3 152	3 269	4 260	1 539	761	1 493	424	494	1 025	5 226	32 610	11 201
- PPP (EUR billions)	2 935	3 182	4 047	1 696	740	1 420	316	423	779	4 868	32 266	10 259
Per capita financial assets⁽¹⁾												
- EUR	51 786	56 231	51 656	35 472	72 908	91 507	78 256	54 756	137 792	87 115	110 015	87 678
- PPP (EUR)	48 209	54 726	49 075	39 079	70 881	86 992	58 297	46 823	104 674	81 142	108 856	80 298
Household net worth⁽¹⁾												
- EUR billions	2 193	2 726	2 691	837	625	921	177	303	664	3 408	22 508	8 271
- PPP (EUR billions)	2 041	2 653	2 556	922	607	875	132	259	504	3 174	22 270	7 575
Total financial assets/ Nominal GDP	1 197%	757%	857%	730%	1 050%	1 359%	1 117%	1 146%	1 600%	1 252%	793%	613%
Household saving rate	11.9%	12.1%	10.6%	10.6%	10.7%	6.5%	-2.5%	8.8%	8.0%	5.3%	-0.4%	3.0%
Market capitalisation/ Nominal GDP	86.8%	47.5%	46.2%	89.9%	82.1%	99.5%	75.0%	130.8%	206.2%	145.3%	137.1%	108.9%
Household financial assets/ Household gross disposable income	292%	347%	292%	263%	433%	623%	462%	348%	573%	444%	426%	539%
Household net worth/ Household gross disposable income	203%	290%	184%	143%	356%	384%	193%	213%	371%	290%	294%	398%
Household financial liabilities/ Household financial assets	30%	17%	37%	46%	18%	38%	58%	39%	35%	35%	31%	26%
Household financial liabilities/ Household gross disposable income	89%	58%	108%	120%	78%	239%	269%	135%	202%	155%	132%	141%

(1) Switzerland data refer to 2004.

Elaboration on data by various Central Banks for Financial Accounts, Eurostat for PPP, Euronext, OMX and WFE for market capitalisations, Thomson Financial for disposable income and saving rates, OECD for GDP and population

4. Market capitalisation shareownership by institutional sectors

4.1 International comparison of listed companies shareownership

The comparison of shareownership structure of listed companies among the most developed countries worldwide is built upon the data provided by FESE for European countries (FESE, 2007) and by Tokyo Stock Exchange for Japan; for the US the source is the Federal Reserve Flow of Funds which describe the ownership structure of the total amount of shares issued by US companies and not only by listed ones; these data can be taken as the best available proxy of the ownership structure of US listed shares. There is a good degree of cross-country comparability of aggregate institutional sectors breakdown (foreign investors, private financial enterprises, private non-financial companies, households and public sector). For what concerns the sub-items countries provide a different degree of detail, especially for collective investment; in fact very few of them distinguish among mutual funds, pension funds, individual asset management schemes and insurance companies.

In the last decade the relative proportions of major industrialised countries in terms of domestic market capitalisation seem almost unchanged. In 2005 the United States have the biggest stock exchange market in the World with more than €14 trillion of market capitalisation and 6,029 listed companies (Nyse, Nasdaq and Amex), immediately followed by Japanese exchanges with €3,921 billion of domestic market capitalisation (companies listed at least on one exchange among Tokyo, Osaka, Nagoya, Fukuoka, Sapporo). In Europe a primary place is ensured to London Stock Exchange, with a capitalisation of almost €2,600 billion, followed by Euronext (about €2,300 billion).

Table 2 shows the international comparison at the end of 2005. It is the latest set of data available for each country (data are available starting from 1995 for most of the exchanges analysed⁴), which comes at the end of a period characterised by significant fluctuations in stock market prices as well as important changes in economic and institutional environment. In spite of these transformations, shareownership structure of European listed companies seems quite stable especially since 2000 and, contrary to common expectations, there is no empirical evidence of its systematic convergence, even after the introduction of the Euro⁵. Focusing on FESE aggregate at the end of 2005, about one third of total market capitalisation belongs to non-resident investors. Their weight has increased until 2000 and remained stable since then, as the degree of openness of the European exchanges was already significant before the introduction of the Euro. Private financial enterprises reach 31 per cent, consolidating their position during the period

(4) The exceptions are Euronext Amsterdam for which the first year available is 2002, Euronext Brussels (1996), Euronext Lisbon (2000), OMX Helsinki Stock Exchange (1996) and OMX Copenhagen Stock Exchange (1999).

(5) European exchanges are characterised by a degree of heterogeneity which seems to be stable if not increasing during the last ten years. This result is obtained calculating the unconditional sigma convergence (standard deviation and variation coefficient) among European exchanges ownership breakdown considered in the analysis.



1999-2005. This item can be split into two sectors: institutional investors (accounting for 24 per cent) and banks and others financial enterprises, accounting for the remaining 7 per cent. The participation of the public sector (government and local public entities) at the end of 2005 accounts for 5 per cent of the whole European market capitalisation, the lowest value ever reached due to a progressive decline started in the Nineties.

The ownership structure of Anglo-Saxon exchanges is characterised by a more consolidated presence of institutional investors holding domestic listed shares on behalf of households or of other institutional investors. Private non-financial companies and public sector are almost absent, confirming a market characterised by companies that are public in the sense that the ownership is widespread among a high number of investors owning small stakes. Japan is halfway between Continental Europe and Anglo-Saxon countries, with about half of total market capitalisation broadly referring to private retail investors directly (19.1 per cent) or through collective investments (15.4 per cent as a whole) and trust banks (10.4 per cent as a whole)⁶. The other half is almost equally split between private non-financial companies (21.1 per cent) and foreign investors (26.7 per cent). The role of public sector is irrelevant.

The analysis of each market highlights even stronger country-specificities. At the end of 2005 foreign investors' holding of listed shares remains, almost in any country, systematically less than domestic one. The incidence of foreign investors on the Italian market is far below the average of FESE participants (13.2 per cent with respect to 33.0 per cent); the only country with a similar pattern is the US which show in general a low degree of international openness due to the huge dimension of their internal market. On the contrary, Amsterdam, Brussels and Helsinki distinguish themselves for the highest incidence of foreign investors (more than 50 per cent of the total listed shares market value), a reasonable result for small open economies.

For what concerns domestic investors, two major markets such as the United Kingdom and Germany have an opposite situation and are both far from the international average structure: in the UK half of the shares are owned by private financial enterprises while in Germany about the same proportion is in the property of private non-financial companies.

The incidence of collective investment institutions is considerable in the case of Anglo-Saxon countries in which they exceed 50 per cent of domestic market capitalisation. In fact, the US and the UK have the largest and most consolidated asset management industries in the world (respectively about €22,800 and €4,000 billion, as shown in the Appendix). Their role is not so high in other European countries, with particular reference to Continental Europe ones (20.4 per cent in France, 12.2 per cent in Italy, 8.6 per cent in Spain and 8.4 per cent in Germany). In these countries, in fact,

(6) Trust banks are unique among Japanese financial institutions and are banks combining conventional banking services, like city banks, with asset management services. Their assets are split in Table 2 among mutual funds (4.4 per cent), insurance and pension funds for the part referring to annuity trusts (3.6 per cent) and other financial institutions (10.4 per cent). The remaining part of other financial institutions consists of securities companies (1.4 per cent), which include brokerage firms, securities dealers and traders, investment banks and advisory firms, and other financial institutions (1.0 per cent).



collective investment, primarily in the form of pension funds, is in its early stage with respect to what has happened in the United Kingdom and in the United States. At the end of 2005 UK pension fund industry represents about 40 per cent of resources totally managed by pension funds in Europe (€1,250 billion) and US pension industry is the largest in the world (€10,500 billion).

Table 2 - Market capitalisation ownership: an international comparison (end 2005)

Bit - Borsa Italiana, BME - Bolsa de Madrid, DB - Deutsche Börse, PAR - Paris, AMS - Amsterdam, BRU - Brussels, LSB - Lisbon, STK - Stockholm SE, HKI - Helsinki SE, CPH - Copenhagen SE, LSE - London SE, US - United States, JP - Japan.

	FESE (1)	Continental Europe								North Europe			Anglo-Saxons and Japan		
		Bit	BME	DB	Euronext				OMX			Oslo Børs	LSE (2)	US (3)	JP (4)
					PAR	AMS (2)	BRU	LSB	STK SE	HKI SE	CPH SE				
Foreign investors	33.0%	13.2%	34.2%	21.0%	39.5%	69.0%	53.2%	39.7%	35.3%	50.9%	24.1%	37.1%	32.6%	12.7%	26.7%
Domestic investors	67.0%	86.8%	65.8%	79.0%	60.5%	25.0%	46.8%	60.3%	64.6%	49.1%	74.7%	62.9%	67.4%	87.3%	73.3%
Private financial enterprises	31.0%	22.5%	17.2%	15.0%	28.5%	12.0%	17.2%	20.8%	28.6%	21.9%	7.8%	51.5%	53.3%	32.9%	
Collective investment	24.0%	12.2%	8.6%	8.4%	20.4%	12.0%	7.0%	16.1%	25.8%	8.7%	6.8%	48.8%	52.2%	15.4%	
- Insurance, pension funds	-	4.8%		4.3%	7.0%	10.0%	3.2%	6.4%	8.7%	8.7%	2.8%	32.9%	27.1%	11.0%	
- Individual asset management schemes	-	2.7%		4.1%		2.0%		8.4%	5.3%			14.0%			
- Mutual funds	-	4.6%			13.4%		3.8%	1.3%	11.8%		3.9%	1.9%	25.1%	4.4%	
Banks	7.0%	6.4%	8.6%	6.6%	8.2%		0.4%	4.6%	2.8%		1.0%	2.7%	0.3%	4.7%	
Other ⁽⁵⁾	-	3.9%					9.8%		-		13.2%	-	-	0.8%	12.8%
Private non-financial companies⁽⁶⁾	16.0%	28.6%	24.7%	42.9%	14.9%		7.7%	26.6%	10.5%	30.3%	15.6%	1.7%		21.1%	
Households	15.0%	26.2%	23.6%	14.5%	6.1%	11.0%	19.0%	12.5%	17.5%	21.2%	4.7%	14.1%	33.5%	19.1%	
Public sector⁽⁷⁾	5.0%	9.5%	0.3%	6.6%	11.0%	2.0%	2.9%	0.3%	8.0%	1.2%	34.9%	0.1%	0.5%	0.2%	
Other investors	-	-		-	-	6.0%	-	-	-	-	1.2%	-	-	-	-
Domestic market capitalisation (EUR billions)	9 523	677	814	1 035	1 491	503	245	57	372	203	156	162	2 593	14 413	3 921

(1) FESE aggregate refers to 26 countries.

(2) Data refer to 2004.

(3) Flow of Funds data refer to all listed and unlisted shares issued by US issuers. Total market capitalisation sums up NYSE, Nasdaq and AMEX ones.

(4) Japanese shares listed at least on one exchange among Tokyo, Osaka, Nagoya, Fukuoka and Sapporo. Total market capitalisation is net of double counting.

(5) This item refers to Banking Foundations for Borsa Italiana, to brokers and dealers for the United States and to Trusts Banks (net of investment trusts and annuity trusts), securities companies and other financial institutions for Japan. Details for Belgium and Denmark are not available.

(6) For Italy this item includes also individuals who own a relevant stake (more than 2%).

(7) Public sector item refers to central and local government entities.

Elaboration on data by Euronext, Federal Reserve, FESE, OMX, TSE and WFE

Regarding household demand for equity, in the United States households' participation in the domestic stock market goes beyond 30 per cent of total stock market value. In European countries, instead, it remains below 30 per cent: in the Italian case, for instance, private investors hold 26.2 per cent of domestic market capitalisation, while France and Norway show the lowest percentage, respectively 6.1 and 4.7 per cent of stock market. In Japan retail investors participate directly to the stock market for 19.1 per cent. Households could hold equity also via collective investment, although shareownership



data are only a proxy for households' indirect domestic listed shareownership because they also include other investors, whose products are mainly but not entirely purchased by households. In spite of this observation, it is still possible to conclude that Anglo-Saxon retail investors, and in particular UK ones, are more committed to holding shares indirectly.

There are big differences in the participation of private non-financial companies in the different markets. In Germany they account for 42.9 per cent of the total market value of listed shares, while in the United Kingdom or in the United States they have a marginal role (1.7 per cent in the former and almost zero in the US). In other European countries they hold on average 16.0 per cent. Between 1999 and 2005 there has been an increase of their participation in the ownership structure in all the countries taken into consideration.

Public sector participation into exchanges has consistently declined over time, due to the massive privatisation programs that have taken place in many countries. At the end of 2005 State and local governments represent a minor shareholder in all countries analysed. This sector is almost disappeared in the Anglo-Saxon and Japanese ownership structure, while in other countries it weighs less than 10 per cent. The only two exceptions are Euronext Paris (11.0 per cent) and Oslo Børs (34.9 per cent).

4.2 Shareownership of Italian listed stocks

During the period 1995-2006 the Italian stock market has known a significant evolution. Market value of listed shares has almost quadrupled in size, reaching €778.5 billion at the end of 2006 with a compound average annual growth rate of 14.7 per cent. The ratio market capitalisation over GDP has risen from 18.6 per cent of 1995 to 52.8 per cent of 2006, after a peak of 70.2 per cent at the end of 2000. The daily equity turnover has reached €4,510 million (from 292 in 1995, +28.3 per cent yearly). The high returns of equity markets together with other economic and financial events have strongly influenced the participation of different players in the Italian stock market.

Table 3 and Figure 1 describe the evolution of the Italian market capitalisation ownership structure between 1995 and 2006, while Figure 2 shows the yearly compounded growth rate of each institutional sector and of the market as a whole during the decade. These numbers are the result of a partial estimation process, based on the aggregation of different official sources⁷. Almost 50 per cent of total capitalisation is exactly allocated by using Consob data on relevant participation in listed companies (more than 2 per cent stakes). Data on insurance, individual asset management schemes, pension funds and mutual funds are Assogestioni, Banca d'Italia and Covip source even if some estimates are required. Foreign investors are obtained starting from net flows of foreign investment in listed shares (UIC). Households result as a residual. Besides a few methodological *caveats*, results put in evidence a quite distinctive picture of the Italian equity market.

(7) For a detailed description of the methodology see Filippa and Franzosi (2001) of which paragraph 4.2 is an update. Sources of data are Assogestioni (Italian Collective Investment Association), Borsa Italiana, Banca d'Italia, Consob (Italian Securities Commission), Covip (Authority on Italian pension funds) and UIC (Italian Foreign Exchange Office).

Table 3 - Italian market capitalisation by institutional sectors (end of period)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Foreign Investors	11.6%	15.0%	18.6%	19.6%	16.3%	15.7%	16.4%	14.0%	14.6%	16.3%	13.2%	13.9%
Domestic Investors	88.4%	85.0%	81.4%	80.4%	83.8%	84.3%	83.6%	86.0%	85.4%	83.7%	86.8%	86.1%
Private financial enterprises	22.0%	21.2%	21.9%	29.4%	23.0%	23.8%	23.2%	21.2%	20.0%	19.6%	22.5%	23.2%
Collective investment	13.9%	13.8%	13.8%	14.9%	12.6%	12.0%	13.4%	11.9%	11.2%	11.7%	12.2%	13.8%
- Insurance companies	5.5%	5.4%	3.8%	3.9%	3.5%	3.4%	3.6%	3.6%	4.2%	4.4%	4.7%	4.8%
- Pension funds	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
- Individual asset management schemes	2.6%	3.0%	3.4%	2.8%	2.9%	2.7%	3.6%	2.8%	2.2%	2.6%	2.7%	4.2%
- Mutual funds	5.7%	5.3%	6.5%	8.1%	6.1%	5.9%	6.2%	5.4%	4.7%	4.6%	4.6%	4.7%
Banks	4.6%	3.6%	5.1%	9.4%	5.9%	6.9%	4.9%	4.8%	5.3%	4.6%	6.3%	5.1%
Banking Foundations	3.5%	3.8%	3.1%	5.1%	9.4%	4.9%	4.8%	4.4%	3.5%	3.3%	3.9%	4.3%
Private non-financial companies⁽¹⁾	11.9%	11.3%	19.3%	16.4%	27.5%	28.3%	28.4%	29.4%	27.8%	28.4%	28.6%	26.6%
Households	28.4%	22.8%	28.1%	25.7%	23.2%	22.4%	21.3%	23.2%	26.6%	25.2%	26.2%	26.6%
Public sector⁽²⁾	26.1%	29.8%	12.0%	8.9%	10.1%	9.8%	10.8%	12.1%	11.0%	10.6%	9.5%	9.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Domestic market capitalisation (EUR billions)	171.7	202.7	314.7	485.2	726.6	818.4	592.3	457.9	487.4	568.9	676.6	778.5

(1) This item also includes individuals who own a relevant stake (more than 2 per cent).

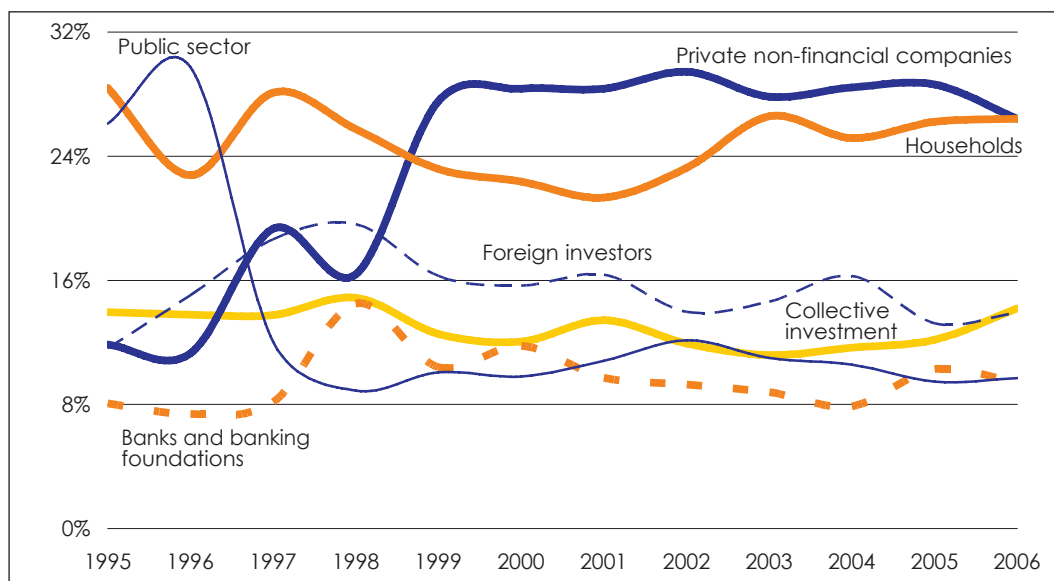
(2) Public sector item refers to central and local government entities.

Elaboration on data by Assogestioni, Banca d'Italia, Borsa Italiana, Consob, Covip and UIC

In detail, at the end of 2006 foreign investors account for 13.9 per cent of the Italian market capitalisation. Between 1995 and 1998 the stock ownership of foreign investors has increased sharply reaching a peak of 19.6 per cent in 1998 thanks to the boost coming from European EMU convergence process. After a brief period of relative stability, foreign investors experienced a decrease of their share in Italian domestic capitalisation in concomitance with the slowdown of financial markets. Looking at turnover data, foreign investors account for a percentage steadily above 35 per cent⁸, signalling their important role in trading activity. In general, the expansion of foreign demand on domestic financial markets seems to be a natural and primary consequence of the liberalization of the processes through which financial services are provided and of the creation of European Economic and Monetary Union. In Italy this trend seems to have still room for improvement. This difficulty finds a similarity in the lower capability of Italy to attract foreign portfolio investments (Franzosi and Geranio, 2007) as well as foreign direct investments (Committeri, 2004).

Among domestic investors, at the end of 2006 Italian households hold 26.6 per cent. This percentage has not changed in a significant way since 1995, in spite of a reduction as a consequence of the slowdown of financial markets in 2000-2002, followed by a prompt recovery.

(8) Borsa Italiana estimates the weight of foreign investors on total shares turnover by using UIC data on flows of foreign investments on listed Italian stocks (Bollettino Statistico). The percentage, equal to 25 per cent in 1993, grew constantly till 2002 when it picked up above 50 per cent. From 2003 it fluctuates around 35 per cent.

**Figure 1 - Italian market capitalisation by institutional sectors (1995-2006)**

Elaboration on data by Assogestioni, Banca d'Italia, Borsa Italiana, Consob, Covip and UIC

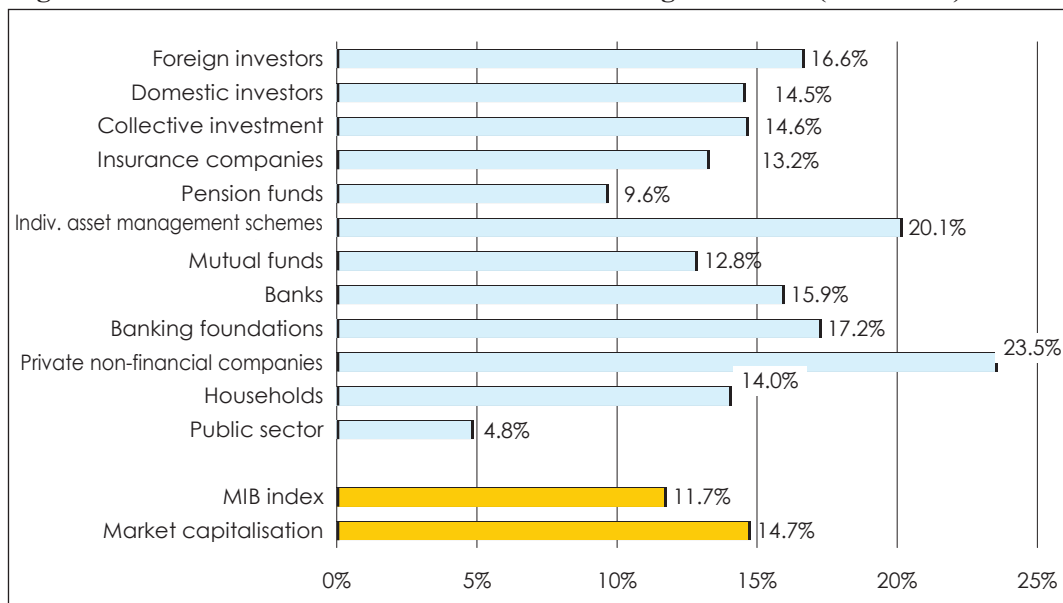
The role of collective investment continues to be limited. In particular, by the end of 2006 mutual funds (provided by domestic intermediaries and including Italian and roundtrip ones) account for 4.7 per cent. This minor role of mutual funds is due to structural as well as cyclical reasons. At the moment, mutual funds industry is experiencing difficulties in attracting new flows of assets; in general it is characterised by a lower propensity to invest in equity (28 per cent of total assets under management are invested in equity at the end of 2006) and especially in domestic shares (6.0 per cent of total assets under management are invested in Italian equity at the end of 2006). The weight of pension funds in the ownership structure of Italian listed companies is almost insignificant (0.1 per cent). In Italy the second pillar of pension system, constituted by private pension funds, is not yet widespread among private sector employees. Moreover pension funds' asset allocation is more concentrated on low risk investments and, among equity, on stocks issued by international companies rather than domestic ones (Covip, 2006). The future evolution of pension funds' share on the domestic stock market will be subordinated to the process of development of Italian private pension schemes and to the degree of risk they will decide to bear. Finally, the insurance sector accounts for 4.8 per cent of total market capitalisation, with a positive trend during the period analysed. A boost has come from the insurance sector growing role as provider of financial wealth management services; in the short term a further positive effect could also come from a regulatory framework permitting to invest more reserves in risky assets⁹.

Differently from banks and banking foundations, whose pattern remains almost stable in the course of the years, non-financial companies and public sector have

(9) ISVAP, the Italian insurance sector regulator, approved in July 2007 (Provvedimento n. 2530) new rules permitting insurance companies to invest technical reserves in alternative investments and to increase their exposure to some riskier investment classes, e.g. non-UCITS mutual funds.

experienced opposite dynamics: the former doubles, owning more than a fourth of Italian market capitalisation at the end of 2006 (26.6 per cent), while the latter reduces below 10 per cent. The sharp reduction of the public sector is the immediate result of the privatisation process of important companies previously mainly participated by the State started at the beginning of the Nineties. Although the privatisation process in Italy started later than in other countries it deeply affected the ownership structure of Italian listed companies whose present composition is partially the result of the kind of investors involved; the highest participation was in fact registered among institutional foreign and retail domestic investors (Goldstein, 2002).

Figure 2 - Market and institutional sectors' annual growth rate (1995-2006)⁽¹⁾



(1) Annual compounded growth rate for each institutional sector, MIB Index and domestic market capitalisation over the period 1995-2006.

Elaboration on data by Assogestioni, Banca d'Italia, Borsa Italiana, Consob, Covip and UIC

In Figure 2 the average growth rate of each institutional sector over the decade 1995-2006 is compared to the growth rate of Italian market capitalisation and to MIB index one. Except public sector and pension funds, which register the lowest levels of growth (respectively 4.8 per cent and 9.6 per cent), all other institutional sectors show a higher growth rate than MIB index (11.7 per cent) and, in some cases, than the market value of domestic listed companies (14.7 per cent).



5. Household financial portfolio

5.1 International comparison of households' financial portfolio

This paragraph tracks the composition of households' financial wealth in major developed countries. Table 4 describes the structure of households' financial portfolio for different countries at the end of 2005 and 1995. Wealth of various agents, especially households, is not only made up of financial assets and liabilities but also includes non financial assets (the most common is housing) whose incidence in many cases is very significant. Italian household financial wealth is equal to about 50 per cent of non financial assets. The percentage is similar to the ones of France and Germany while it reaches about 100 per cent for the UK and 150 per cent for Japan and the US (De Bonis, Fano and Sbano, 2007). In examining the evolution of households' portfolio choices, this paper concentrates exclusively on the stock of financial wealth and its composition by financial instruments. The main source of data is represented by National Financial Accounts provided by Central Banks or National Statistics Offices; these data have a full comparability among European countries using the SEC95 classification; for Japan and the United States sources are the Flow of Funds with minor differences with respect to European countries data^{10,11}.

Difficulties in making comparisons may still arise from the way variables are measured or from the lack of information (Babeau and Sbano, 2002). In order to make the comparison fully feasible, only main financial aggregates are considered in Table 4 (Currency and deposits, Securities other than shares, Shares and other equity, Mutual funds, Insurance and pension reserves, Other claims). Some countries (such as Italy and the UK) provide much more detail, but coverage of all countries under analysis is not assured. The highest level of detail for equity demand available at the moment is provided in paragraph 5.

Households' financial wealth has progressively increased since mid-Nineties. During the period 1995-2005 the yearly compounded growth ranges between 1.0 per cent of Switzerland and 9.7 per cent of Sweden.

A significant change in households' portfolio allocation has progressively taken place in the last decade, following different patterns for each country. At the end of 2005

(10) Another possible source of data about households' wealth and financial portfolio composition is represented by surveys provided by Central Banks, such as the SHIW (Survey on Household Income and Wealth) provided by Banca d'Italia. Micro data permit to observe distribution and differences among investors. At the moment the degree of comparability among surveys made at country level remains quite low, and research teams are working to improve the situation (Serminska, Brandolini and Smeeding, 2007).

(11) The National Financial Accounts generally adopt an extended concept of households, which also includes non-profit institutions serving households. This aggregation is based on the notion that, as these institutions are largely financed by households and as their main purpose is to serve households, their accounts can be assimilated to those of households. However, as NPISHs represent a very small sector, its inclusion in the households' item makes very little difference to the final result. The only exception is represented by Japan, which considers the two sub-sectors separately. In order to assure comparability among countries, in the case of Japan NPISHs have been added to households.



in almost all countries analysed the proportion of financial wealth held by households in the form of currency and other deposits has declined with respect to 1995, although its amount is still considerable. In Japan liquidity instruments represent more than 50 per cent of households' financial wealth. This peculiarity of Japanese households' portfolio is related to the economic situation of this country which experienced years of zero or negative real interest rates, to the lack of trust that Japanese people have towards other asset classes and, in general, to the dominant role of banking intermediation (Babeau and Sbano, 2002). In other countries the incidence of liquidity instruments is far below: in the United States currency and deposits, after a minimum in 1999 (12.5 per cent), have gone back to the level of 1995 standing at about 17 per cent of households' financial wealth in 2005. Among European countries, Swedish households are the less willing to hold currency and deposits (15.9 per cent), while in Spain they account for 38.4 per cent of households' financial assets. Italian households show the strongest interest for bonds: government and corporate bonds account altogether for about 20 per cent of households' wealth. In other countries instead fixed income instruments, after experiencing a sharp reduction, do not exceed 10 per cent on average: in particular, the United Kingdom and France show the lowest values, respectively 1.2 per cent and 1.4 per cent of households' financial wealth. A popular financial asset among German households is represented by *pfandbrief*, a collateralised loan generally used to raise funds for housing (BME Consulting, 2007).

Pension funds and insurance companies play an important role in the United Kingdom, in the Netherlands and in Denmark (above 50 per cent of households' financial wealth), where private pension schemes and insurance contracts are far more widespread among households than in Italy and Spain, where they represent 17.7 per cent and 14.9 per cent at the end of 2005. The role of pension funds and insurance companies is also relevant in the Swiss and Swedish case (about 40 per cent), while in other countries their aggregate proportion is between 20 per cent and 30 per cent. Insurance technical reserves with respect to pension funds play a different role in each country: in the case of Germany and Japan it is possible to observe a sharp predominance of resources destined to insurance contracts, while in the United States and in the United Kingdom the aggregate mostly consists of assets managed by the second pillar pension schemes. In Italy this item almost completely consists of insurance reserves. Life insurance policies are widespread in France. In Spain the incidence of pension and insurance items is modest (14.9 per cent) and these two sectors are equally weighted in households' financial portfolio.

In 2005, the proportion of saving destined to mutual funds ranges from 2.5 per cent for the Netherlands to 17.1 per cent for Belgium. In other countries households invest in this kind of financial instruments no more than 10-15 per cent. UK households hold a very low proportion of their financial wealth in investment funds (4 per cent at the end of 2005) due to the large amount of households' saving held in insurance products and pension funds. French and Swedish situations are peculiar due to a widespread indirect ownership of investment funds, respectively about 10 and 7 per cent, especially via life insurance policies (EFAMA, 2006).

The United States show the highest proportion of households' wealth directly



invested in shares and other equity, about a third of the whole financial assets. This situation is not far from the Swedish and Spanish ones (respectively 31.1 and 28.6 per cent), while other countries are between 20 and 25 per cent. Italy seems to be in line with the European average (24.6 per cent). The topic of households' financial shareholding will be deeply overviewed in the following paragraph. In spite of the dimensional differences among countries, it is interesting to highlight a progressive approach of households to riskier assets over time. In the decade 1995-2005 Europe and the United States have seen a generalised decline in banking intermediation and an increase in the weight of equities and investment funds. This is especially true for European countries that are moving toward an asset allocation more similar to the Anglo-Saxon one. The period of major expansion for equity assets in households' asset allocation took place in concomitance with the late Nineties growth of equity prices when a large number of households, looking for higher returns, have increased the proportion of equity in their portfolios. In addition, households have progressively developed their financial and investment abilities over time, together with the enrichment of the variety of financial instruments in which retail investors can invest.

Table 4 - Households' financial portfolio: international comparison (end of period)⁽¹⁾

BE - Belgium, CH - Switzerland, DE - Germany, DK - Denmark, ES - Spain, FR - France, IT - Italy, JP - Japan, NL - Netherlands, SE - Sweden, UK - United Kingdom, US - United States

2005, % total financial assets	FR	IT	DE	ES	BE	NL	DK	SE	CH ⁽²⁾	UK	US	JP
Currency and deposits	31.7%	26.7%	35.0%	38.4%	20.5%	29.3%	24.1%	15.9%	25.9%	25.7%	16.8%	51.7%
Securities other than shares ⁽³⁾	1.4%	20.3%	9.7%	2.3%	3.4%	11.1%	5.5%	2.3%	8.3%	1.2%	7.1%	3.4%
Shares and other equity	18.2%	24.6%	11.6%	28.6%	14.5%	19.0%	10.6%	31.1%	13.2%	12.3%	33.2%	11.0%
Mutual funds	9.8%	10.2%	12.1%	12.8%	2.5%	17.1%	8.8%	11.9%	10.1%	4.0%	10.9%	3.9%
Insurance and pension reserves	34.5%	17.7%	31.6%	14.9%	58.8%	23.1%	50.9%	38.4%	42.5%	53.8%	30.6%	25.1%
Other	3.3%	0.5%	0.0%	3.0%	0.3%	0.3%	0.2%	0.4%	0.0%	3.0%	1.4%	5.0%
1995, % total financial assets	FR	IT	DE	ES ⁽⁴⁾	BE	NL	DK ⁽⁴⁾	SE	CH ⁽⁴⁾	UK	US	JP
Currency and deposits	41.5%	39.8%	42.4%	46.7%	22.5%	28.9%	26.8%	28.5%	23.7%	23.7%	16.0%	49.1%
Securities other than shares ⁽³⁾	5.9%	30.4%	11.8%	3.3%	3.4%	29.4%	10.3%	9.2%	10.4%	2.1%	8.6%	3.5%
Shares and other equity	10.9%	14.4%	11.0%	20.2%	16.6%	18.4%	9.0%	24.0%	19.0%	16.1%	35.6%	10.9%
Mutual funds	13.4%	4.0%	7.2%	13.9%	3.9%	8.7%	4.0%	7.0%	7.9%	3.7%	9.5%	6.7%
Insurance and pension reserves	24.0%	10.2%	27.6%	10.8%	53.3%	9.9%	49.6%	30.3%	39.0%	50.6%	29.0%	25.2%
Other	2.6%	1.2%	0.0%	5.0%	0.3%	4.9%	0.3%	0.9%	-	3.7%	1.3%	4.6%
Households' financial assets growth rate⁽⁵⁾	6.6%	6.6%	4.8%	8.2%	7.5%	4.0%	7.7%	9.7%	1.0%	6.2%	5.8%	1.7%

(1) Households and non profit institutions serving households.

(2) Data refer to 2004.

(3) Bills, bonds, certificates of deposit, commercial papers, debentures and similar instruments normally traded in the financial markets.

(4) Spain data refer to 1996, Denmark 1998 and Switzerland to 1999.

(5) Yearly compounded growth rates at local currency.

Elaboration on data by various National Central Banks and National Statistics Offices

5.2 Italian households' financial portfolio

The period between 1995 and 2006 has been interested by considerable changes in the way in which Italian households decide to allocate their wealth. Table 5 describes the evolution of Italian households' financial assets and their allocation over the period 1995-

2006, providing a highly detailed description of the instruments they invest into. In Italian financial accounts households' wealth is measured starting from the information provided by economic operators variously involved in economic and financial relationships with households themselves (Cannari and D'Alessio, 2006). For what concerns equity instruments, though, in order to have a deeper insight of the item, the data provided by Banca d'Italia have been crossed with the ones elaborated by Borsa Italiana (FESE, 2007) regarding the Italian market capitalisation held by households, so as to have a coherent amount for listed domestic shares held by final retail investors¹².

The important economic and financial events happened in the period in exam have boosted the process of accumulation of financial assets and induced households to gradually reorganise their own financial portfolio. The joint incidence of the sudden reduction of interest rates during the process of convergence necessary to enter the EMU, their low levels for a long period, the privatisations of important domestic public companies usually leading to public offerings, the wide range of products offered by the new-born industry of collective investment and the generous returns on equity markets during two positive cycles in the decade, have oriented investors to riskier and more diversified asset allocation choices. However, the present situation continues to be characterised by the significant incidence of less risky financial instruments and there are still wide margins of further diversification of households' financial portfolio.

Among the most significant changes in Italian households' financial choices in the period considered, there has been a considerable decline of liquidity and fixed income instruments. Currency and other deposits have fallen from almost 40 per cent of total financial wealth in 1995 to 28 per cent eleven years later; domestic fixed income assets, represented by government and corporate bonds, have reduced their aggregate incidence from 28.5 per cent in 1995 to 16.0 per cent in 2006. In detail, the two sub-items have been interested by opposite trends: as long as government bonds declined over years, from 26.0 per cent in 1995 to 4.7 per cent in 2006, domestic corporate bonds have progressively increased their incidence on households' portfolio, reaching 11.3 per cent in 2006. Most of them are issued by banks. Bonds with a foreign issuer have grown considerably, reaching 3.7 per cent at the end of 2005. Also mutual funds, shares and other equity have taken advantage of the reduction of the role of financial instruments issued by the State: at the end of 2006 these items account altogether for more than a third of households' financial wealth. Mutual funds, whose weight is only 4 per cent in 1995, reached 18.6 per cent in 1999. This sudden growth is related to the development of a modern Italian asset management industry. Since 2000 they have however gradually lost their importance in households' portfolios (9.1 per cent in 2006), signalling a difficult period for the Italian industry. For what concerns direct shareholding, it is important to underline the significant growth of the percentage of shares held by Italian households, almost doubled with respect

(12) In detail, financial accounts provided by Banca d'Italia already split the item "Shares and other equity" into different categories, included listed domestic shares. This information has been integrated with data coming from Borsa Italiana estimation on market capitalisation obtaining a fully comparable dataset for this paper. Differences between the two series remain trivial.



to 1995 from 14.4 to 24.6 per cent. This value reached a peak in 2000 in concomitance with the strong returns of the stock market and, after a slowdown in 2001-2003, the trend has become again positive during the last three years. This is mainly the result of a price effect, due to the fact that all assets are at market value, but also of a cyclical attitude toward riskier assets. In order to provide a higher level of detail, the item is segmented into listed domestic shares, unlisted domestic shares and other participations and foreign shares. In all cases it is possible to observe a growth. For what concerns the incidence of domestic listed shares, it reached 8.6 per cent of households' financial wealth in 2006, from 3.4 per cent in 1995 and a maximum of 8.9 per cent in 2000. The increase in the weight of the sub-item unlisted shares and other participations assumes relevant proportions as well, raising from 9.5 to 13.0 per cent in 2006. The estimation of this item is a difficult task (Rodano and Signorini, 2007). A positive trend, though at a slower rate, is experienced also by foreign shares, whose incidence is still modest but doubled since 1995 and equal to 3.0 per cent of total financial assets at the end of 2006.

Nowadays Italian households invest 17.0 per cent of their financial wealth into life insurance contracts and pension funds. Italian financial accounts do not distinguish between life-insurance and pension schemes claims. Most of the aggregate reasonably consists of insurance companies. This fact finds its justification in the short span that pension funds have experienced in Italy. Because of the high levels of protection that citizens, especially older ones, have received till now by the public pension system, employees have not felt yet the need for further protection, by contributing to private pension plans. That is why the rate of participation of Italian households to private pension schemes is still low. Actually, the current state of the things may be subject to relevant changes in the future, especially if the take-off of the second and third supplementary pillars of the social security system definitely occurs as a result of the latest pension system reform (Legislative Decree n.252/2005). This may represent a great opportunity for Italy to fulfil a gap making private pension schemes a consolidated vehicle of saving among households.

In the end, as pointed out in paragraph 3, Italian households show a low level of indebtedness. Most of it consists of medium/long-term liabilities, especially banking-mortgage related to the purchase of housing. This slight increase during the period under analysis (13.4 per cent of total financial assets in 1995 and 17.6 per cent in 2006) has been favoured in recent years by low interest rates and the increase in real estate investments by Italian households.



Table 5 - Italian households' financial portfolio (end of period)⁽¹⁾

% total financial assets	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Currency and deposits	18.7%	18.3%	18.0%	17.0%	15.6%	15.0%	16.2%	16.5%	17.1%	17.0%	17.0%	17.7%
Other deposits	21.1%	19.7%	15.9%	12.0%	9.9%	9.6%	10.2%	10.4%	10.3%	10.1%	9.7%	10.3%
Government bonds	26.0%	23.3%	18.1%	11.4%	6.5%	6.9%	7.7%	8.4%	6.9%	7.1%	5.5%	4.7%
- short term	9.4%	7.1%	5.0%	2.1%	1.0%	0.9%	1.0%	1.2%	0.2%	0.6%	0.1%	0.4%
- CCT ⁽²⁾	8.7%	7.8%	6.2%	3.1%	1.7%	1.7%	1.9%	1.5%	1.2%	0.5%	0.3%	0.4%
- medium/long term	7.9%	8.5%	7.0%	6.2%	3.8%	4.3%	4.8%	5.7%	5.4%	6.0%	5.1%	3.9%
Shares and other participations	14.4%	13.7%	17.4%	20.2%	27.2%	27.7%	24.7%	23.2%	21.7%	22.2%	24.6%	24.6%
- non listed domestic shares	9.5%	8.8%	9.6%	10.7%	15.0%	14.9%	14.8%	15.7%	13.1%	13.2%	14.5%	13.0%
- listed domestic shares ⁽³⁾	3.4%	3.4%	5.6%	6.9%	8.5%	8.9%	6.4%	5.1%	6.1%	6.5%	7.3%	8.6%
- foreign shares	1.5%	1.5%	2.2%	2.7%	3.7%	3.9%	3.4%	2.4%	2.6%	2.5%	2.8%	3.0%
Mutual funds	4.0%	5.7%	9.7%	16.4%	18.6%	16.6%	14.3%	11.9%	11.9%	10.6%	10.2%	9.1%
- home-domiciled	3.6%	5.3%	9.0%	15.7%	17.1%	14.8%	12.9%	11.0%	10.9%	9.3%	8.2%	6.6%
- non home-domiciled	0.3%	0.5%	0.7%	0.8%	1.5%	1.8%	1.4%	0.9%	1.1%	1.3%	2.0%	2.4%
Domestic Corporate bonds	2.5%	5.3%	7.2%	8.8%	7.5%	8.8%	9.7%	11.0%	12.2%	12.5%	11.1%	11.3%
Foreign bonds	1.9%	2.1%	2.7%	2.6%	2.8%	2.8%	3.4%	3.3%	3.2%	2.9%	3.7%	3.7%
Life insurance and pension reserves	9.4%	9.6%	9.8%	9.9%	10.2%	11.0%	12.5%	13.8%	15.2%	16.0%	16.6%	17.0%
Other⁽⁴⁾	2.1%	2.2%	1.6%	1.6%	1.5%	1.5%	1.4%	1.5%	1.5%	1.5%	1.5%	1.7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Saving rate	19.4%	20.2%	16.7%	13.6%	11.0%	9.2%	11.2%	12.0%	11.0%	11.5%	12.1%	11.9%
Total financial assets (EUR billions)	1 719	1 862	2 026	2 273	2 596	2 756	2 734	2 772	2 868	3 046	3 269	3 382
Total financial assets (y/y)		8.3%	8.8%	12.2%	14.2%	6.2%	-0.8%	1.4%	3.5%	6.2%	7.3%	3.5%
Total financial liabilities (EUR billions)	231	211	251	282	321	350	371	404	440	490	543	596

(1) Households also include non profit institutions serving households and individual entrepreneurs (until five employees).

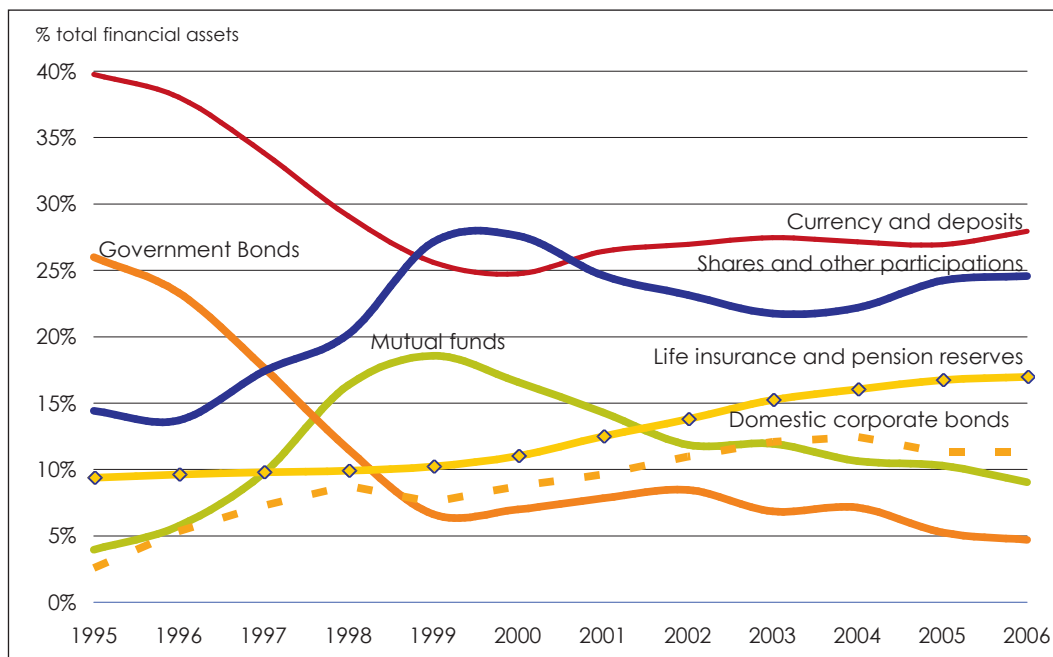
(2) They are seven-year-long floating rate Government bonds.

(3) Borsa Italiana data.

(4) It also includes non life insurance reserves.

Elaboration on data by Banca d'Italia, Borsa Italiana and Thomson Financial

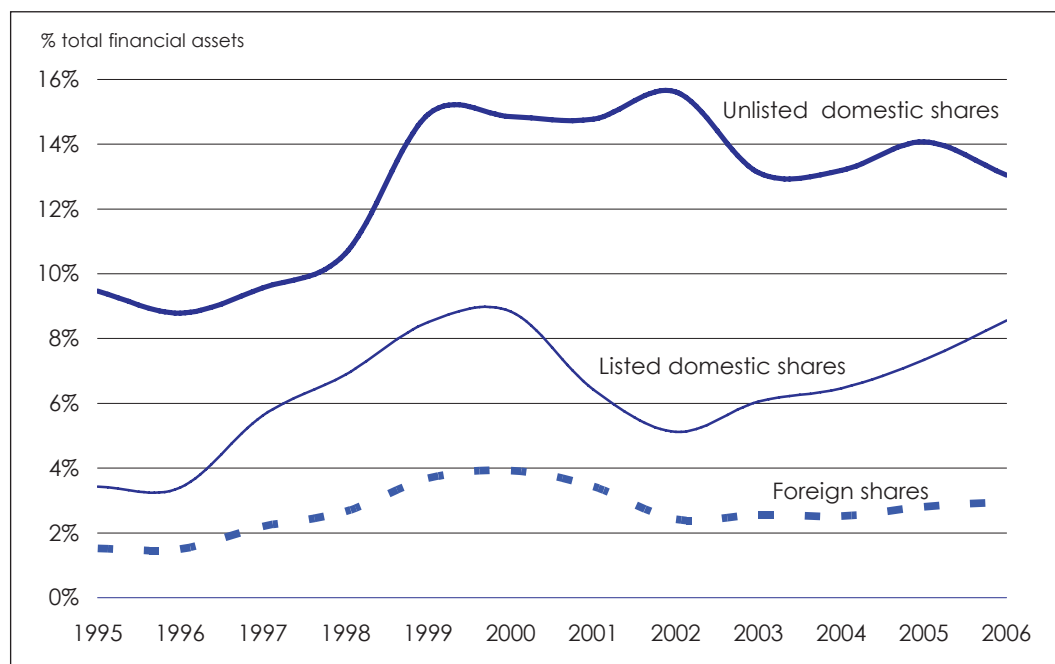
Figure 3a - Italian households' financial portfolio (1995-2006)



Elaboration on data by Banca d'Italia and Borsa Italiana



Figure 3b - Shares and other participations sub-items (1995-2006)



Elaboration on data by Banca d'Italia and Borsa Italiana

6. Households' demand for equity

6.1 Households' direct and indirect shareholding

This paragraph provides an estimation for households' shareholding across countries, in order to have a deeper understanding of their propensity to equity and of the channels through which they decide to approach equity market, directly or via mutual funds, pension funds and insurance products. Having an overall picture of households' equity demand among major economies is a challenging task due to the necessity of collecting detailed information from many sources not always perfectly comparable. For what concerns financial accounts, most of the countries taken into consideration provide an aggregate labelled "Shares and other equity" for direct shareholding. Moreover, very few of them distinguish it in function of the nationality of the issuer (domestic or foreign) or of the typology of share (listed or unlisted). At the same time, details are not available for equity held indirectly because it is included in larger aggregates based upon the kind of financial instruments (mutual funds, pension funds and insurance) and not upon the final asset allocation. As a matter of fact, in order to have a more reliable perception of households' attitude to shareholding it has been necessary to proceed with a partial estimation, recurring to other sources. The proportion of domestic listed shares held by domestic households has been estimated using the weight of households and individual asset management schemes over the domestic market capitalisation of each country (paragraph 4.1)¹³. Direct investment in foreign stocks is shown only where directly available from financial accounts. In the case of mutual funds, the data do not allow to isolate up from the item "Mutual funds shares" the amount of resources invested in equity, which can be proxied using the weight of equity mutual funds on the overall assets managed by each domestic industry (EFAMA, 2006). The assumption is that the proportion of equity mutual funds held by households is the same as the proportion that mutual funds have over the whole industry. The result could underestimate the total amount invested in equity because it does not take into account investments through other categories of mutual funds; furthermore, it does not distinguish between domestic and foreign stocks. Even more difficult is the determination of the value of equity held by households through pension and insurance products. In both cases, this value has been obtained applying to households' total investment in insurance and pension funds the weight that pension funds and insurance companies respectively attribute to equity in their asset allocation. Pension funds and insurance investments' asset allocation is taken from country-based associations of collective investments institutions. Finally, it has not been possible to use data from the domestic shareownership of listed companies (paragraph 3.1) to quantify households' investments in domestic listed shares through institutional

(13) Whenever, as in the case of Spain, there is mismatch between FESE and financial accounts data, the first prevails.



investors because these data are not fully referable to households and they include also other investors¹⁴.

Table 6 - Households' equity assets: an international comparison (end 2005)

BE - Belgium, CH - Switzerland, DE - Germany, DK - Denmark, ES - Spain, FR - France, IT - Italy, JP - Japan, NL - Netherlands, SE - Sweden, UK - United Kingdom, US - United States

	FR	IT	DE	ES	BE	NL	DK	SE	CH	UK	US	JP
% of total household financial assets invested in equity												
Total equity assets	29.4%	29.6%	22.6%	34.5%	47.3%	33.8%	27.7%	55.2%	24.4%	35.1%	46.9%	18.0%
Shares and other participations	18.2%	24.6%	11.6%	28.6%	17.0%	19.0%	10.6%	31.1%	13.2%	12.4%	33.2%	11.0%
- listed domestic shares ⁽¹⁾	2.9%	7.3%	4.5%	12.5%	3.7%	6.1%	7.8%	17.2%	7.4%	7.9%	15.8%	7.0%
- foreign shares (listed and unlisted)	....	2.8%	....	....	....	....	....	....	4.2%	1.8%	....	....
Equity by mutual funds⁽²⁾	2.7%	2.2%	5.6%	4.4%	1.2%	9.7%	3.4%	8.1%	3.3%	3.0%	5.9%	2.6%
Equity by insurance and pension funds⁽³⁾	8.5%	3.0%	5.4%	1.5%	29.1%	5.0%	13.7%	16.0%	7.8%	19.7%	7.9%	4.4%
Direct /indirect ratio	1.6	4.7	1.1	4.9	0.6	1.3	0.6	1.3	1.2	0.5	2.4	1.6
% of Assets Under Management of each sector invested in equity												
Equity funds over total mutual funds AUM ⁽⁴⁾	27.5%	20.6%	45.9%	34.6%	49.0%	56.9%	39.1%	68.2%	33.1%	74.1%	53.6%	66.7%
Equity over pension funds AUM ⁽⁵⁾	5.3%	18.6%	34.5%	15.2%	49.8%	9.8%	25.9%	37.0%	16.9%	40.1%	41.3%	34.8%
Equity over insurance AUM ⁽⁶⁾	28.3%	16.5%	13.3%	6.0%	28.8%	22.6%	27.4%	48.0%	22.3%	34.0%	24.1%	12.3%

(1) Ratio between the value of domestic capitalisation held by households (FESE, Flow of Funds and TSE) and households total financial assets (Financial Accounts and Flow of Funds). Whenever available (Italy, Germany, Sweden, UK) households item includes also individual asset management schemes.

(2) Estimated applying the percentage of equity mutual funds on total domestic UCITS mutual funds (EFAMA) to mutual funds weight in households' portfolio (Financial Accounts or Flow of Funds).

(3) Estimated applying the percentage of equity in pension funds and insurance AUM on insurance and pension funds aggregate in the households' portfolio (Financial Accounts or Flow of Funds); the relative weight of insurance versus pension funds is obtained from Financial Accounts except for Italy, France, Belgium, the Netherlands, Denmark and Switzerland for which it has been broken up by national associations.

(4) Percentage of equity mutual funds on total domestic UCITS mutual funds (EFAMA).

(5) Percentage of direct equity in pension funds assets under management (OECD and Covip for Italy).

(6) Percentage of direct equity in insurance assets under management (national insurance associations), except for Italy, France, Spain, Belgium, the Netherlands and Switzerland for which the percentage includes also equity mutual funds (Isvap for Italy and CEA for other countries).

Elaboration on data by CEA (2006), EFAMA (2006), FESE (2007), Flow of Funds, National Financial Accounts, OECD, various collective investment associations, TSE

As shown in Table 6, shareholding has strong country-specificities. What immediately emerges from the international comparison is that Swedish, Dutch, US, and UK households' financial portfolios have the highest amount invested in equity, respectively equal to 55.2, 47.3, 46.9 and 35.1 per cent. In the other countries equity accounts for about 30 per cent of households' financial resources except in the case of Germany and Japan, for which the percentage is about 20 per cent.

Italy appears to be in line with other countries (29.6 per cent). In detail, Italian households show a strong preference for direct shareholding, which represents about 25 per cent of their financial resources. This percentage consists of listed domestic shares (7.3 per cent)¹⁵ and foreign shares (2.8 per cent), and the remaining part is composed by

(14) As an example, French households' total equity investment through mutual funds is about €85 billion, compared to €200 billion of investment in domestic listed stocks by national mutual funds, whose main investors are insurance companies.

(15) Italian data on listed domestic shares could be lower than other countries which may also include relevante stakes of final private investors.



unlisted shares (mainly participations in directly owned small enterprises). Italian households invest only 5.2 per cent of their financial wealth in equity through mutual funds (2.2 per cent), pension funds or insurance companies (3.0 per cent). The scenario just described is further confirmed looking at the direct/indirect ratio which is equal to 4.7, the highest value after Spain.

Instead, indirect channels of shareholding are preferred by the UK, Danish and Dutch households, for which direct/indirect ratio assumes values below 1. In these countries equity is held primarily via pension funds and insurance companies, due to the expansion reached by institutional investors among households.

Equity mutual funds' role underlies a quite heterogeneous scenario from 1.2 per cent of the Netherlands to 9.7 per cent of Belgium, with Italy positioned in the lower part of the range.

It is relevant to highlight that cross-country divergence in the split between direct and indirect shareholding among households may derive either from the different role that institutional sectors play in each country in terms of assets under management or from a different asset allocation. In the case of Italy, for example, both of these factors concur to a minor role of institutional investors firstly because they deal with smaller amounts of resources and secondly because they are characterised by a poorly equity-oriented asset allocation. Italian mutual funds show the lowest percentage of assets invested in equity (20.6 per cent). An opposite situation happens in the UK, where not only institutional investors manage important amount of resources but they are also characterised by a high propensity to equity (74.1 per cent for mutual funds).

6.2 Households' participation in the stock market

Aggregate data provide an average picture, but the demand for equity is characterised by a peculiar distribution among the population. For this reason it is important to understand how many households, in each country, decide to enter the stock market. Table 7 provides a list of empirical evidence that it has been possible to collect. Important methodological issues arise when dealing with this topic. Differences could be due to the timing of the survey, to the choice of the reference sample (that could be representative of households, total population or population over a certain age), to the definition of shareholding (that could refer to listed or unlisted companies, domestic or also foreign companies). Furthermore, not all surveys provide participation rates for both direct and indirect shareholding. Finally, most countries experience also under-reporting problems for wealth-related data.

Bearing in mind all these warnings, some conclusions are still possible. At a first glance, it appears immediately how direct shareholding is not a widespread phenomenon among the population; participation rates, in fact, range from 5 to 30 per cent. This finding is puzzling in the light of traditional economic theory, which would expect higher participation in the stock market due to more favourable differential in equity returns with respect to other asset classes (Ibbotson, 2002). This finding, whose motivations have already been described in the Introduction, is supported also by other analyses indicating



too low participation rates also among the richest part of the population (Guiso, Haliassos and Jappelli, 2003).

Cross-country differences point out that higher levels of participation to the stock market are common in countries with observed higher aggregate demand for equity, like Anglo-Saxon and Northern Europe countries. In the UK 20 per cent of households hold stocks and shares directly, a further 4 per cent may be added if employee stock plans holders are included; in the US the situation is similar reaching 24.8 per cent of households holding stocks directly, including employee stock plans; this percentage grows to 49.7 per cent if indirect ownership through equity mutual funds is included. The total count of heads is impressive, reaching 30 millions of households. Among Northern Europe countries, in Denmark 28.0 per cent of households hold stocks directly; in Sweden the percentage is equal to 19.5 per cent but is limited to direct ownership of listed Swedish stocks with further 8.2 per cent due to indirect ownership through equity mutual funds. Continental Europe countries range from 5.0 per cent of Belgian households and 5.9 per cent of German adult population with direct ownership of stocks to 23.0 per cent of French households. The French percentage concerns direct ownership of listed and unlisted stocks, including employee stock plans, and reduces to 14.5 per cent if it considers adult population holding listed stocks, including employee stock plans. All other countries are in an intermediate position. Japan shows the highest participation rate but serious methodological issues suggest an overestimation of this indicator.

With respect to Italy, many sources try to depict the overall situation, with a participation rate ranging from 7.1 to 13.6 per cent. Higher numbers are obtained when shareownership is not referred to a fixed point in time but to a wider period¹⁶ or when there is correction for under-reporting problems. Despite the indicator used, the conclusion is that Italian participation rates are in line with Continental Europe ones.

(16) This choice is motivated by the fact that a static picture could lose situations in which a person does not have a stock temporarily, for cyclical reasons or for high frequency trading activity often characterised by selling the whole portfolio at the end of each day (Franzosi, Grasso and Pellizzoni, 2005).



Table 7 - Households' participation in the stock market

Country	Participation rate	Year	Methodological issues	Source of data
Italy	12.4%	2003	Households (2.77 millions). Direct ownership of listed stock at the interview (11.9% only Italian listed stocks). Further 8.1% through mutual funds.	Borsa Italiana (2004) - 'Investitori retail e Borsa'.
	7.2%	2004	Households (1.6 millions). Direct ownership of listed and unlisted stocks.	Banca d'Italia (2006) - 'I bilanci delle famiglie italiane nel 2004'.
	13.6%	2004	Households (3 millions). Direct ownership of listed and unlisted stocks.	D'Aurizio et al. (2006) on Banca d'Italia (2006) data corrected for taking into account under reporting problems.
	7.1%	2007	Direct ownership of listed stocks.	Gfk Eurisko (2008) 'Indagine Multifinanziaria Retail 2007'.
France	23.0%	2004	Households (10.6 millions). Direct ownership of listed and unlisted stocks, including employee stock plans.	INSEE (2004) - 'Patrimoine 2004'.
	14.5%	2006	Population older than 15 years (6.7 millions). Direct ownership of listed stocks, including employee stock plans.	TNS/BANQUE DE FRANCE/EURONEXT (2006) - 'Les porteurs de valeurs mobilières en France en 2006'.
Germany	5.9%	2006	Population older than 14 years (4.24 millions). Direct ownership of stocks, including employee stock plans.	Deutsches Aktieninstitut (2006).
Spain	10.8%	2002	Households (1.5 millions). Direct ownership of listed stocks.	Banco de Espana (2004) - 'Encuesta Financiera de las Familias'.
Belgium	5.0%	2000	Households (0.22 millions). Direct ownership of stocks.	Deutsches Aktieninstitut (2002) quoted in Giannetti and Koskinen (2005).
Netherlands	13.5%	2003	Households (0.95 millions). Direct ownership of listed and unlisted stocks, excluding stocks held as part of the business.	DBN Household Survey (2003) quoted in Guiso, Sapienza and Zingales (2005).
Denmark	28.0%	1998	Households (0.64 millions). Direct ownership of stocks.	WFE (1999) 'Share Ownership Survey' quoted in Giannetti and Koskinen (2005).
Sweden	19.5%	2006	Population (1.76 millions). Direct ownership of listed Swedish stocks; further 8.2% indirect ownership through equity mutual funds.	Statistics Sweden (2007) - 'Ownership of shares in companies quoted on Swedish Exchanges'.
Switzerland	18.2%	2006	Population (1.33 millions), survey conducted among household financial decision-makers. Direct ownership of stocks; 20% including employee stock plans.	Swiss Bank Institute. University of Zurich (2006) - Equity Ownership in Switzerland 2006.
UK	22.0%	2002	Adults (10.1 millions). Direct ownership of stocks and shares (10% only privatised or demutualised; 12% shares not privatised or demutualised).	ProShare (2002) - 'Private Share Ownership in Britain 2002'.
	20.0%	2006	Households (4.9 millions). Direct ownership of stocks and shares including being Members of a Share Club, excluding employee stock plans (4%).	Department for Work and Pensions (2006) - 'FRS Family resources survey'.
US	20.4%	2005	Households (23.3 millions). Direct ownership of stocks, excluding employees stock plans.	SIA (2006) - 'Equity ownership in America'.
	24.8%	2005	Households (28.4 millions). Direct ownership of stocks, including employees stock plans; 49.7% including indirect ownership through equity mutual funds.	SIA (2006) - 'Equity ownership in America'.
Japan	29.8%	2006	Individuals (38 millions). Direct ownership of stocks listed on TSE. Duplications due to holdings of more than one kind of stocks are possible.	TSE (2006) - 'Shareownership survey'.



7. Conclusions

Nowadays financial assets owned by households involve relevant and growing amount of resources. Total household financial wealth in the countries under analysis adds up to more than €65 trillion of which 37 per cent is invested in equity. Over the last ten years, demand for equity has increased in many countries bringing more risk in household portfolios and changing economic relationships among investors, intermediaries and companies. This has been true in particular for the countries previously characterised by portfolios with a lower propensity for equity. Despite the increasing integration of international financial markets, households' financial portfolios and listed companies' shareownership still reveal important differences at country level. A convergent trend toward more similar structures has not clearly appeared till now.

In Anglo-Saxon countries there is the highest level of participation into the stock market. Almost 50 per cent of US households have shares in their portfolios, while in Continental Europe this percentage ranges from a minimum of 6 per cent for the German adult population to a maximum of 23 per cent for French households. In Italy direct shareownership regards about 10 per cent of households. In terms of financial wealth invested in stocks, the weighted average of 37 per cent ranges from 47 per cent for the US to 18 per cent for Japan (because of the high role of liquidity), with European countries halfway (due to a major preference for bonds). Finally, domestic households hold directly from 26 per cent of domestic market capitalisation in Italy to 5 per cent in Norway. Households together with collective investment hold respectively 86 and 63 per cent of US and UK listed companies.

The cross-country comparison highlights that high household shareholding is very often associated with high equity-oriented economies, e.g. large stock markets with companies having a public ownership model, or with deep institutionalisation of savings. These factors are both present in the US and in the UK, resulting in a high propensity for equity by households in terms of participation rates and assets invested directly or through an equity oriented asset allocation by institutional investors. Usually these countries are also characterised by a high level of home bias in equity investments. In the case of the UK, for example, more than 30 per cent of assets managed by the asset management industry are invested in UK listed stocks. Satisfactory levels of equity demand are observed in countries with mature private pension funds systems, such as the Netherlands, Sweden and Denmark. France benefits from a developed insurance sector.

Italy has a peculiar situation. In fact, households' demand for equity has not found any support either in a large domestic stock market and listed companies with a public-type ownership structure, or in the important role of institutional investors. In spite of this situation, demand for equity in Italy, while remaining lower than the Anglo-Saxon one, is not feeble. The direct shareownership of listed domestic companies is in fact noteworthy, weighting more than 7 per cent of total households' financial assets and more than 25 per cent of the total domestic market capitalisation. This relative favour for direct equity demand seems to be a long lasting situation destined to remain at least in the short term. Mutual funds' role has been stuck since the beginning of this century and pension funds



are expected to grow after the recent reforms although their weight on the domestic equity market is estimated to remain below 1 per cent for many years.

For the near future a further increase of equity in non Anglo-Saxon countries asset allocation is expected, even if not following a continuous convergence path. Furthermore, it is worthy to observe that participation in the stock market is not yet a widespread phenomenon among households: most of them do not invest in stocks, even among the richest part of the population. It means that there is still a high potential for the spread out of equity holding and, through it, savings access to enterprises.

The relationships among financial markets actors will change. The introduction in Europe of MiFID is putting more emphasis on processes between investors and intermediaries, in particular in terms of transparency for contents and prices of proposed services. Pension reforms in Continental Europe will provide a boost to private pension savings. By consequence, it will change households' portfolio composition in favour of managed assets and it will focus more on long term savings needs. Integration process in the banking sector of some countries will continue, with a rationalisation of services, driving more competition and a cost reduction for retail clients together with new products availability, such as hedge funds. Finally, the distribution of personal wealth among households and the way it is allocated to maximize financial returns are becoming more important, playing a crucial role in cushioning individuals against life cycle uncertainties (unemployment, health, education and old-age income levels). Wealth will increasingly contribute, together with labour income, to delineate the living standards of a country.

With particular reference to Italy, the relationship between financial market and private retail investors has to be further developed under many aspects. The retail trading activity has to be carefully managed by intermediaries so as to be considered sustainable from the investors' point of view. Financial institutions that almost fully intermediate investors in their asset allocation decisions, should improve the balancing of returns and risks in the services offered. From the listed companies side, huge space is still available for improving the relationship with their retail shareholders, too passive till now. They should become more conscious of the potential benefits deriving from a more managed relationship with their retail shareholders; a strong link could make the ownership base more stable and be the starting point for fidelization programs.

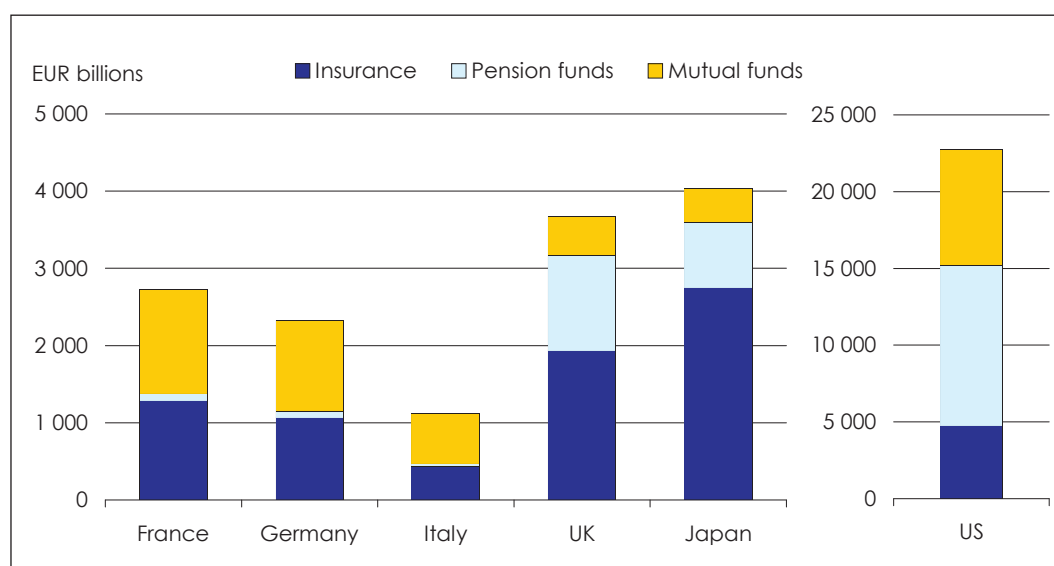
All this goes through more general financial education and information. Education has to be finalised to improve financial knowledge in order to enable investors to be fully aware of their financial decisions. Information has to be assured to all investors. In order to be effective it has to be clear, simple and easy to access.



Appendix - Asset management industry in some selected countries

This Appendix provides more details on the asset management industry (mutual funds, pension funds and insurance companies) for France, Germany, Italy, the UK, the US and Japan. As an aggregate, in these countries almost €36,700 billion are managed by institutional investors; the US are far the most important financial centre with about €22,800 billion, followed by Japan and the UK, respectively around €4,000 and €3,700 billion. Each country has strong peculiarities. Pension funds are largely the most important institutional investor in the US and are characterised by an asset allocation strongly biased in favour of domestic equity. Insurance companies play a primary role in Japan, with important investments in the bond market. In the UK, both pension funds and insurers are significant; in general the industry fuels domestic equity market due to a strong attitude toward equity investment as a whole and domestic one in particular. This is especially true for pension funds. Mutual funds are, together with insurance companies, relevant in Continental Europe, where private pension funds are small and at their very early stage of development. In these countries, institutional investors' asset allocation is more oriented in favour of fixed income products.

Figure A1 - Assets managed by country and institutional investors (end 2005)



Elaboration on data by EFAMA (2006), OECD (2006), various national collective investment associations

1. France

French asset management industry has progressively consolidated over the last ten years, reaching €2,734 billion under management in 2005. Mutual funds manage almost a half of these resources, €1,349 billion; insurance companies and pension funds manage respectively €1,285 and €100 billion.

French mutual funds industry has progressively expanded becoming the first one in



Europe with a market share of 21.8 per cent in terms of funds managed (followed closely by the United Kingdom and Germany, with respectively 18.0 and 17.9 per cent) and 20.0 per cent in terms of funds domicile (led by Luxembourg, 23.9 per cent)¹⁷. Almost 86 per cent of assets are managed through home-domiciled UCITS compliant funds; non-UCITS (8.6 per cent) or roundtrip funds (5.8 per cent) are a minor phenomenon in France.

Table A1 - French mutual funds industry structure (end 2005)

	AUM (EUR billions)	%
Home-domiciled UCITS	1 155.0	85.6%
- Equity	317.5	27.5%
- Bond	181.0	15.7%
- Balanced	250.9	21.7%
- Money market	389.5	33.7%
- Fund of funds	-	-
- Fund of hedge funds	16.2	1.4%
Home-domiciled non-UCITS	116.1	8.6%
Funds domiciled abroad and promoted by national providers (roundtrip)	78.0	5.8%
Total	1 349.1	100%

Elaboration on data by EFAMA (2006)

Assets managed in equity-oriented funds, that is equity, balanced and funds of alternative investments (fund of hedge funds with equity in their portfolios) account altogether for a half of total assets under management by home-domiciled UCITS funds. They totally manage €584.6 billion, according to these relative proportions: equity funds (54.3 per cent), balanced funds (42.9 per cent) and fund of hedge funds (2.8 per cent). The number of pure equity funds at the end of 2005 is 1,952 and they manage €317.5 billion. About a third of French equity funds are specialised in international equity, another 20 per cent in shares issued by domestic companies and another 20 per cent on shares issued by euro-area companies. The remaining part is represented by mutual funds specialised on shares issued by EMU countries and other kinds of equity funds. Also money market funds benefit from strong demand, especially from companies and institutions which consider them as a cash investment vehicle, accounting for 33.7 per cent. Fixed income funds represent the remaining 15.7 per cent.

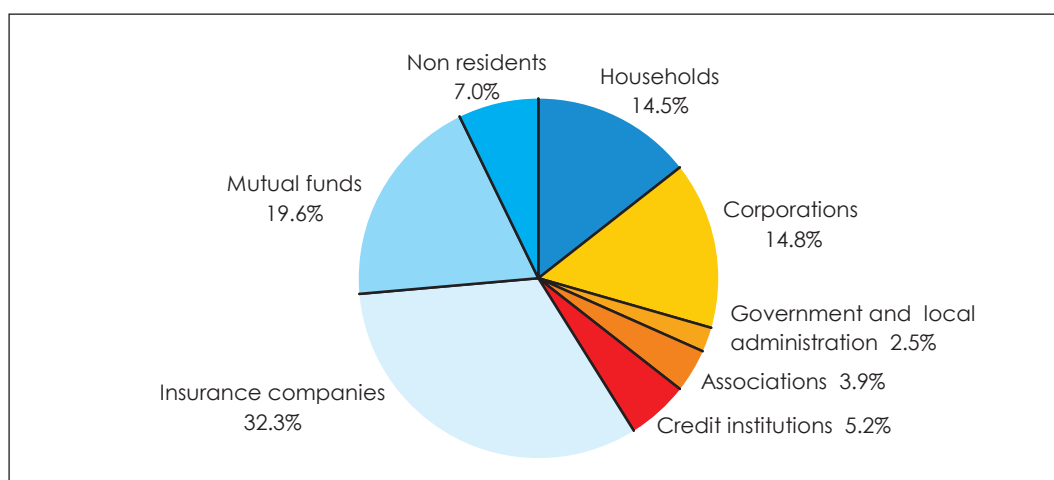
The ownership of French mutual funds has been relatively stable since 2000. As shown in Figure A2, at the end of 2005 French mutual funds are primarily held by domestic institutional investors, which in France mainly consist of insurance companies, accounting altogether for more than half (52.0 per cent). Households hold directly 14.5 per cent. With reference to households' financial assets, AFG estimates that about 10 per cent are invested in mutual funds via life insurance companies (8 per cent of which are equity, balanced and guaranteed UCITS), about 2 per cent via PEA (Plan d'Épargne en Action) and another 8 per cent directly. Such a considerable role of both households and institutional investors in the ownership structure of French mutual funds industry, called 'instividuals', is becoming

(17) Market shares refer to September 2006 (AFG, 2007).



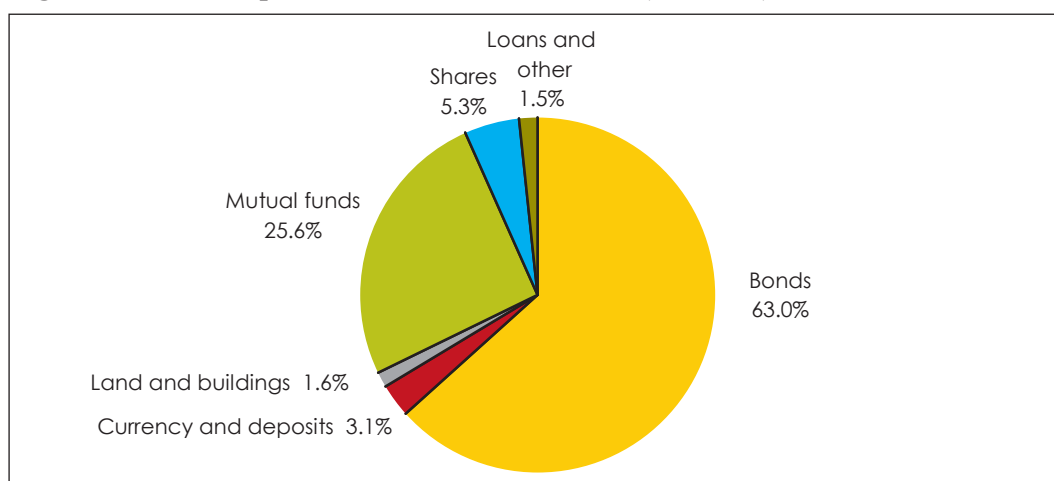
increasingly important and widespread. Finally, corporations hold 14.8 per cent while 7.0 per cent of assets under management are held by non residents. French mutual funds industry is made up of about 500 asset management companies and it is very diversified, consisting of many entrepreneurial firms and asset managers subsidiaries of banks, insurance companies, financial and asset management groups, French and foreign¹⁸. The top 5 players manage about 50 per cent of total assets under management. Foreign players are also gradually entering the French market, either by acquiring existing local managers, by setting up new management companies, by establishing local distributors or by selling through independent channels (EFAMA, 2006).

Figure A2 - Owners of French mutual funds (end 2005)



Elaboration on data by EFAMA (2006)

Figure A3 - French pension funds asset allocation (end 2005)



Elaboration on data by OECD (2006)

(18) The traditional business model for distributing funds in France is changing. The value chain manager-distributor is becoming less integrated. Managers are no longer managing funds only for their parent company distribution network but also for other distributors or investors. At the same time, distribution channels are selling not only the funds managed by their asset management subsidiary but also funds managed by other entities (AFG, various documents).

At the end of 2005 in France, as in Italy, Spain or Germany, public pensions still play a major role in the old-age retirement system, while private pension plans have been introduced and promoted only in the last decade. In December 2005 pension funds manage about €99.5 billion, accounting for about 6 per cent of GDP. Figure A3 shows the dominant weight that bonds play in French pension funds' portfolio: these financial instruments represent more than 60 per cent of total assets under management. It is remarkable the incidence of mutual funds, accounting for almost 26 per cent, while shares represent only 5.3 per cent.

Insurance industry in France is a well-established sector, with a long and consolidated tradition managing €1,285 billion, of which 1,128 belonging to life-insurance and 157 to non-life. In 2005 French insurance companies have collected a total volume of premiums (life and non-life) for €178.8 billion, with a total penetration as percentage of national GDP of 10.1 per cent (Sigma and SwissRE, 2006). Life-insurance channel account for almost 66.5 per cent of premiums collected, while non-life premiums represent the remaining 33.5 per cent. French insurance industry is the fourth in Europe for life-sector premiums collected and the fifth for non-life ones. A relevant part of French insurance companies' assets are still invested in bonds and fixed income mutual funds (FFSA, 2007): 67.3 per cent considering the industry as a whole (life and non-life sectors). Shares and equity mutual funds account for another 26.2 per cent. The remaining part of insurance companies investments is distributed among real estate investments, loans, cash and deposits.

2. Germany

In Germany the asset management industry manages €2,329 billion, almost equally divided between mutual funds and insurance companies, while pension private funds continue to play a marginal role.

In detail, at the end of 2005 German home-domiciled mutual funds referable to a German provider totally manage €1,175 billion. The structure of the German mutual funds industry is characterised, as the Italian case, by the presence of funds domiciled abroad but promoted by domestic providers, also known as roundtrip mutual funds. Since 2000 this category of funds has expanded its market share, managing about 18 per cent of total assets under management (€208.2 billion). Germany-registered mutual funds - either UCITS compliant or not - account for the remaining 82 per cent of the industry, with a sharp prevalence of non-UCITS funds (€704.8 billion towards €262.4 billion handled by UCITS funds). This is the second important feature of the German industry, as described in Table A2.

**Table A2 - German mutual funds industry structure (end 2005)**

	AUM (EUR billions)	%
Home-domiciled non-UCITS	704.8	60.0%
Home-domiciled UCITS	262.4	22.3%
- Equity	120.4	45.9%
- Bond	78.5	29.9%
- Balanced	18.9	7.2%
- Money market	31.9	12.2%
- Fund of funds	10.8	4.1%
Other	1.9	0.7%
Funds domiciled abroad and promoted by national providers (roundtrip)	208.2	17.7%
Total	1 175.4	100.0%

Elaboration on data provided by EFAMA (2006)

Among home-domiciled UCITS funds, mutual funds specialised in equity investment manage almost half of total assets (€ 120.4 billion, corresponding to 45.9 per cent); they are followed by fixed income funds (29.9 per cent), balanced funds (7.2 per cent) and money-market funds (12.2 per cent). Equity funds represent the largest category also in terms of number of funds, equal to 500 at the end of 2005. As shown in Table A3, the German non-UCITS market mainly consists of property funds, hedge funds and a particular type of mutual funds, commonly known as *spezialfonds*. The subscription of *spezialfonds* is only allowed to institutional investors. After the expansion experienced till 2003, property funds have progressively slowed down representing 12 per cent of the assets managed by non-UCITS in 2005 while hedge funds still play a minor role in Germany. The considerable amount of resources managed by non-UCITS funds has to be almost completely attributed to *spezialfonds*, which manage € 619.1 billion accounting for 87.8 per cent of non-UCITS assets.

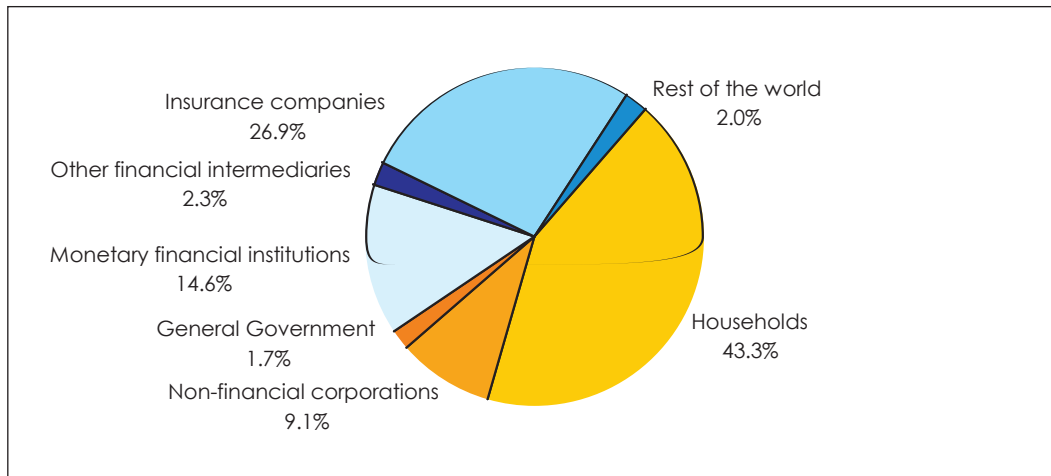
Table A3 - Non-UCITS home-domiciled mutual funds (end 2005)

	AUM (EUR billions)	%
Real estate	85.2	12.1%
Alternative management	0.564	0.1%
- Hedge funds	0.232	41.1%
- Fund of hedge funds	0.332	58.9%
Spezialfonds	619.1	87.8%
Total	704.8	100.0%

Elaboration on data by EFAMA (2006)

As Figure A4 shows, at the end of 2005 households are the main owners of home-domiciled and roundtrip mutual funds (43.3 per cent of assets under management). Insurance companies account for 26.9 per cent while 16.9 per cent is held by other financial or monetary financial institutions. Among others, with a minor role, it is possible to mention non-financial corporations (9.1 per cent), non-residents (2.0 per cent) and general government (1.7 per cent).

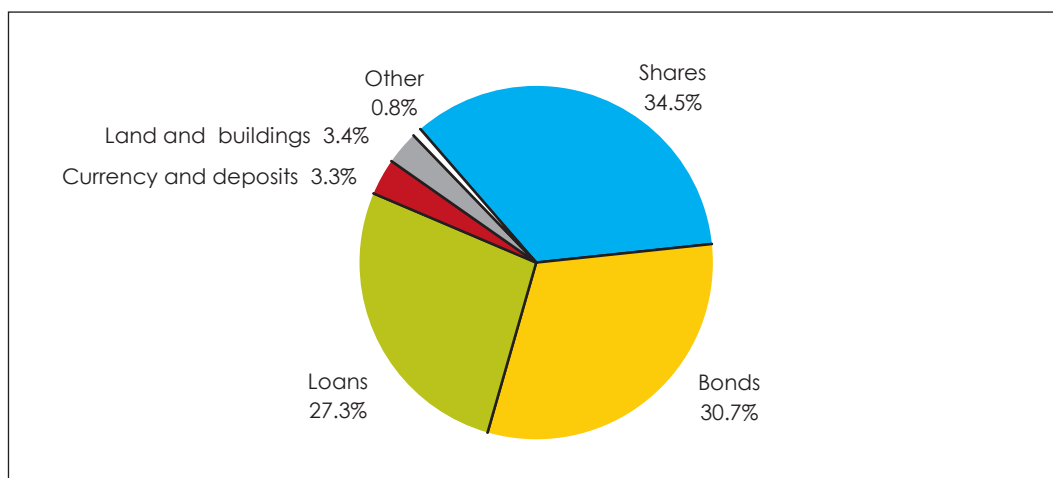
Figure A4 - Owners of German mutual funds (end 2005)



Elaboration on data by Deutsche Bundesbank (2006)

For what concerns the private pension market, at the end of 2005 German pension funds industry is not particularly widespread, managing €87 billion, although it is expected to grow in the next years due to the post-2000 pension reforms. German pension funds' asset allocation accounts equity investment for 34.5 per cent of total assets under management, immediately followed by bonds (30.7 per cent, of which 4.3 per cent issued by public administration while the other 95.7 per cent by private sector) and loans (27.3 per cent, a very high proportion if compared to other countries). The split between government and corporate bonds appears peculiar with respect to other OECD countries, where public sector bonds comprise a significant portion of the combined bond holdings. As shown in Figure A5, the remaining resources are distributed between money-market instruments, land and buildings and other investments, which altogether represent 7.5 per cent of assets under management.

Figure A5 - German pension funds asset allocation (end 2005)



Elaboration on data by OECD (2006)



In Germany insurance sector appears mature and well-established, with a total amount of financial resources managed (life and non-life) equal to €1,067 billion at the end of 2005. In 2005 Germany ranks fifth worldwide in terms of premiums collected, which amount to €158.7 billion (72.6 on behalf of life-insurance policies and 86.1 on behalf of non-life insurance). As a matter of fact, about a third of total assets under management are invested in equity instruments, specifically shares and other participations (14.2 per cent) and mutual funds shares (21.4 per cent). The rest is mainly allocated among bonds for about 30 per cent and loans for 29.0 per cent. Cash and deposits, land and buildings account respectively for 1.2 and 2.0 per cent (GDV, 2006).

3. Italy

In Italy the asset management business accounts for €1,636 billion at the end of 2005. Mutual funds manage about €654 billion, pension funds €30 billion and insurance companies €439 billion. The remaining €513 billion include other institutional financial services providers such as individual asset management schemes (Banca d'Italia, 2006). At the end of 2005 the dimension of the asset management industry considered as a whole reveals to be smaller than in other developed countries, reflecting in particular a minor incidence that insurance and pension funds still have in Italy.

The industry of mutual funds represents about 40 per cent of the total outstanding assets and it is dominated by funds provided by management companies belonging to the largest Italian banking and insurance groups. As shown in Table A4, about 60 per cent of total assets refers to home-domiciled funds, 27.8 per cent to roundtrip funds and 8.4 per cent to foreign funds.

Table A4 - Italian mutual funds industry structure (end 2005)

	AUM (EUR billions)	%
Home-domiciled non-UCITS⁽¹⁾	33.5	5.1%
Home-domiciled UCITS	381.9	58.4%
- Equity	78.6	20.6%
- Bond	146.1	38.3%
- Balanced	85.7	22.4%
- Money market	71.6	18.7%
- Fund of funds	-	-
Other	-	-
Funds domiciled abroad and promoted by national providers (roundtrip)	182.8	28.0%
Funds domiciled abroad and promoted by foreign providers	55.8	8.5%
Total	654.0	100.0%

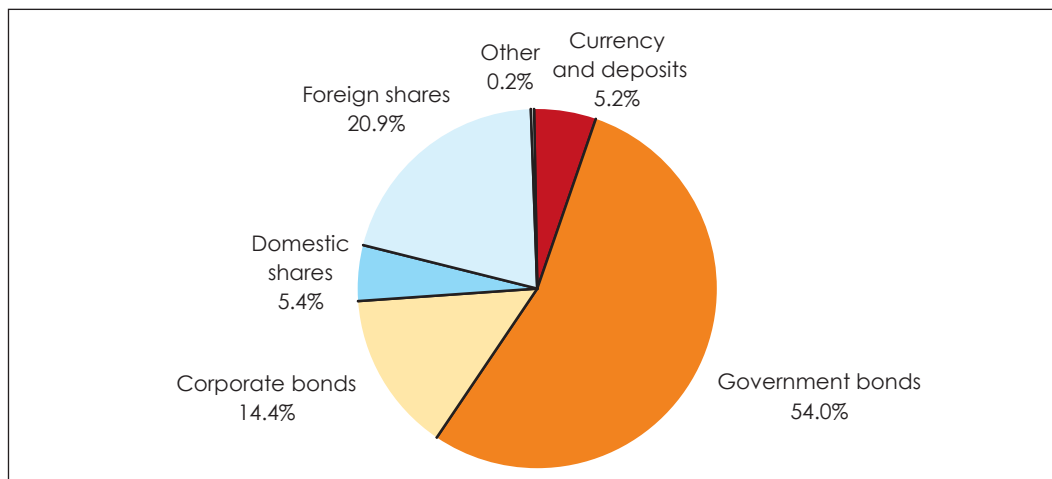
(1) Fund of funds and close-ended funds are included in home-domiciled non-UCITS mutual funds. Elaboration on data by Assogestioni and EFAMA (2006)

Recently, most of the new subscriptions have concerned roundtrip and foreign funds, which altogether account for more than a third of the whole industry, while home-domiciled funds have experienced significant redemptions of resources. Italian-based mutual fund industry is dominated by bond funds (almost 40 per cent), immediately followed by

balanced and equity ones (respectively 22.3 and 20.5 per cent). As it is possible to evince from Figure A6, the overall investment of mutual funds distributed in Italy appears to be biased in favour of corporate and government bonds, which represent more than two thirds of their resources. Another 26.3 per cent consists of shares while the remaining part is mainly made up of currency and deposits (5.2 per cent). A complete breakdown of Italian mutual funds owners is not available, but Assogestioni (2005) estimates that about 50 per cent of assets are directly held by Italian households. About 61 per cent of owners (considered as a whole) hold shares of only one mutual fund, and the average amount invested is €34,700.

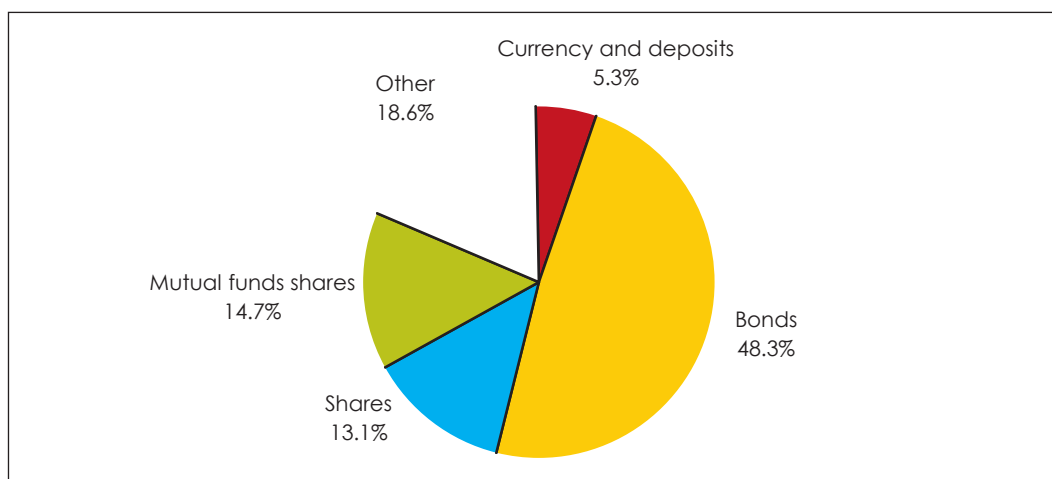
Finally, at the end of 2005 the Italian mutual fund industry is highly concentrated: the first 5 players represent more than 50 per cent of the total assets managed.

Figure A6 - Italian mutual funds asset allocation (end 2005)



Elaboration on data by Assogestioni

Figure A7 - Italian pension funds asset allocation (end 2005)



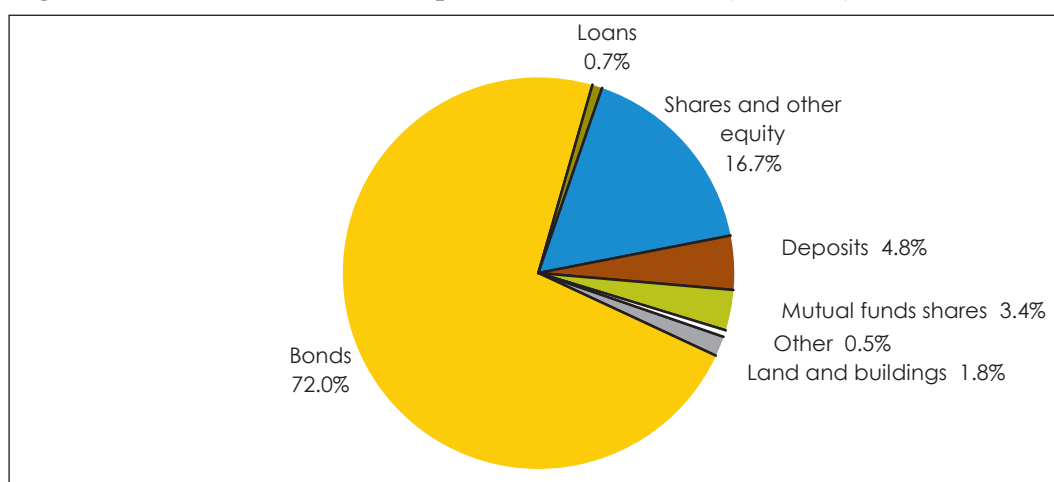
Elaboration on data by Covip (2006)



As already pointed out, during the year 2005 a further reform of the Italian pension system has been approved (Legislative Decree n.252/2005) and enforced in January 2007. This reform is intended to pave the way for the take-off of the second-pillar, consisting of pension funds, either open-ended or close-ended, for private sector employees.

As already seen for mutual funds, also Italian pension funds' overall asset allocation is dominated by fixed income instruments: bonds account for 48.3 per cent of total assets. The other half of assets outstanding is divided between shares (18.6 per cent), mutual funds shares (14.7 per cent), currency and deposits (5.3 per cent) and other (18.6 per cent, mainly constituted by land and buildings, which are common in portfolios of pension funds settled before the enforcement of Legislative Decree n. 124/1993, first reform of Italian pension system).

Figure A8 - Italian insurance companies asset allocation (end 2005)



Elaboration on data by Isvap (2006)

At the end of 2005 the Italian insurance business manages about €440 billion of technical reserves, of which 369.9 belonging to life insurance and 69.0 to non-life one. For what concerns investments (Figure A8) bonds, to which 72.0 per cent of total resources is destined, are followed by shares and other equity (16.7 per cent), deposits (4.8 per cent), mutual funds shares (3.4 per cent) land and buildings (1.8 per cent) and loans (0.7 per cent). During 2005 Italian insurance industry has collected premiums for €109.8 billion (73.5 life-insurance and 36.3 non-life insurance policies). The aggregate market share of the top five players of the Italian insurance industry is about 60 per cent.

4. Japan

Japanese asset management industry ranks second worldwide reaching about €4,200 billion of assets managed, with a strong importance of the insurance sector. This amount includes also close-end funds and ETFs (€200 billion).

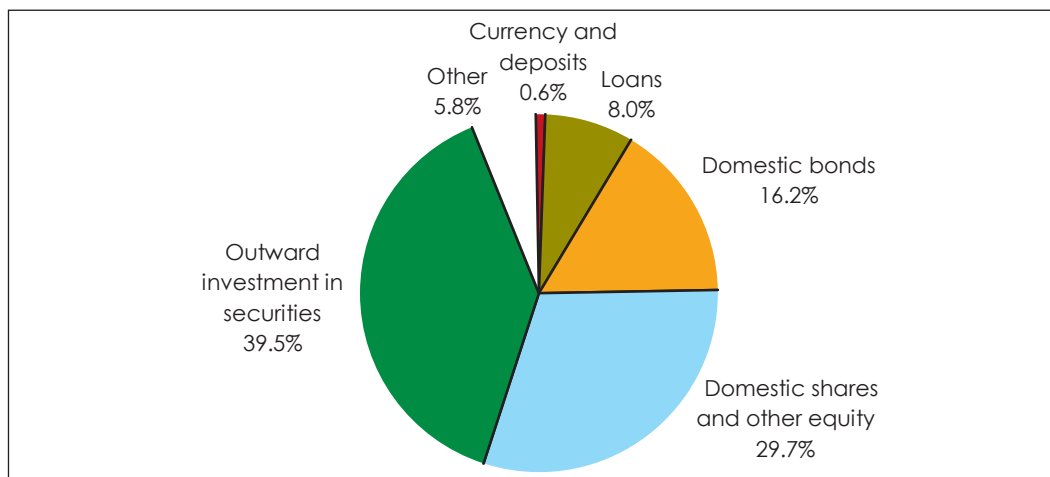
Table A5 - Japanese mutual funds industry structure (end 2005)

	AUM (EUR billions)	%
Home-domiciled		
- Equity	293.9	66.7%
- Bond	82.8	18.8%
- Balanced	-	-
- Money market	21.7	4.9%
- Fund of funds	42.5	9.6%
- Other	-	-
Total	440.9	100.0%

Elaboration on data by EFAMA (2006)

Japanese home-domiciled mutual funds industry manages €441 billion at the end of 2005. The industry is dominated by equity funds, which account for 66.7 per cent of the total assets, followed by funds specialised in bonds (18.8 per cent); other resources are distributed between fund of funds (9.6 per cent) and money market funds (4.9 per cent). Besides being the largest category in terms of managed resources, mutual funds specialised in equity investment are the most numerous (2,308 out of 2,706 of the whole industry).

Figure A9 - Japanese investment trusts asset allocation (end 2005)



Elaboration on data by Bank of Japan (2006)

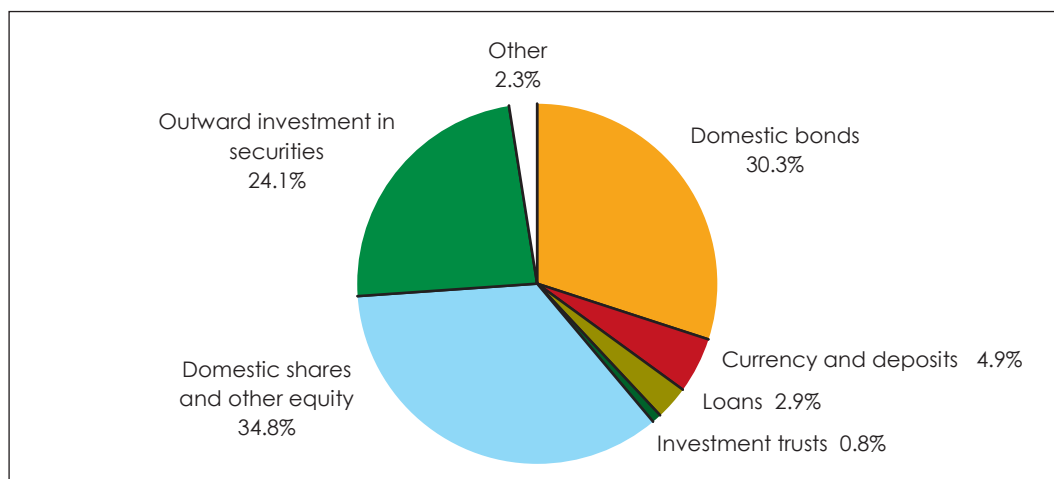
Figure A9 describes how Japanese investment trusts (which include mutual funds for €441 billion and close-end funds and ETFs for the remaining) allocate their financial assets, which amount to €591 billion at the end of 2005. Their asset allocation appears dominated by outward investment securities (39.5 per cent) which substantially are foreign currency denominated stocks and bonds primarily issued in the US. Other asset classes held by Japanese mutual investment trusts are Japanese shares and other equity (29.7 per cent), bonds by Japanese issuers (16.2 per cent), loans (8.0 per cent) and other investments (5.8 per cent).

Japan has a quite solid pension and life insurance market. At the end of 2005 Japanese pension funds manage almost €850 billion of financial assets. As shown in



Figure A10, these assets are mainly invested in Japanese shares and other equity (34.8 per cent). As for mutual funds, pension funds show a quite strong attitude towards financial instruments issued by non residents, in fact outward investment in securities (equity or bonds) represents 24.1 per cent of financial assets held by pension funds. As the domestic interest rates still remain very low, pension funds' managers are continuing global asset diversification.

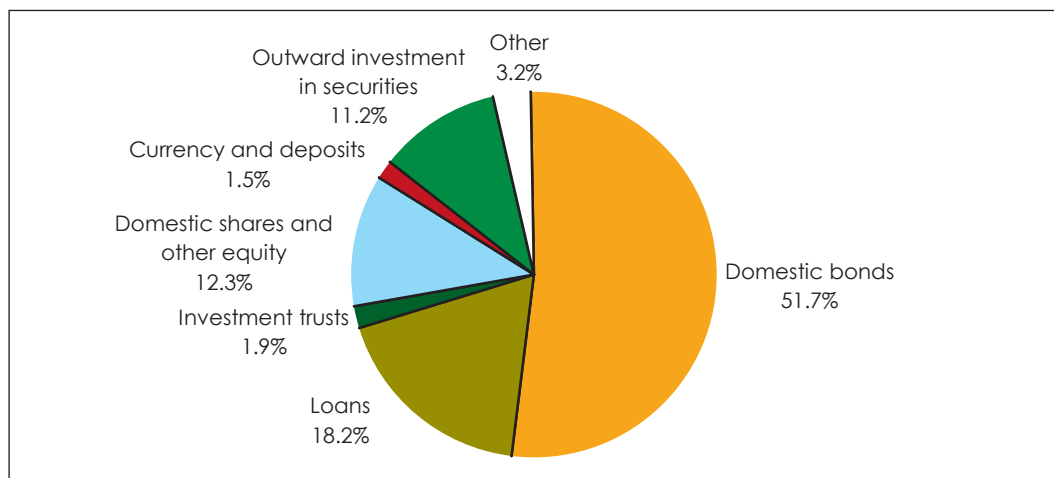
Figure A10 - Japanese pension funds asset allocation (end 2005)



Elaboration on data by Bank of Japan (2005)

It is relevant to notice that two-thirds of Japanese pension plan sponsors are considering to review their asset allocation, with a particular attention to riskier assets such as hedge funds shares. Contrary to the common belief in fact, in the last years 55 per cent of Japanese institutions have invested in hedge funds, with respect to 28 per cent in the US and 10 per cent in the UK (BME Consulting, 2007).

Figure A11 - Japanese insurance companies asset allocation (end 2005)



Elaboration on data by Bank of Japan (2005)



Japanese insurance companies' financial assets amount to €2,748 billion at the end of 2005. The core component of life insurers' total assets are domestic bonds, which represent over 50 per cent of total assets under management. For what concerns premiums collected, about €400 billion by 2005, most of them (78.9 per cent) relate to life-insurance policies (SIGMA and SwissRE, 2005).

5. United Kingdom

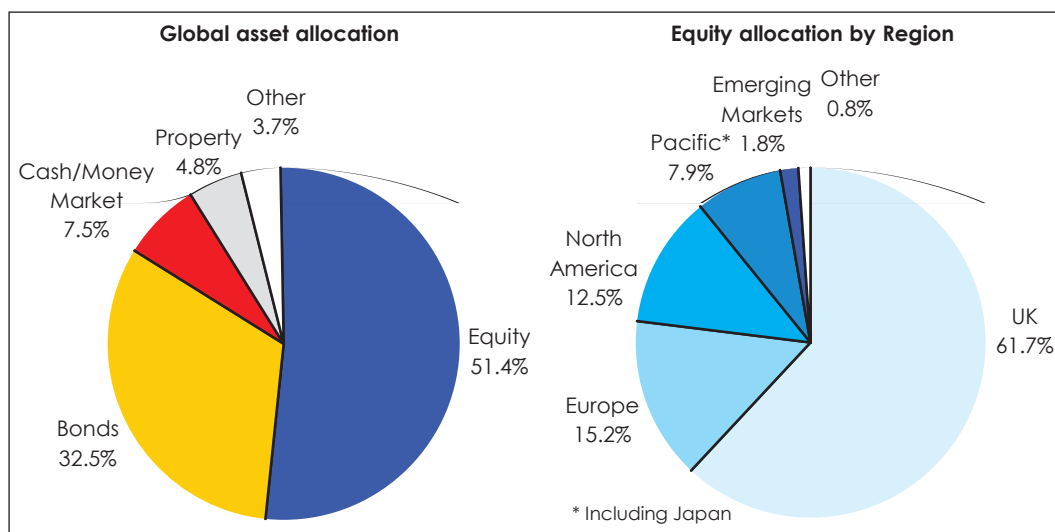
At the end of 2005 the United Kingdom is one of the most developed financial systems in the world. Its financial sector is the largest contributor to UK balance of payments and a major contributor to GDP and employment. Between 1995 and 2005 UK asset management industry experienced a fast growth especially thanks to the high level of sophistication reached by the financial services industry, of which asset management is part. At the end of 2005, assets totally managed and distributed in the UK by Investment Management Association (IMA) members¹⁹ reached €4,000 billion. Mutual funds account for €505 billion, pension funds for €1,234 billion and insurance companies for €1,936 billion. The remaining part consists of other financial institutions such as retail and investment banks (IMA, 2006). In detail, about 80 per cent of these financial resources are invested on behalf of institutional investors, with particular regard to pension funds and insurance companies, while the retail market accounts for the remaining 20 per cent (about €500 billion)²⁰. Assets managed for overseas clients represent about 20 per cent of the total, but this figure seems to underestimate the total importance of overseas business to UK-based industry as many firms serve clients accounts and manage assets in multiple locations all over the world (IMA-Oxera, 2005). More than 80 per cent of asset management is domiciled in the UK, whereas the remaining 20 per cent is domiciled overseas²¹. The choice of a foreign country as legal domicile is generally guided by the search for less rigid regulatory and tax regimes (as it is in Ireland or Luxemburg), and mainly concerns collective investment funds, with particular regard to specialised funds such as hedge funds and money market funds.

A glance to the asset allocation of the UK asset management industry considered as a whole, shows that more than 50 per cent of assets are invested in equities. Bonds account for 32.5 per cent, cash and money market for 7.5 per cent and property for 4.8 per cent. The equity split, using a regional breakdown, highlights that UK equities are predominant (61.7 per cent of assets with more than 400 funds), followed by European and US equity issuers. For what concerns fixed income instruments, the data collected by IMA suggest that about 80 per cent of the total is invested in UK corporate, government and index-linked bonds.

(19) IMA is the UK Investment Management Association. The Association's full membership is made up of 135 companies and includes stand-alone investment management groups, the investment management arms of insurance, retail banks and investment banking groups, independent providers and managers of occupational pension schemes.

(20) Retail assets include UK-managed unit trusts, OEICs (Open-ended individual asset management schemes), investment trusts and other retail products.

(21) IMA estimates that some £200 billion (€291 billion) are managed by firms domiciled in Luxemburg, Dublin and other overseas locations.

**Figure A12 - UK asset management industry (end 2005)**

Elaboration on data by IMA (2006)

At the end of 2005 UK domestic mutual funds (UCITS and non-UCITS) manage €505 billion, of which more than 50 per cent belong to the first 10 companies. The majority of investment funds operating in the UK are UCITS compliant, and their weight seems bound to consolidate in the following years. On the other side, in the last years non-UCITS investment funds market has become progressively smaller, being constantly characterised by high redemptions. Among the different categories in which UK mutual funds industry can be divided into, equity funds are the main class, in terms of both number of funds and resources managed (1,093 funds representing 74.1 per cent of total assets under management). These funds are characterised by a strong home bias, since more than 40 per cent of assets are invested in shares issued by domestic companies. Immediately after domestic issuers, there are European ones, representing about 35 per cent. Investment funds whose asset allocation is dominated by bonds continue to lose importance as a percentage of asset pool, falling to 15.7 per cent of the total assets in 2005. While retail investors prefer equity funds, institutional ones prefer less risky investment funds, such as those specialised in bonds. The UK mutual funds industry is completed by balanced and money market funds, which represent less than 10 per cent of total industry by end-year 2005.

Although official statistics about hedge funds are not available, it is interesting to stress that the UK, with particular reference to London, is the centre of European hedge fund industry, accounting for \$225 billion, three-quarters of European hedge fund investments which amount to \$300 billion at the end of 2005 (IFSL, 2006). Most hedge funds and fund of hedge funds are in fact registered in the UK.

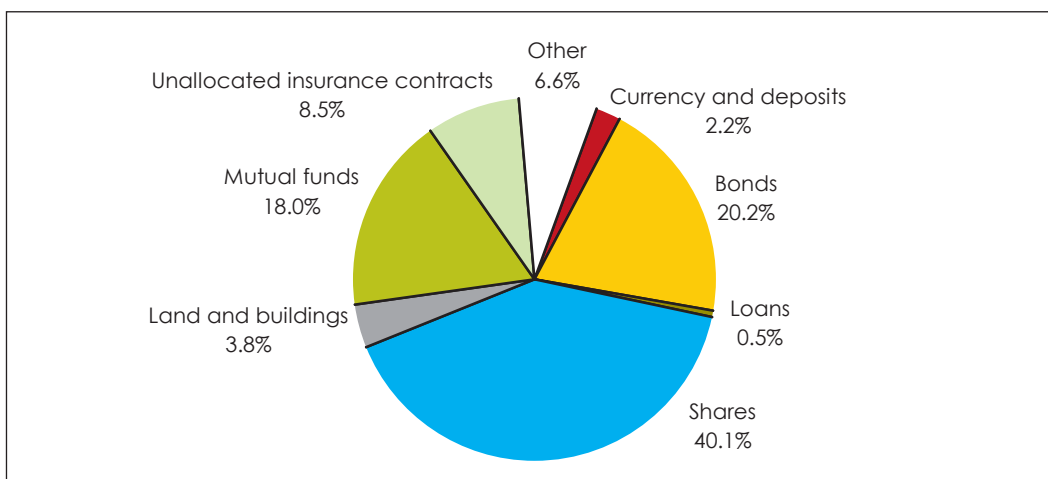
Table A6 - UK mutual funds industry structure (end 2005)

	AUM (EUR billions)	%
Home-domiciled non-UCITS	23.9	4.7%
Home-domiciled UCITS	480.7	95.3%
- Equity	356.4	74.1%
- Bond	75.5	15.7%
- Balanced	37.1	7.7%
- Money market	3.9	0.8%
- Fund of funds	-	-
Other	7.7	1.6%
Total	504.6	100.0%

Elaboration on data by EFAMA (2006)

Pension funds are particularly important in the UK asset management industry, since they have made a major contribution to the growth of asset management as a whole. United Kingdom pension funds industry ranks first in Europe for assets under management, which amount to €1,234 billion at the end of 2005 (OECD, 2006). It represents more than 40 per cent of resources totally managed by pension funds in Europe.

Figure A13 - UK pension funds asset allocation (end 2005)



Elaboration on data by OECD (2006)

UK pension funds asset allocation is concentrated on equity instruments, which account for more than 40 per cent, while fixed income instruments are about 20 per cent, followed by investment funds (18 per cent). As other European pension funds, UK ones hold a very small amount of deposits and liquidity, about 2 per cent at the end of 2005. Other kinds of investments, with particular regard to real estate and unallocated insurance contracts, represent altogether about 17 per cent of assets under management.

The UK confirms its leading role in asset management also for what concerns insurance. UK insurance industry is first in Europe in terms of assets managed which equal to €1,936 billion invested at the end of 2005 (ABI, 2005) and premiums collected (€240 billion in 2005) and third worldwide (after the US and Japan). Premiums collected belong to life-insurance contracts (€159.6 billion) and non-life contracts (the remaining



€80.5 billion). London market, in particular, is the leading market for internationally traded insurance and reinsurance products (IFSL, 2007). At the end of 2005 the UK has the third largest insurance penetration in the world (12.4 per cent premiums as a proportion of GDP, of which 8.9 per cent life-insurance and 3.6 per cent non-life insurance).

A significant part of UK insurance companies' investments are in stocks and shares (listed and unlisted), although they are less exposed to equity than pension funds (about 35 per cent at the end of 2005). Bonds account for about 40 per cent and the remaining assets are divided among unit trusts, property and cash/money market which respectively represent about 10, 7 and 9 per cent (ABI, 2007).

It is interesting to notice that almost one on four of UK insurance companies' net premiums is derived from overseas business (about €46 billion premiums in 2005), confirming the international profile of UK industry. The attractiveness of insurance is also strong as a vehicle of both saving and protection for UK population with a yearly per capita long-term insurance expenditure of €2,600, secondly only to Switzerland (ABI, 2005).

6. United States

The US asset management industry is the largest in the world managing almost €22,800 billion; all mutual funds, pension funds and insurance play an important role.

In particular, the US mutual fund market, with €7,545 billion of assets under management at the end of 2005, is itself the largest in the world, accounting for half of the €15,090 billion of mutual fund assets worldwide.

Table A7 - US mutual funds market (end 2005)^{(1),(2)}

	AUM (EUR billions)	%
Domestic equity funds		45.0%
International equity funds		10.0%
Bond funds		15.0%
Money market funds		23.0%
Balanced/mixed funds		6.0%
Total	7 545.2	

(1) Fund of funds are not included: they amount to €259 billion at the end of 2005.

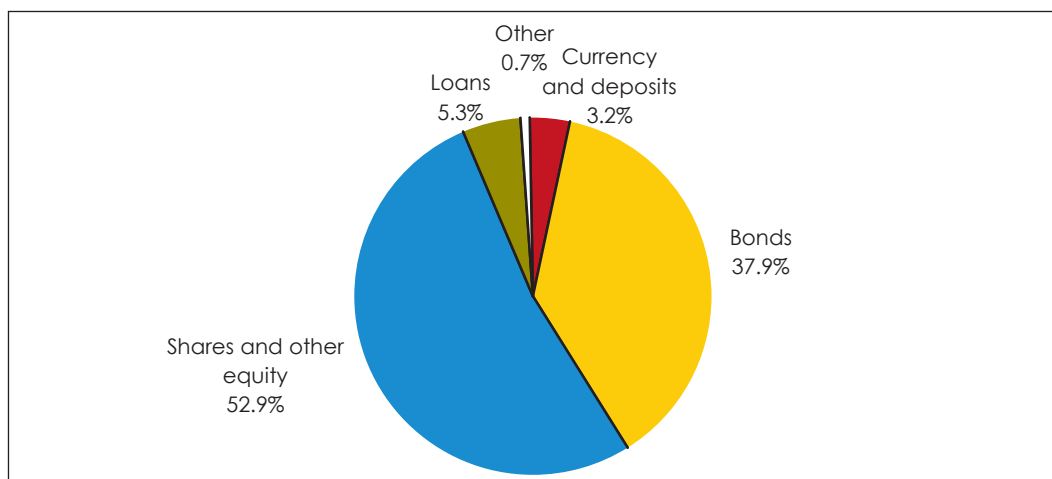
(2) Components may not add to 100 per cent because of rounding.

Elaboration on data by Investment Company Institute (2006)

As shown in Table A7, equity mutual funds represent more than half of the US mutual fund industry in 2005, both in terms of number of funds and assets under management (respectively 4,586 funds and €4,151 billion). Their market share has ranged from 50 per cent to 60 per cent since 1997, with the exception of 2002 when it dropped to around 42 per cent largely owing to the sharp decline in the stock markets. Equity mutual funds can be divided in domestic equity funds, that is mutual funds investing primarily in shares of US-registered companies, and international stock funds. The former typology accounts for 45 per cent of the US total industry assets, while the latter accounts for

another 10 per cent. US mutual funds managers show a quite strong home bias towards domestic shares. Other typologies of funds, such as money market funds (23 per cent), bond funds (15 per cent), and balanced/mixed funds (6 per cent) hold smaller though sizeable portions of total US mutual fund assets as well. The structure of mutual funds' financial portfolio, considered as a whole, is by consequence dominated by equity: shares and other equity account for 52.9 per cent of total assets. The other half of assets is primarily invested in bonds (37.9 per cent), followed by loans (5.3 per cent) and currency and deposits (3.2 per cent). The US retail investors hold, directly or via other institutional investors, about 90 per cent of total mutual fund assets. Other financial institutions, non-profit organisations and other institutional investors hold the other 10 per cent of mutual fund assets. In 2005, nearly 54 million households (about half of all US households) own mutual funds shares (Investment Company Institute, 2006).

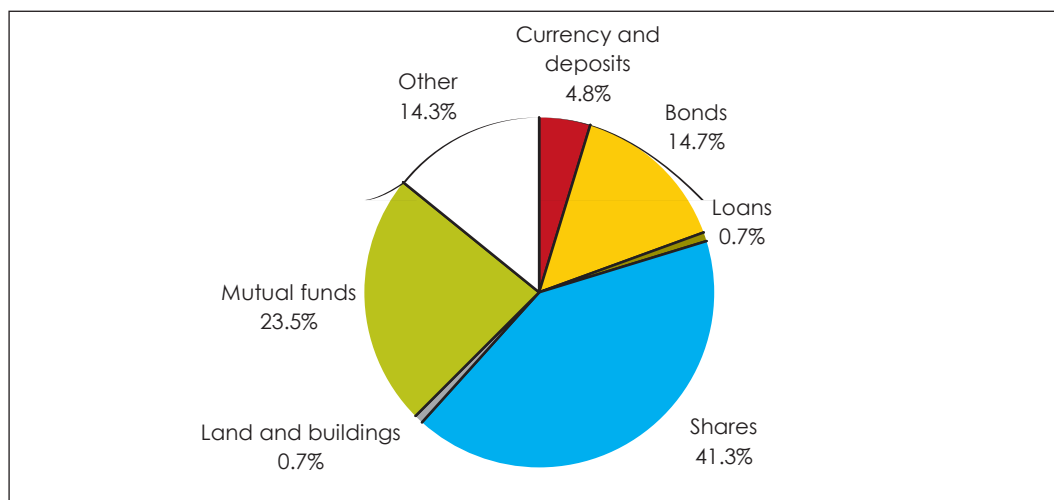
Figure A14 - US mutual funds asset allocation (end 2005)



Elaboration on data by Bank of Japan (2005)

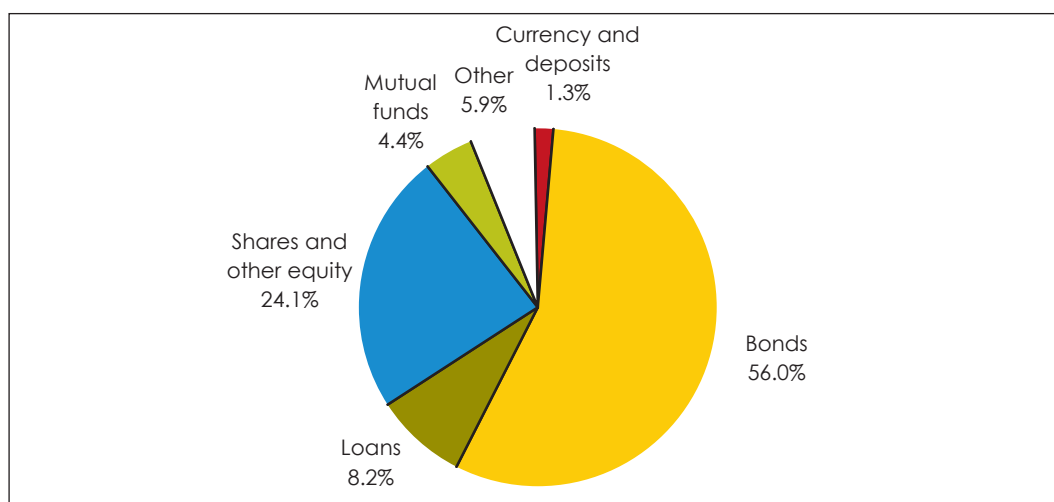
By the end of 2005 the United States have accumulated a large amount of financial pension wealth. Not surprisingly the United States and the United Kingdom have the largest pension markets in absolute value worldwide, as in these two countries private occupational pension plans started decades ago.

For what concerns the structure of pension funds' portfolio, which amount to €10,469 billion, the United States have witnessed a large allocation of pension fund assets to shares, whose weight over total assets has risen to 41.3 per cent at the end of 2005. Partly due to large allocation to shares, bonds do not stand for a significant portion, representing only 14.7 per cent of total resources, while mutual funds share weighs more than 20 per cent. Finally, the US pension funds allocate 23.5 per cent of assets into cash and deposits (OECD, 2006).

**Figure A15 - US pension funds asset allocation (end 2005)**

Elaboration on data by OECD (2006)

The US insurance industry is the largest in the world in terms of financial assets held by insurance companies (€4,748 billion) and premiums volume (€970 billion). About 45 per cent of the premiums collected belong to life-insurance sector, while the other 55 per cent refers to non-life one. Insurance penetration, that is insurance premiums in percentage of national GDP, totally amount to 9.2 per cent. At the end of 2005 the allocation of financial assets held by the US insurance companies is dominated by bonds, which represent more than 50 per cent of total resources. Shares and other equity instruments account for 24.1 per cent, followed by loans (8.2 per cent). The amount of assets invested in mutual funds, on the contrary, is very small (4.4 per cent).

Figure A16 - US insurance companies asset allocation (end 2005)

Elaboration on data by Bank of Japan (2005)

References

- ABI Association of British Insurers (2007), “UK Insurance. Key Facts”, www.abi.org.uk
- Alemanni, B. and A. Franzosi (2006) “Portfolio and psychology of high frequency online traders. Second report on the Italian market”, *BITNotes* n.16, July, www.borsaitaliana.it
- Ang, A., G. Bekaert and J. Liu (2005) “Why stocks may disappoint”, *Journal of Financial Economics*, vol. 76, n. 3, pp. 471-508
- Assogestioni (2005), “Caratteristiche dei sottoscrittori dei fondi comuni aperti. Rapporto Annuale”, December, www.assogestioni.it
- Babeau, A. and T. Sbano (2002), “Household wealth in the National Accounts of Europe, the United States and Japan”, *mimeo*, presented at OECD Meeting of National Accounts Experts, Paris, October, www.oee.fr
- Banca d’Italia (2008), “I bilanci delle famiglie italiane nel 2006”, Supplementi al Bollettino Statistico, anno XVIII, n. 7, January, www.bancaditalia.it
- Banco de Espana (2004), “Encuesta Financiera de las Familias”, *Boletín Económico*, n. 11/2004, www.bde.es
- Bank of Japan (2005), “Flow of funds: Japan and US overview”, www.boj.or.jp
- Bank of Japan (2006) “Guide to Japan’s Flow of Funds Accounts”, Research and Statistics Departments Bank of Japan, www.boj.or.jp
- BME Consulting (2007), “The EU Market for Consumer Long-term Retail Savings Vehicles”, November, <http://ec.europa.eu>
- Cannari, L. and G. D’Alessio (2006), “La ricchezza degli italiani”, Ed. Il Mulino
- CEA Comité Européen des Assurances (2007), “European Insurance in Figures”, *CEA Statistics* n. 24, www.cea.assur.org
- CentERdata Tilburg University (2003), “DBN Household Survey”, <http://www.uvt.nl/centerdata/dhs/>
- Cocca, T., R. Volkart and S. Schmid (2006), “Equity Ownership in Switzerland 2006”, Swiss Bank Institute and University of Zurich (eds.)
- Committeri, M. (2004), “Investire in Italia? Risultati di un’indagine empirica”, *Temi di Discussione della Banca d’Italia*, n. 491, March, www.bancaditalia.it



Covip (2006), “Relazione annuale per l’anno 2005”, www.covip.it

D’Aurizio, L., I. Faiella, S. Iezzi and A. Neri. (2006), “L’under-reporting della ricchezza finanziaria nell’indagine sui bilanci delle famiglie”, Temi di Discussione della Banca d’Italia, n. 610, December, www.bancaditalia.it

De Bonis, R., D. Fano and T. Sbano (2007), “The household aggregate financial wealth: evidence from selected OECD Countries”, *mimeo*, presented at Conference “The Luxembourg Wealth Study: enhancing comparative research on households finance”, Rome, 5-7 July

Deutsches Aktieninstitut (2006), “Deutsches Aktieninstitut Fact Book”, <http://www.dai.de>

Deutsche Bundesbank (2006), “Financial Accounts for Germany: 1991 to 2005”, www.bundesbank.de

Department for Work and Pensions (2006), “FRS Family resources survey”, www.dwp.gov.uk

Draghi, M. (2007), “Household wealth in central bank policy analysis”, *mimeo*, presented at Conference “The Luxembourg Wealth Study: Enhancing Comparative Research on Households Finance”, Rome, 5-7 July

EFAMA (2006), “Fact Book. Trends in European investment funds”, www.efama.org

Euronext, Banque de France and TNS Sofres (2006), “Les porteurs de valeurs mobilières en France en 2005”, www.euronext.com

Farrell, D., S. Lund, C. Folster, R. Bich, M. Pierce and C. Atkins (2008), “Mapping the global capital market. Fourth Annual Report”, McKinsey Global Institute, www.mckinsey.com

FESE (2007), “Shareownership structure”, www.fese.be

FFSA Fédération Française des Sociétés d’Assurance (2007), “L’assurance française en 2006”, www.ffsa.fr

Filippa, L. and A. Franzosi (2001), “Capitalizzazione di Borsa, settori istituzionali e portafoglio retail”, BItNotes n. 2, November, www.borsaitaliana.it

Franzosi, A. and M. Geranio (2007), “Investimenti azionari internazionali di portafoglio: quale ruolo per l’Italia?”, BItNotes n. 18, November, www.borsaitaliana.it

Franzosi, A., E. Grasso and E. Pellizzoni (2004), “Investitori retail e Borsa”, BItNotes n.12, November, www.borsaitaliana.it



GDV German Insurance Association (2006), “Statistical Yearbook of German Insurance 2005”, www.gdv.de

Giannetti, M. and Y. Koskinen (2004), “Investor protection and the demand for equity”, ECGI Finance Working Paper n. 2004/64, www.ecgi.org

Goldstein, A. (2002) “Privatization in Italy 1993-2002: goals, institutions, outcomes, and outstanding issues”, CESifo Working Paper n. 912, www.CESifo.de

Guiso, L., M. Haliassos and T. Jappelli (2001), “Household portfolios”, MIT Press, Cambridge

Guiso, L., M. Haliassos and T. Jappelli (2003), “Household stockholding in Europe”, OEE and Palgrave Macmillan (eds.)

Guiso, L., P. Sapienza and L. Zingales (2005), “Trusting the stock market”, CFS Working Paper n. 2005/27, September

Haliassos, M. and A. Michaelides (2003), “Portfolio choice and liquidity constraints”, *International Economic Review*, vol. 44, n. 1, pp. 143-177, February

Ibbotson Associates (2002), “Stocks, bonds, bills, and inflation 2002 yearbook”, Chicago Ibbotson

IFSL (2006), “Hedge Funds”, City Business Series, March, www.ifsl.org.uk

IFSL (2007), “International Financial Markets in the UK”, May, www.ifsl.org.uk

IMA (2006), “Asset Management Survey 2006”, www.investmentfunds.org.uk

IMA-Oxera (2005), “The future of asset management in UK”, May, www.oxera.org

IMF (2008), “CPIS - Coordinated Portfolio Investment Survey”, www.imf.org

INSEE (2004), “Patrimoine 2004 (Enquête)”, www.insee.fr

Investment Company Institute (2006), “Investment Fact Book”, www.icifactbook.org

Kahneman, D. and A. Tversky (1974), “Judgment under uncertainty: heuristics and biases”, *Science*, vol. 185, n. 4158, pp. 1124-1131

Kahneman, D. and A. Tversky (1979), “Prospect Theory: an analysis of decision under risk”, *Econometrica*, vol. 47, pp. 263-291

Kahneman, D. and A. Tversky (1991), “Loss aversion in riskless choice: a reference dependent model”, *Quarterly Journal of Economics*, vol. 106, pp. 1039-1061.



Loomes, G. and R. Sudgen (1982), “Regret theory: an alternative theory of rational choice under uncertainty”, *The Economic Journal*, n. 92, pp. 805-824

OECD (2003), “Economic Surveys. Italy”, vol. 2003/13, August

OECD (2006), “Pension market in focus”, OECD, Issue 3, October

ProShare and London Stock Exchange (2002), “Private Share Ownership in Britain 2002”, www.londonstockexchange.com

Rodano, L. and F. Signorini (2007), “Measuring the value of micro-enterprises”, *mimeo*, presented at Conference “Italian household wealth”, Perugia, 16-17 October

Semeraro, G. (2005), “E’ possibile tener conto delle pensioni future nei conti finanziari?”, *mimeo*, presented at Conference “I conti finanziari: la storia, i metodi, l’Italia, i confronti internazionali”, Perugia, 1-2 December

Serminska, E., A. Brandolini and T. Smeeding (2007), “Comparing wealth distribution across rich countries: the Luxembourg Wealth Study”, *mimeo*, presented at Conference “The Luxembourg Wealth Study: enhancing comparative research on households finance”, Rome, 5-7 July

SIA Securities Industry Association and ICI Investment Company Institute (2005), “Equity ownership in America 2005”, www.ici.org

SIGMA and SwissRE (2006) “World insurance in 2005”, n. 5/2006, www.swissre.com

Statistics Sweden (2007), “Ownership of shares in companies quoted on Swedish Exchanges”, www.scb.se

TSE Tokyo Stock Exchange (2006), “2006 Shareownership survey”, www.tse.or.jp

Vissing-Jørgensen, A. (2003), “Perspectives on behavioral finance: does “irrationality” disappear with wealth? Evidence from expectations and actions,” NBER Macroeconomics Annual



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