FINAL REPORT

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EUROPEAN COMMISSION and FINANCIAL SERVICES USER GROUP

UNDER THE TENDER: WHO OWNS THE EUROPEAN ECONOMY ? EVOLUTION OF THE OWNERSHIP OF EU-LISTED COMPANIES BETWEEN 1970 AND 2012

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The European Savings Institute (Observatoire de l'Epargne Européenne, OEE) was created in 1999 with two goals: information and data collection on credit and savings and to encourage research that contributes to the public debate. OEE consists of financial institutions, professional associations and public institutions based in Europe. The OEE has in the past worked for the European Commission, the European Parliament, OECD and the European Central Bank among others.

INSEAD OEE DATA SERVICES (PARIS, FRANCE)

INSEAD OEE Data Services (IODS) is an online data platform that provides access to databases on finance and the economy. IODS offers a large amount of data and associated services to academic researchers and economists in finance, the quality of which is recognised by the scientific community. IODS core objective is to gather, reprocess and structure large volumes of financial data on European markets (including market and corporate data, investment products and macro-financials) in a coherent fashion. IODS ensures that data are collected from a diverse range of sources such as data vendors, existing data platforms and proprietary databases.

The team in charge of the present report included Didier DAVYDOFF, Daniele FANO and Li QIN.

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Executive summary

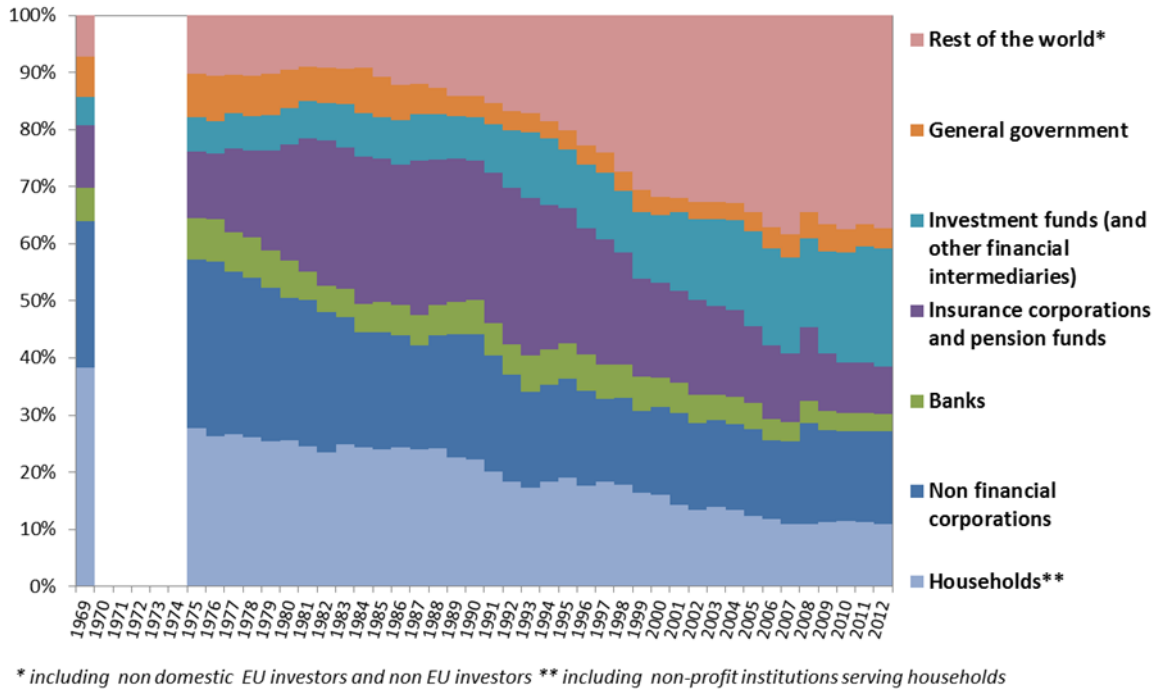
We have built a database on the share ownership structure of listed European corporations. For that purpose, we have combined several data sources, including National Financial Accounts, Portfolio Investments survey data disclosed by IMF, data on institutional investors compiled by the OECD, statistics on stock exchange capitalisation and long time series built by national statisticians. Despite these extensive sources, we had to estimate some figures, due to missing data or inconsistent methodologies used in the past. However, the output of our data processing is sufficiently representative to identify significant trends.

The database is innovative for two reasons:

- We propose long time series covering the years 1975 to 2012. We also propose an estimation for 1969, based on two countries only (the United Kingdom and Germany[1])
- We propose a first estimation based on a new classification of investors where EU investors, rather than national investors are considered as domestic. Such estimation has been possible for the years 2001 to 2011. Moreover, starting from 1990, we have reallocated pan-European investment funds to domestic investors rather than foreign investors.

Long-term trends

Share ownership structure in the European Union



** including non domestic EU investors and non EU investors ** including non-profit institutions serving households*

[1] For years 1970 to 1974, available data are not representative enough for running any estimation

- The relative weight of foreign investors more than quadrupled, from 10% in 1975 to 45% in 2012, or 38% in 2012 if European funds domiciled in Luxembourg and Ireland are considered as domestic investors rather than foreign investors.

If all European funds that hold shares of companies registered in another country than the country of domiciliation of the funds are classified as foreign investors, the share of foreign investors ranges from 10% to 58% across countries. It is superior to one third in a majority of countries, including in large countries where there is a saving pool that would be sufficient to meet the needs of the domestic market: investors have been diversifying their portfolio abroad and a symmetrical move also happened with foreign investors becoming prominent shareholders of European firms. Since 2008, the share of foreign investors has stabilised. If European funds domiciled in Luxembourg or Ireland are considered as domestic investors, the share of foreign investors in European market capitalisation decreases by seven percentage points (38% instead of 45%).

- Statistically, governments have become marginal players in the European stock market (4% in 2012 against 7% in 1975).

However, the impact of public intervention is only partly reflected in percentages of holdings in market capitalisation because most companies owned by the government were not listed before being privatised and symmetrically, many companies stopped being listed after their nationalisation. The successive waves of privatisation, starting in the United Kingdom in the 1980s and followed by continental Europe in the next decades, dramatically broadened European markets and enabled European and non-European institutional investors to invest large amounts in European equity markets.

- Investment funds and "Other financial intermediaries" increased from less than 10% until the 1990s to 21% in 2012.

Our estimation includes holdings of domestic funds, round-trip funds[2] and pan-European funds domiciled in Luxembourg or Ireland. The main beneficiaries of the "European passport" given to UCITS were Luxembourg and Ireland. The share of European funds domiciled in Luxembourg or Ireland increased from 1% to 7% from the beginning of the 1990s to 2012. We estimate that Luxembourg funds held stakes of 360 billion euros in European companies and Irish funds held stakes of 227 billion euros at end of 2012: together, their weight is almost half of that of all other investment funds in their own country.

- Insurance corporations and pension funds, after having reached a maximum of 28% in 1992, declined almost continuously and represented no more than 8% in 2012.

Pension funds, like PAYG systems, faced the consequences of an ageing population: the ratio of contributions to benefits decreased or even became negative and the outstanding assets were only

[2] Round-trip funds are Luxemburg and Ireland-domiciled funds promoted by national intermediaries to clients in the home country of such intermediaries. They benefit from a more flexible authorization process by market authorities and from a more advantageous taxation.

sustained by the revenues of the portfolio. Moreover, asset allocation has changed to the disadvantage of stocks for several reasons: shortening in the duration of liabilities, accounting rules, the forthcoming Solvency 2 directive, and the perception by stakeholders that risks on financial markets have increased.

- Banks are now the smallest category of investors, with a share of 3% in 2012 (7-8% in the 1970s).

The prudential regulation has considerably increased the cost of shareholding in terms of capital requirement for the banks.

- The weight of non-financial corporations was divided by two, from 30% to 16% over the period.

The participation of non-financial corporations in the stock market varies considerably across countries: traditionally low in the United Kingdom, high in Italy, and decreasing in France.

- The weight of households was divided by almost three, from 28% to 11%.

Private investors have been numerous to participate in the privatisation programs but for a limited amount on average. However, individuals have become major indirect stake holders in the equity market through retail investment funds and "packaged products" offered by financial distributors. The actual control of those indirect holdings of EU citizens in the EU listed companies have been transferred to financial intermediaries who are supposed to exercise their powers, including voting rights, on behalf of their clients.

Recent trends

During the 2000s, the share ownership structure of European listed companies was rather stable, with an exception: the value in euros of insurance and pension funds continued to decrease, a trend that started at the beginning of the nineties.

The financial crisis starting in 2008 did not change the share ownership structure dramatically, despite several reconstitutions of banks' capital, translating into temporary acquisitions of stakes by general governments or state-owned financial firms.

Considering European investors rather than only national ones as domestic

Our data also allow for a breakdown of foreign investors into non-European investors and European investors and for a re-allocation of the latter to their relevant category of investors. Such analysis gives a quite different picture of the share ownership of listed European corporations: At the end of 2011, non-European investors accounted for 22% of market capitalisation holdings against 44% for all "non-national" investors.

Intra-European cross-border investments are mainly attributed to investment funds:

- Investments of European funds (other than funds domiciled in Luxembourg or Ireland) in quoted shares of companies registered in the country of domiciliation of such funds accounted for 14% of the overall European market capitalisation.

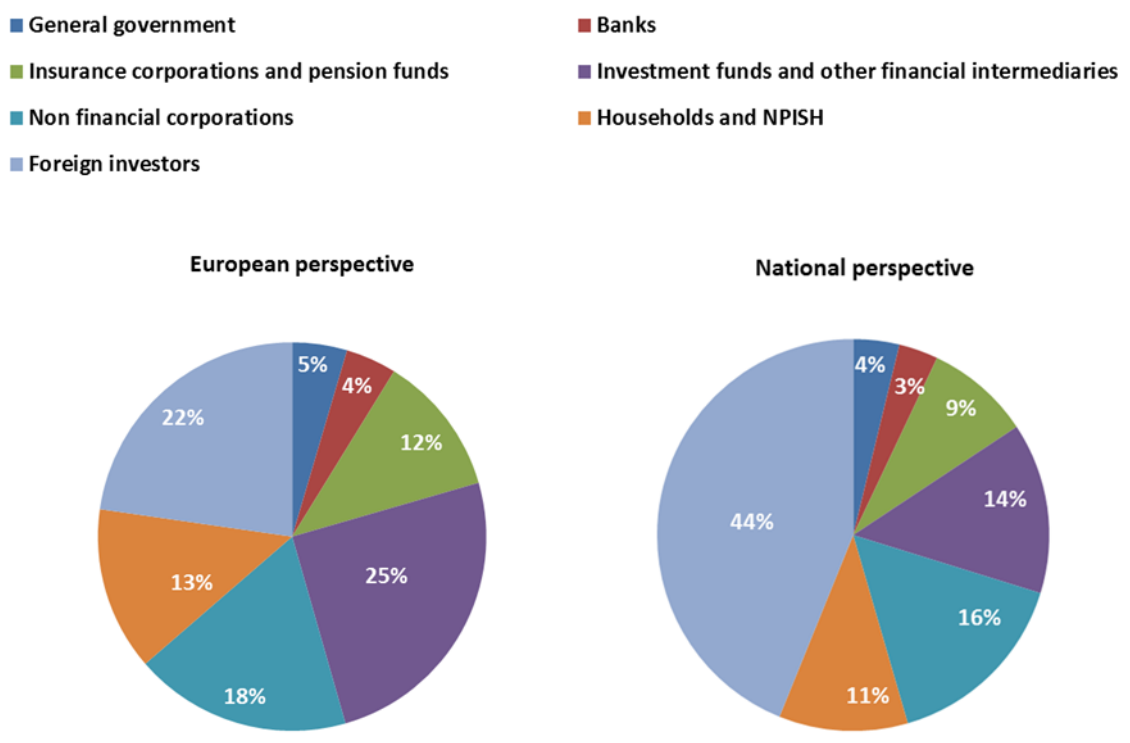
- Investments of European funds (other than funds domiciled in Luxembourg or Ireland) in quoted shares of companies registered in another country than the country of domiciliation of such funds accounted for 4% of the overall European market capitalisation.

- Investments of funds domiciled in Luxembourg or Ireland in quoted shares of European corporations accounted for 7% of the overall European market capitalisation.

Therefore, overall the share of investment funds is higher: 25 % versus 21 % on a purely national basis.

Direct intra-European cross-border investments of investors other than investment funds are still limited.

The ownership structure of EU listed corporations in 2011



Limitations and future outlook

There are limitations to our findings that should be overcome in further research: We have been forced to estimate several figures and we noticed some statistical breaks in available official data. Among other issues, securities held by custodian banks for the account of clients might have been computed as being the ownership of the bank instead of the one of the final holder. Further research could gradually eliminate these inaccuracies.

Without waiting for these new advances in research, FSUG could annually update the statistics on share ownership in Europe by using national financial accounts. Although this will not allow for a breakdown of foreign investors between European and non-European investors, such updates will highlight the main future trends. Updating the breakdown between European and non-European investors would hardly be possible without the cooperation of specialised statisticians.

There is one issue that FSUG might be willing to point out: the statistical treatment of pan-European funds domiciled in Luxembourg and Ireland is a black hole in financial statistics and cannot be easily overcome by the users of statistics.

More generally, share ownership can be direct or indirect, through investment funds, life insurance contracts, pension funds or structured products. A “look-through” approach would show a much heavier weight of households. This approach has been used for specific research in some countries. Generalising it to the whole of Europe would help gaining a better understanding of important issues relating to the equity markets.

Introduction

Understanding the major trends of share ownership is necessary when implementing market regulation and investor protection, and when addressing corporate governance issues.

Share ownership is to be found in all the sectors of the economy, whether they are domestic: *Non-financial Corporations, Financial Corporations, Government, Households* and *Non-Profit Organizations*, or belong to the *Rest of the World*.

Some sectors, and especially Households, play a critical role in allowing healthy financial intermediation. Households may own equities either directly or indirectly through institutional investors (Investment Funds, Life Insurance and Pension Funds).

Several crises (1987, 2000 and 2008) convinced many individuals that equity markets were too risky for them and that they were not at equality with professional market participants. In the absence of large privatisations, the number of direct shareholders is declining in many European countries. Meanwhile, as a reflection of both public incentives and the action of institutional investing, indirect shareholding has been on the rise with "packaged products" that represent diversified portfolios of securities and are an increasingly significant portion of portfolios. Households became indirect shareholders through these products. However, even this indirect participation of households in equity markets has recently been challenged by a growing reluctance of savers towards the complexity and uncertainty of such products.

Such obstacles on the households' side occur in a context where non-financial corporations themselves appear to be changing their relationships with the financial markets. In many countries this sector has, on aggregate, become a net lender. This mutation has, however, not occurred in countries (such as Italy) where smaller corporations dominate the economic system. Generally, many large non-financial corporations are themselves becoming relevant holders of financial assets.

Financial corporations often do not limit their role to mere intermediation but have become in some instances significant holders of securities, including equities although recent regulatory (implemented or planned) changes applying to banks and insurance corporations have already reduced their propensity to hold shares. Also, the role of government has been evolving as views about the role of public corporations and of industrial policies has been challenged.

Last but not least, financial liberalization that has developed since the late eighties and the creation of the Euro have significantly increased the importance of international interconnections.

All these changes translate into a break of the balance of European and non-European investors in the provision of equity funding to corporations.

There is a literature analysing the provision of financing to the economy, presented in annex 1. But such literature is based on incomplete statistics on the breakdowns of holdings of quoted shares, separately from non-quoted shares and other participations.

Although quoted shares are included in existing financial data sets, there is no comprehensive statistical tool enabling the assessment of the long-term trends of share ownership in Europe and their contribution to the financing of European companies. There are some national data sets available for research but none for the European Union as a whole. Europe lags behind the United States, where the FED, among others, has been producing and analysing structural statistics for a long time. The present research aims at contributing to fill the gap. This is a first attempt that cannot substitute to the production of consistent data by official bodies in charge of financial statistics in Europe. This exercise will be successful if it serves as a proof of feasibility for official, periodic and controlled data production.

The present research is innovative for two reasons:

- A long history is necessary to understand the structural changes, beyond the short-term developments of financial markets. The history of the time series is very long and crosses several "basis" in national accounts. We have been able to gather data with an acceptable representativeness for the period 1975-2012. We also propose an estimate for 1969 based on two countries only (the United Kingdom and Germany).

- Considering EU investors as domestic investors is simply recognizing the existence of a single financial market in Europe and corresponding regulation. The share of cross-national border investments inside Europe has increased, especially as a consequence of the creation of the Euro and subsequent pan-European stock indices. Identifying European shareholders of European listed companies as domestic investors will be a major innovation. Our proposed classification of investors is unique, as it considers all EU investors as domestic investors, whatever the country of domicile of the European companies whose shares they hold. We provide data compliant with this classification for the period 2001-2011.

The database that was built includes several estimated figures. We provide not only the database and related comments of trends, but also a transparent methodology and sources enabling users to assess the reliability of figures. However, it should be only considered as a first step triggering further improvements which could then be implemented by official statistical bodies in Europe.

1. Description of data used to build the database.

1.1 National Financial Accounts

The Eurostat database provides annual national financial accounts of sectors going back to 1990 for two countries (Hungary and United Kingdom), back to 1994 or 1995 for most other countries, except Luxembourg and new EU countries from Central Europe where the holding of shares by private citizen only recently became possible. National accounts are compiled according to a standardised methodology defined in a European Council regulation dated on 25th June 1996, n°2223196.

- Institutional sectors defined in ESA 95 are:

Non-financial corporations	S.11
Financial corporations	S.12
General government	S.13
Households	S.14
Non-profit institutions serving households	S.15
Rest of the World	S.2

The classification also defines sub-sectors. For example, within "Financial corporations", there are the following sub-sectors:

Central Bank	S.121
Other monetary financial institutions	S.122
Other financial intermediaries, except insurance corporations and pension funds	S.123
Financial auxiliaries	S.124
Insurance corporations and pension funds	S.125

"Central Banks" (S.121) and "financial auxiliaries" (S.124) do not hold significant amounts of quoted shares in most countries. Most units included in "Other monetary financial institutions" are banks. Investment funds are the main component of "Other financial intermediaries, except insurance corporations and pension funds" (S.123).

ESA 95 also includes a classification of financial transactions. Among other types of transactions, there is "Shares and other equity" (code F.5). This is further divided into the following:

Shares and other equity, excluding investment funds shares	F.51
Quoted shares	F.511
Unquoted shares	F.512
Other equity	F.513
Investment funds shares	F.52

There are three reasons why long time series on the ownership of European listed companies are not easily available:

- National accounts are periodically re-based and the methodology usually changes when this happens (see annex 1 for more details). There are some differences between data compiled according ESA 95 framework and historical data:
    - Non-financial corporations do not include any more sole proprietors and self-employed persons whose entrepreneurial activities cannot disentangle from their operations as private individuals. Such entrepreneurs are now included in the "Households" sector.
    - Supplementary pension funds for government employees are now included in the "Insurance corporations and pension funds" sector, and are no more considered as part of governments (the "General Government" sector).

  However, holdings of quoted shares by these four institutional sectors do not show any statistical break at the starting date of the ESA 95 methodology.

- Quoted shares raise a specific problem: the most common method used by national statisticians consists of a survey that asks financial depositories (mainly banks) for a breakdown of holdings of the securities they manage for their clients. Such surveys have not existed for very long in all countries. Hence, figures on holdings of quoted shares have been available only recently in some countries like Spain and Italy. In some other countries, historical data sets and current national financial accounts show statistical breaks.

- ESA 95 national financial accounts identify separately quoted shares holdings but these include both domestic and foreign shares[3]. Hence, it is necessary to estimate the share of domestic shares in the holdings of each category of investors using complementary sources. Some national central banks or offices of statistics provide the breakdown of domestic versus foreign shares. Data from the "Coordinated Portfolio Investment Survey" (CPIS) can also be used to calculate an estimate of such breakdown.

1.2 Portfolio investments in Balances of Payments

We use the consolidated information compiled by the IMF for the "Coordinated Portfolio Investment Survey" (CPIS) since 1997.

The CPIS is an annual voluntary portfolio investment data collection exercise conducted under the auspices of the IMF. It provides a unique source for foreign portfolio asset holdings, with details on the breakdown by instrument and counterpart country. Its main objective is indeed to collect comprehensive information, with geographical detail on the country of residence of the issuer, on the stock of cross-border equities, long-term bonds and notes, and short-term debt instruments for

[3] The United Kingdom is an exception: in the national accounts available in the Eurostat database, quoted shares issued by the "Rest of the world" are not specifically recorded, neither on the assets side nor on the liabilities one.

use in the compilation or improvement of international investment position (IIP) statistics on portfolio investment capital. Sector-wise CPIS figures are aligned with the Balance of Payments and SNA 93[4] criteria.

Data are presented in an annual frequency with a lag of 11 months. The following countries participate in the survey: Argentina, Aruba, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Bermuda, Brazil, Bulgaria, Canada, Cayman Islands, Chile, Colombia, Costa Rica, Curacao and Sint Maarten, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Gibraltar, Greece, Guernsey, China, P.R.: Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Isle of Man, Israel, Italy, Japan, Jersey, Kazakhstan, Korea, Kosovo, Kuwait, Latvia, Lebanon, Lithuania, Luxembourg, China, Macao, Malaysia, Malta, Mauritius, Mexico, Netherlands, Netherlands Antilles, New Zealand, Norway, Pakistan, Panama, Philippines, Poland, Portugal, Romania, Russian Federation, Singapore, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Kingdom, United States, Uruguay, Vanuatu, Venezuela. All EU28 countries participate in the survey.

CPIS statistics relate to cross border portfolio investments. Portfolio investments are defined as any outstanding holding of a given investor in a given security that represents less than 10% of the total outstanding amount of that security. CPIS provides statistics of portfolio investment from each reporting "investing country" with separate matrices for each category of securities:

- Short-term debt securities
- Long-term debt securities
- Equity securities, which include quoted and unquoted shares, and investment funds.

We use only the data relating to equity.

Data are in US dollars and we convert them into euros.

Cross-border portfolio investments are reported by the country of origin of the investment. Each country reports the total outstanding amount of cross-border portfolio investments, broken down by country of destination. For all countries, the CPIS registers a breakdown of domestic equity securities between foreign countries of residence of holders and a breakdown of domestic investment abroad between issuer countries. For example, CPIS indicates that an amount of $180 million of Estonian equity securities were held by Finnish investors and that Estonian investors held $437 million in Finish equity securities at end of 2010. This source of information enables to calculate the share of European and non-European equity holders in each EU country and the overall aggregate for all EU countries.

Since 2001, a majority of countries provide detailed information on foreign equity securities by country of issuer which also includes a sectoral breakdown. For example, CPIS tables indicate that Austrian households held $5.7 billion of German equities and $5 million of Greek equities at end of 2010. Such information is available for 16 European investing countries. All the largest countries

[4] SNA (System of National Accounts) is a standard adopted by the United Nation, see annex 1. The European standard ESA 95 is consistent with SNA 93.

provided data for this table. The institutional classification of CPIS is consistent with the ESA 95 classification, although its granularity is not exactly the same:

- General Government
- Monetary Authorities
- Banks
- Insurance Corporations and Pension Funds
- Investment Funds (not distinguished from "Other financial intermediaries" in ESA 95)
- Other Financial Institutions
- Non Financial Corporations
- Households
- Non-Financial Sector, Others (Non Profit Institution Serving Households are a specific category in ESA 95 and relating data are often incorporated to households' ones).

In practice, Monetary Authorities (Central Banks) and the non-financial sector other than companies and households hold small amounts of cross-border equity investment. The main difference of this classification with national accounts is that it distinguishes Investment Funds from "Other Financial Institutions" whereas national accounts do not (sector S123 in ESA 95 classification).

However, CPIS data have to be re-processed for five reasons:

- Sectoral statistics are reported by each country of origin, but we are interested in statistics by country of destination to get the sectoral and geographical breakdown of European quoted shares. We need to build statistics according to the country of destination view to estimate the share of European/non-European shareholders in European countries market capitalisation and to estimate the share of each institutional sector in the cross-border investments from one European country to another.
- Cross-border equity investments include not only quoted shares, but also some unquoted shares and UCITS shares that should be substracted.
- Cross-border equity investments of more than 10% of the capital of an invested listed corporation are classified as foreign direct investments (FDI) and not portfolio investments. Although such cross-border stakes are relatively rare, they have to be added to CPIS data to cover all investments in quoted shares.
- Data for some years in some countries are missing. Although the coverage improved over the years, investment amounts broken down by sectors of holders were still not available for the following countries in 2011: Belgium, Latvia, Luxemburg, Malta, Slovakia, Slovenia, Ireland and the United Kingdom[5].
- Moreover, some figures are not disclosed for reasons of confidentiality. For example, our correspondent in Ireland clarified that due to confidentiality constraints, they could not supply the holdings of foreign portfolio security assets by sector of resident holder for individual instruments (Equity, Long-term debt securities, Short-term debt securities). They were only able to provide the data at a total assets level, classified by sector of resident holder. In the case of Poland, our correspondent could complement data available from the

[5] However UK data are available for prior years.

CPIS by providing assets by holder of security broken down in two groups of countries: EU/non EU. Most data concerning investments in EU countries were provided as a whole.

Our detailed methodology in processing CPIS data and combining these data with national financial accounts is presented in annex 2.

1.3 WFE statistics on total market capitalisation

The World Federation of Exchanges (WFE) makes data on total capitalisation available for domestic companies listed in Europe since 1975. These data were used to check the consistency of available data on holdings of quoted shares in each country.

1.4 OECD data on institutional investors

OECD provides data on the assets of institutional investors (investment funds, insurance corporations, pension funds) since 1980 for all countries. One of the asset categories is "shares and other equity", whereas the present study only refers to quoted shares. This drawback is limited as the share of non-quoted shares in institutional investors' assets is small. We applied a haircut that we estimated by comparing OECD data with ESA 95 data.

1.5 National data

Some national statisticians built consistent long time series. For example, the ONS in the UK publishes data on the ownership of quoted shares at some dates in the past (1963, 1969, 1975, 1981, 1989 to 2004, 2008 and 2010). The Banque de France disseminates figures going back to 1977. Deutsche Bundesbank provided us with data since 1960. Long-term time series are also available in Belgium and in Sweden.

Many additional national sources were used for the present study. They are presented country by country in annex 3.

1.6 Representativeness of available data

As compared to the current composition of the EU, available data represent more than 76% of the European market capitalisation since 1987. They are complete from 1995 and 2011, and represented 72% of the market in 2012, pending the provision of the most recent data by all countries.

For previous years, we got a good representation (81%) of the market in 1981. For 1975 the percentage is 54%. But there are data available for France in 1977, and we estimated French data for 1975 on the basis of trends in 1977: no major event happened in 1976 and 1977, and the ownership structure of the exchange cannot have dramatically changed. Including such French data, the percentage of the market capitalisation covered in 1975 reaches 60%.

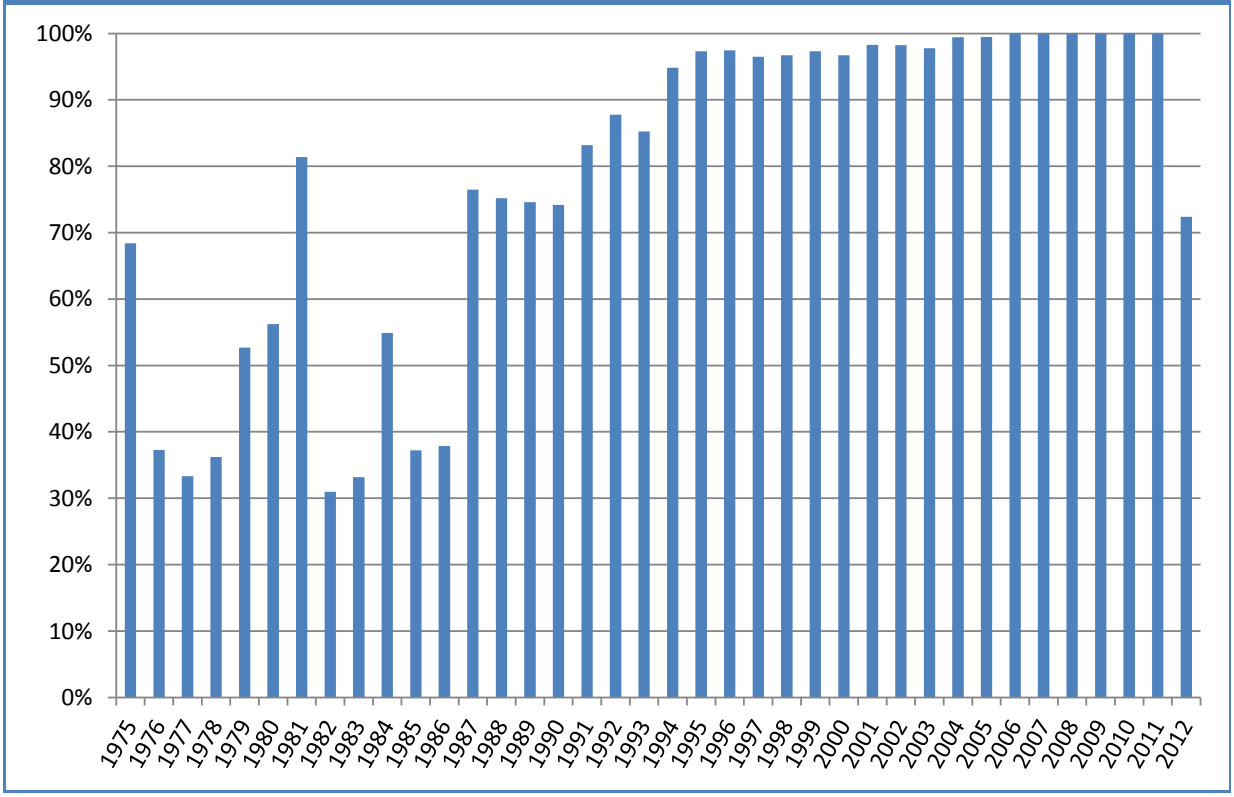
As compared to the market capitalisation of EU countries at each date, the percentage is higher before 1986 (Spain and Portugal joining date) and 1995 (Austria, Finland and Sweden joining).

Before 1975, we have data on holdings of quotes shares for only two countries:

- United Kingdom: Data on years 1963 and 1969
- Germany: data on all years since 1960

The United Kingdom plus Germany represent a little more than half the total European market capitalisation. Hence for indicative purpose, the database includes an estimate for 1969. But 1969 to 1975 is a too long period for enabling any significant interpolation.

Percentage of market capitalisation with available data of share ownership structure



2. Detailed classifications

2.1 Defining the categories of investors

We provide statistics with two different classifications of investors, depending on the period:

1. Long time-series (1969 and 1975-2012) are provided with a classification close to the one used in national financial accounts:
    - National General Government
    - National Banks
    - National Insurance corporations and pension funds
    - National, round trip and pan-European Investment Funds, and Other National Financial Institutions
    - National Non-Financial corporations
    - National Households and non-profit institutions serving households
    - Rest of the World (i.e. Non National investors)

The only divergence between our institutional classification and ESA 95 classification consists in aggregating funds domiciled in Luxembourg and Ireland to domestic funds and other financial intermediaries. Indeed the existence of Pan-European products is simply contradictory with the country-based approach of official financial statistics in Europe. Such funds can neither be considered as domestic (to which country would they be allocated?) nor foreign since a large proportion of their subscribers are national. Round-trip funds are even purely national from an economic view-point and foreign from a statistical perspective. The only solution would be to have a "look-through" approach, consisting in allocating the assets of the funds to different categories of investors and countries proportionally with the amounts of subscriptions to those funds. To achieve this goal, more detailed data should be made available in Luxembourg and Ireland both on the assets side and the liability side of the funds. In the absence of such data, it was decided at the request of the Financial services User Group to classify round-trip and pan-European investment funds as domestic investors since 1990. There are no data enabling for estimation before 1990 but this is a minor drawback because the assets of these funds were still limited during this period.

Moreover, it is worth noting that this breakdown applies to holdings of European quoted shares, whereas ESA 95 classification applies to quoted shares in general, whatever their nationality.

2. In a second step, we propose a "full European view" of all European categories of investors. We provide estimated figures for the time period 2001-2011 with the following classification of investors.
    - European General Government
    - European Banks
    - European Insurance corporations and pension funds
    - European Investment Funds and Other European Financial Institutions
    - European Non-Financial Corporations

- European Households and Non-profit institutions serving households
- Non-European investors

These time series for 2001-2011 are built according to a “full European view” whereas our long time series can be considered are a “partial European view” since they only reclassify pan-European funds and round-trip funds as domestic investors.

2.2 Defining the geographical scope

The presented time series cover EU domiciled listed companies. “EU domiciled” can be understood as:

- Being EU domiciled in a country that is currently a member of the EU.
- Being EU domiciled at the time of any given statistic (varying sample of countries).

In theory, the first option allows for a more reliable interpretation of historical trends but it does not correctly reflect the actual economic or legal reality of the EU.

The second option can generate statistical breaks of the overall EU aggregate at the dates of entry into the EU of countries with a large market capitalisation. In practice, there would be such a break in 1973 (new memberships included the United Kingdom, Denmark and Ireland) and smaller ones in 1986 (Spain, Portugal) and in 1995 (Austria, Finland, Sweden). Most other new memberships were those of former Eastern European countries with no, or very small, market capitalisation at the date of joining.

Our data are based on a variable sample with the list of member states as of 1973, which evolves afterwards according to the actual list of member states. This avoids significant breaks and also excludes countries where statistics were scarce before they joined the EU. It is worth noting that in any case, the sample is variable in terms of companies since some were delisted and others were newly listed across this period.

3. European trends

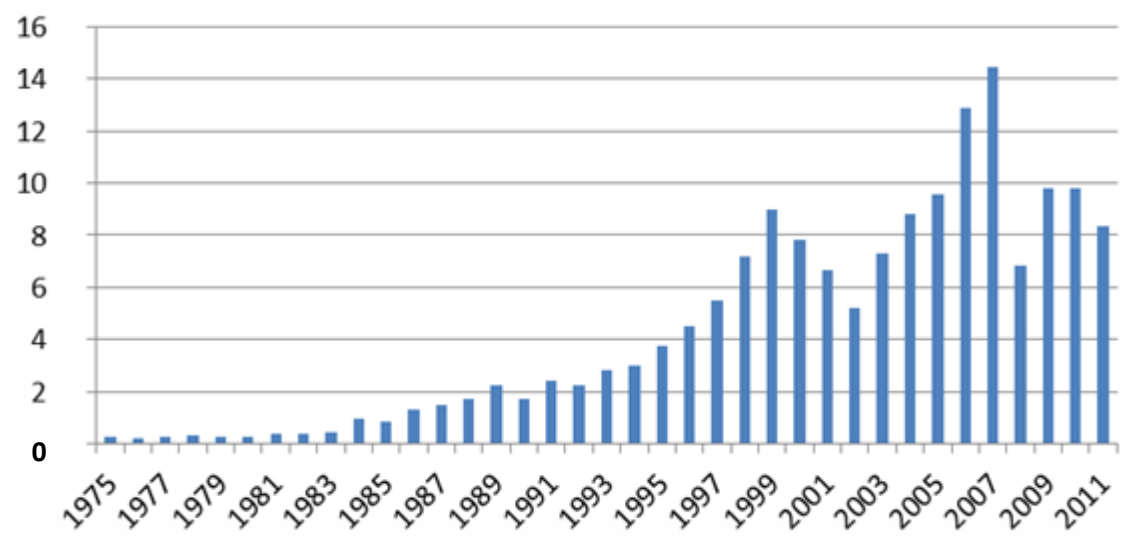
3.1 The growth of the capitalisation of European listed companies

Statistics published by the World Federation of Exchanges (WFE) include data on the market capitalisation of domestic companies going back to 1975 for most countries. Missing data vary across years and exchanges but data on the largest exchanges can be estimated for the whole period.

Market capitalisation of European exchanges grew slowly until the beginning of the 1990s and then at an accelerated pace until the year 2000. The growth of market capitalisation reflects both a price effect and an increased part of the European economy being composed of listed companies. A major driver of this volume effect has been the large privatisations, a trend initiated by the United Kingdom government in 1979 and followed by continental Europe in the nineties. The European stock market thus became much larger and more liquid, enabling domestic and foreign institutional investors to increase their relative weight in the shareholding structure of European companies.

The burst of the "internet bubble" stopped this trend. The total market capitalisation at end of 2002 was 19% lower than at end of 1999. A new upward trend happened until the financial crisis of 2008. The latter translated into a loss in value by about half the market capitalisation, by far the most severe decrease since the beginning of the period under review. At end of 2012, its value in euros had returned to a level comparable to 1998, 20% lower than in 2007.

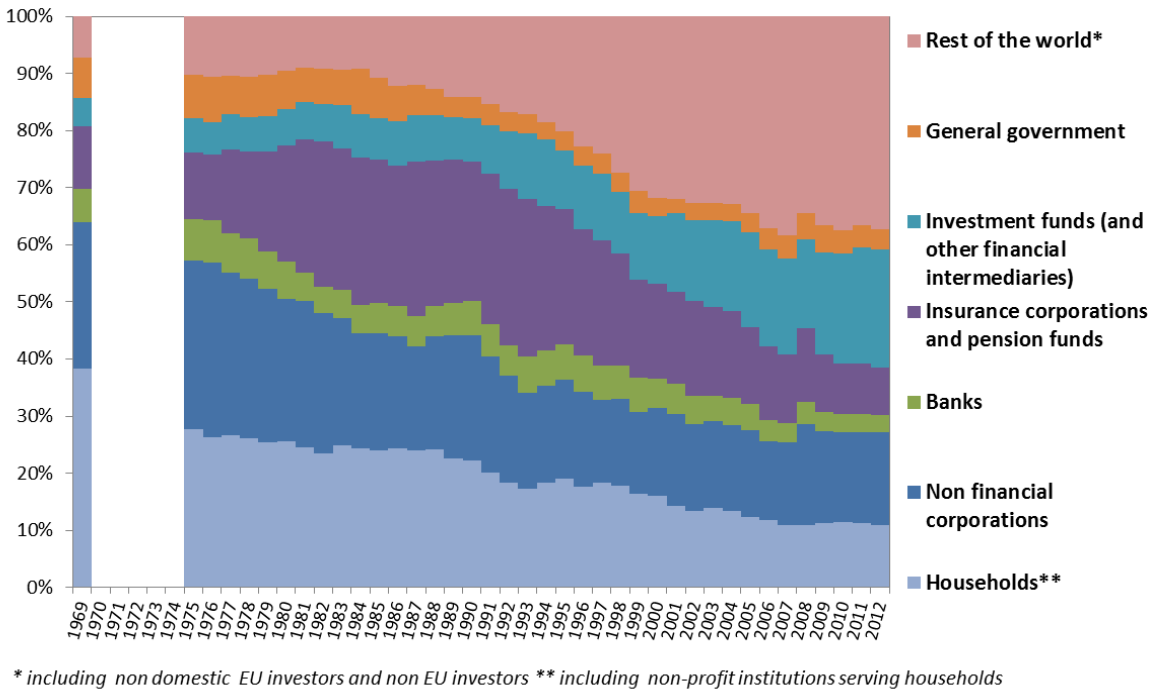
Market capitalisation of European listed companies (thousands of billion $)



Source: WFE, Eurostat, OEE estimations

3.2 Overall trends of share ownership structure

Long-term trends of share ownership structure in the European Union



** including non domestic EU investors and non EU investors ** including non-profit institutions serving households*

The share ownership structure of European listed companies changed dramatically over the last forty years:

- The relative weight of foreign investors more than quadrupled, from 10% in 1975 to 45% in 2012, or 38% in 2012 if funds domiciled in Luxembourg or Ireland are considered as domestic investors rather than foreign ones.
- Statistically, Governments have become marginal players in the European stock market (4% in 2012 against 7% in 1975).
- Investment funds (including pan-European funds) and "Other financial intermediaries" increased from less than 10% until the 1990s to 21% in 2012.
- Banks are now the smallest category of investors, with a share of 3% in 2012 (7-8% in the 1970s).
- The weight of non-financial corporation was divided by almost two, from 30% to 16% over the period.
- The weight of households was divided by almost three, from 28% to 11%.

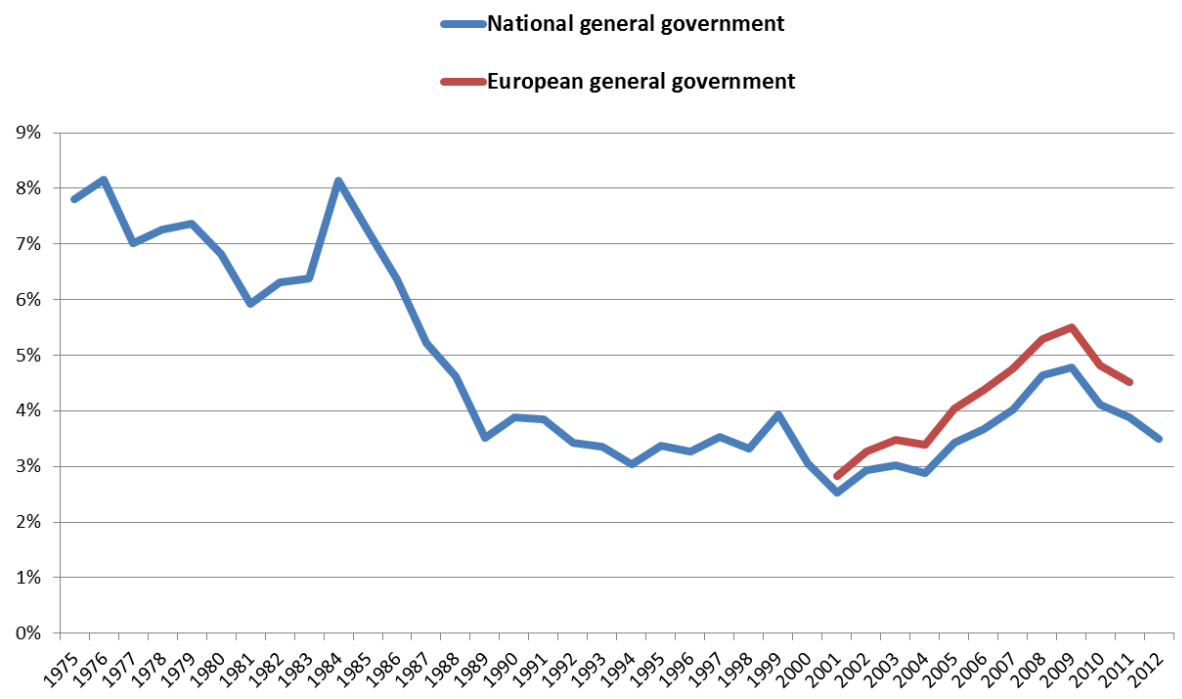
During the 2000s, the share ownership structure of European listed companies was rather stable, with an exception: the value in euros of insurance and pension funds continued to decrease, a trend that started at the beginning of the nineties. This trend is mainly due to UK pension funds facing an ageing population: the total assets of pension funds diminish because the ratio of retirees to active

members increases. And the relative weight of shares in the assets of pension funds also decreases because the maturity of liabilities is shortened.

The financial crisis which started in 2008 did not dramatically change the share ownership structure, although the growth of investment funds accelerated. The reconstitution of capital of some major banks translated into temporary acquisition of stakes by General Governments or state-owned financial firms. The fall of pension funds direct holdings continued as a consequence of changes in asset allocation decided by stakeholders considering that risks on financial markets have increased. The fall of direct share ownership might also be a consequence of an increasing recourse to indirect equity investment through investment funds.

3.3 Governments

Share of governments in the share ownership structure of European listed companies



Governments played a major role in share ownership of European companies since the eighties because massive privatisations dramatically broadened the markets and increased their liquidity, enabling institutional investors, especially foreign ones, to acquire large stakes. More recently, the role of governments was important in the bailout of the financial sector after the crisis that started in 2007-2008.

However, the impact of public intervention is only partly reflected in percentages of holdings in market capitalisation because most companies owned by the government were not listed before being privatised and symmetrically, many companies stopped being listed after their nationalisation.

From a general perspective, the weight of the government in corporate ownership has traditionally been larger in Europe than in other parts of the world since WW2. In 1984 (after French nationalisation), governments held 7% of the market capitalisation. As previously mentioned, the United Kingdom initiated a massive privatisation program in 1979 and Continental Europe followed in the eighties. The weight of the government decreased to a minimum of 2% in 1992. It remained stable at 3% from 1993 to 2004.

The financial crisis of 2008 forced governments to nationalise or support several major "systemic" banks that would otherwise have defaulted. Prime examples of such nationalisations or

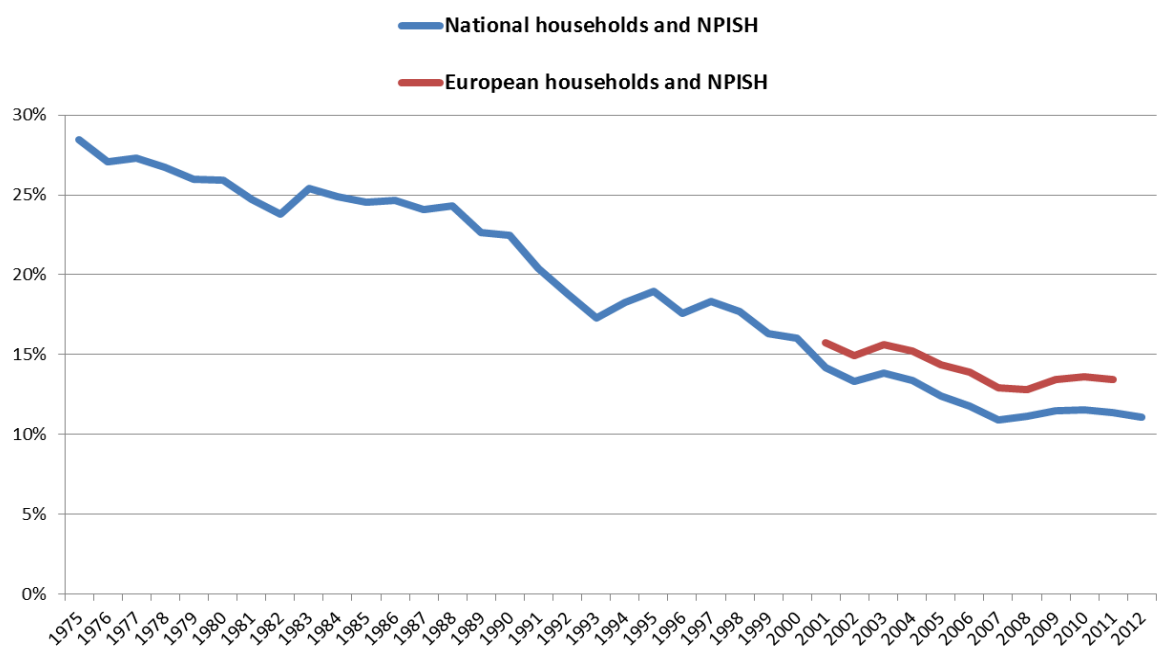
governmental support are the stakes of 81% of the UK government in Royal Bank of Scotland and 43% in Lloyds, the 25% stake of the German government in Commerzbank (reduced to 17% in 2013), the full control of Dexia in France, the 18 billion recapitalisation of Bankia in Spain etc. The 5% stake held by European governments in 2008-2009 does not fully reflects the importance of these events on the shareowner structure in Europe: first, because the price of banks' shares collapsed during this whole period, and therefore the weight of public intervention is underestimated when compared to the total market capitalisation of all sectors; second, because several supported banks were de-listed; third, because in some cases, the public intervention was implemented by State-owned banks, classified within the financial sector and not governments (for example, in France Dexia shares were acquired by Caisse des Dépôts, a state-owned bank).

The weight of the general government started to decrease as soon as 2010 and was back at 4% at end of 2012.

Finally one should mention that Social Security Administrations are also included in the Government. Some Pay-As-You-Go pension schemes which hold quoted shares are thus classified in this category.

3.4 Households and non-profit institutions serving households (NPISH)

Share of households and NPISH in the share ownership structure of European listed companies



A general trend over the last 25 years has been the dramatic decrease of the weight of individuals in the share ownership of European companies. Households held 28% of the market capitalisation in 1975. Their stake dropped and stabilised at 10-11% since 2007. The recent stabilisation might reflect the relative attractiveness of shares as compared with low interest rates on alternative savings products.

Figures should be interpreted with caution: Households include two very different types of shareholders:

- Families owning majority or controlling stakes in listed companies. One often refers to Italy where families are predominant players in the domestic capitalism, but in several countries families control some of the "Bluest" Chips. Holdings of foundations are aggregated to households' ones in present statistics. Foundations are important shareholders in the Italian banking sector and in Germany (for example: The 25.1% stake of Alfried Krupp von Bohlen und Halbach Foundation in ThyssenKrupp). However, the overall percentage of households' holdings only partly accounts for this reality, because families often hold their stake through a non-listed holding company, classified as a "corporation" in national accounts. Examples of

such holdings are Tethys, the holding structure of the Bettencourt family in L'Oréal, or Porsche, the holding company owned by the Piëch and Porsche families.

- Savers owning limited amounts of quoted shares. Public shareholding has been a major objective of privatisations but it finally had little influence on the weight of private investors. The latter were numerous, but the majority of them subscribed for a limited amount and their participation in the privatisation program rarely triggered further acquisition of more stocks to build a diversified portfolio.

The participation rate of households in the stock market varies across countries. There are several obstacles to such participation:

- There are fixed entry costs, including information costs and the cost of financial literacy.
- Households face background risk, such as activity income uncertainty and health risks. Households tend to compensate such risks with a secure financial portfolio. For example, it has been shown that healthy people tend to participate more in the stock market.
- There are behavioural biases, such as overestimation of low probabilities. It is not so much the risk aversion that has increased, than the perception of risks after several violent crises (Burst of the Internet bubble, financial crisis since 2008, euro area crisis since 2011…)
- Banks do not necessarily promote this kind of investment to their clients: they may have more incentives in selling PRIPs (Packaged Retail Investment Products) generating higher and more stable fees. More recently, they were also incited to sell banking products (saving accounts, time deposits) to comply in advance with the forthcoming international liquidity ratios.
- Although privatisations were promoted by governments as a mean for building a model of "shareholder democracy", priorities have changed and translate into a dissuasive taxation of dividends and capital gains in several countries.

Participation of individuals in the stock market has been somewhat stimulated by the use of on-line trading through the Internet, a trend that might contribute to explain why the share of households in market capitalisations stopped declining since 2007. However, industry sources indicate a slowdown of Internet trading by individuals.

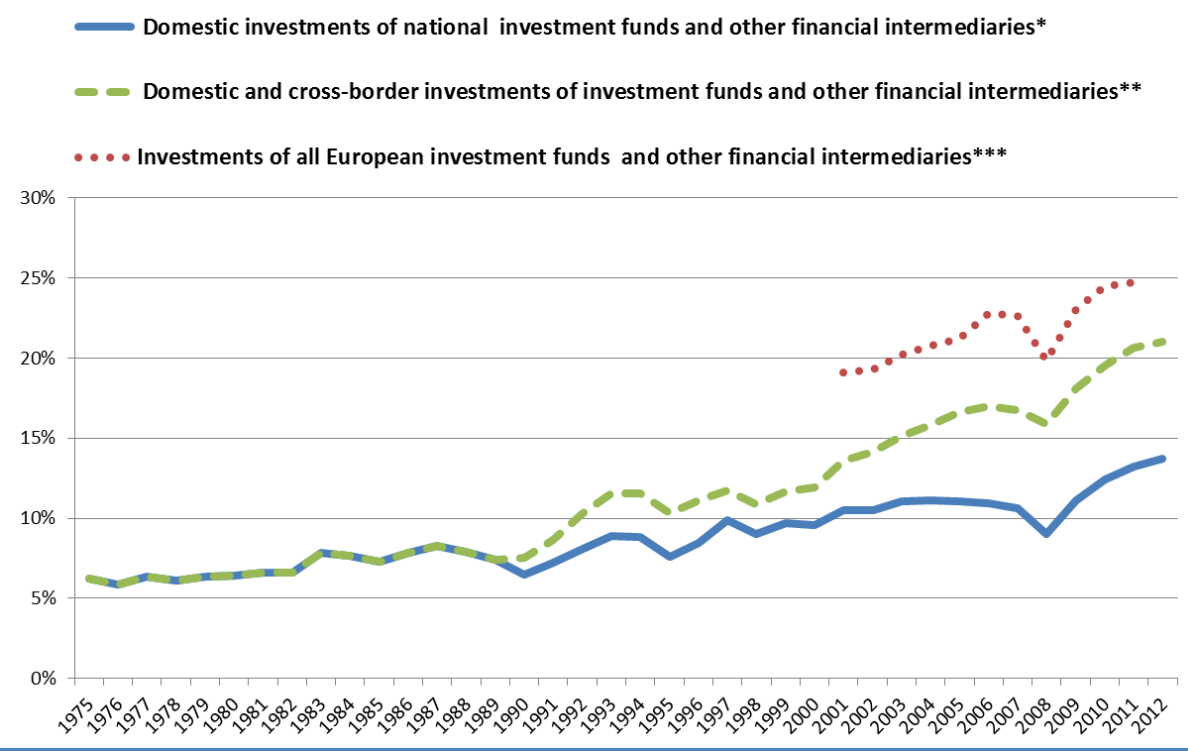
The participation of private investors varies to a large extent across countries and country specificities are not necessarily permanent: The share of private investors in the UK market capitalisation used to be higher than the average in the seventies (40% against 28%), but it was very close to the European average (11-12%) in 2012.

Jappelli and Padula[6] showed that the holding of shares by investors varies greatly from one country to another in Europe. Direct ownership or indirect ownership through investment funds is the lowest in the countries of southern Europe and higher in northern countries, with a group of intermediary countries: France, Germany, Belgium and the Netherlands. In contrast, the average share of equities in the portfolio of individual shareholders is much less heterogeneous: it varies from 20% in Denmark to 35% in Austria and Italy.

[6] Tullio Jappelli et Mario Padula : « Investment Literacy, Social Security and Portfolio Choice », OEE publication, January 2013

3.5 Investment funds and other financial intermediaries

Share of investment funds and other financial intermediaries in the share ownership structure of European listed companies



The "Investment funds and other financial intermediaries" category of investors is mainly composed of investment funds. We present three lines which respectively correspond to three different perspectives:

- * the solid line includes only investments of investment funds and other financial intermediaries in shares of corporations registered in the country of domiciliation of such funds;
- ** the dashed line adds to the solid one the investments of funds domiciled in Luxembourg and Dublin, which include mainly pan-European funds and round-trip funds;
- *** the dotted line adds to the dashed one intra-European cross border stakes of funds domiciled in any European country other than Luxembourg, Ireland.

Investment funds have gained in importance after the implementation in each EU country of the directive of 1985 on UCITS[7]. Before, investment funds were not identified as such in official statistics of all countries and our time series are partly estimated for this period. The weight of investment funds and other financial intermediaries remained at approximately 6% until 1990 and then

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

increased gradually throughout the past two decades. The gap between the dashed line and the solid one increased since 2000 due to the rapid growth of the pan-European and round-trip funds. The upward trend has been temporarily interrupted in 2008 and continued afterwards. The increasing weight of the other financial intermediaries in the UK (from 2.7% of UK quoted shares in 1998 to 16% in 2012) has heavily contributed to the upward trends. However, this rise should be analyzed with caution because it could be partly due to a statistical break (see below page 50).

Investment funds offer several advantages to individuals investors:

- Their subscribers benefit from the services of specialised portfolio managers, without having to get and analyse complex information on each individual security and listed company.
- They also usually benefit from risk diversification as funds tend to hold more varied securities within a domestic universe and abroad than individuals' portfolios.
- Administrative costs are diminished thanks to scale effects.

On the other hand:

- the benefits of scale effects are not necessarily fully passed to the final investors. For example, it has been evidenced that management fees charged by cross-border retail funds have increased because some asset management companies compete for gaining market shares in European domestic markets by offering high distribution fees to local networks[8].
- According to Lipper and other sources, a majority of European investment funds (*i.e.* around 60% of actively managed equity funds) underperformed the corresponding capital market asset classes over the mid and long term.[9]

Survey data show that investment funds give an access to equity markets to social categories and age classes which are less oriented towards individual holding of shares.

Concerning institutional investors, there was also a trend to outsource portfolio management, either in the framework of mandates or of pooled vehicles (or both combined). UCITS have also been increasingly included in financial wrappers, such as life insurance contracts and structured products.

Over the studied period, the main beneficiaries of the "European passport" given to UCITS were Luxembourg and Ireland. According to ESA 95 Standard, funds legally domiciled in those countries are classified as foreign investors in national accounts. Some of these funds are actually domestic funds domiciled in Luxembourg or Ireland for tax or regulatory reasons ("round-trip" funds). Some others are Pan-European: their portfolio is composed of stocks quoted in all European countries and they are sold to institutional investors in several countries[10]. The bulk of their portfolio of European shares is not invested in Luxembourg or Ireland and hence they are considered as foreign investors

[8] Didier Davydoff, "*An Assessment of 10 Years Financial Services Action Plan*", report to the European Parliament (Economic and Monetary Affairs), 2009.
[9] See for example Lipper, Beating the benchmark, March 2012
[10] A significant percentage of these investors might be non-European, as the European "UCITS brand" is more and more widely recognised, especially in Asia. See: Mason Hayes & Curran: "*Investment funds in Ireland*", 2012

("Rest of the World") in national accounts. We reclassified them as domestic since they are truly European instruments which cannot be attributed to any country.

Intra-European cross-border investments are mainly attributed to investment funds:

- Investments of European funds (other than funds domiciled in Luxembourg or Ireland) in quoted shares of companies registered in the country of domiciliation of such funds accounted for 14% of the overall European market capitalisation at the end of 2011.

- Investments of European funds (other than funds domiciled in Luxembourg or Ireland) in quoted shares of companies registered in another EU country than the country of domiciliation of such funds accounted for 4% of the overall European market capitalisation.

- Investments of funds domiciled in Luxembourg or Ireland in quoted shares of European corporations accounted for 7% of the overall European market capitalisation. Using cross-border portfolio investment data provided by CPIS and national financial account data, we estimate that Luxembourg funds held stakes of 360 billion euros in European companies and Irish ones 227 billion euros at the end of 2012.

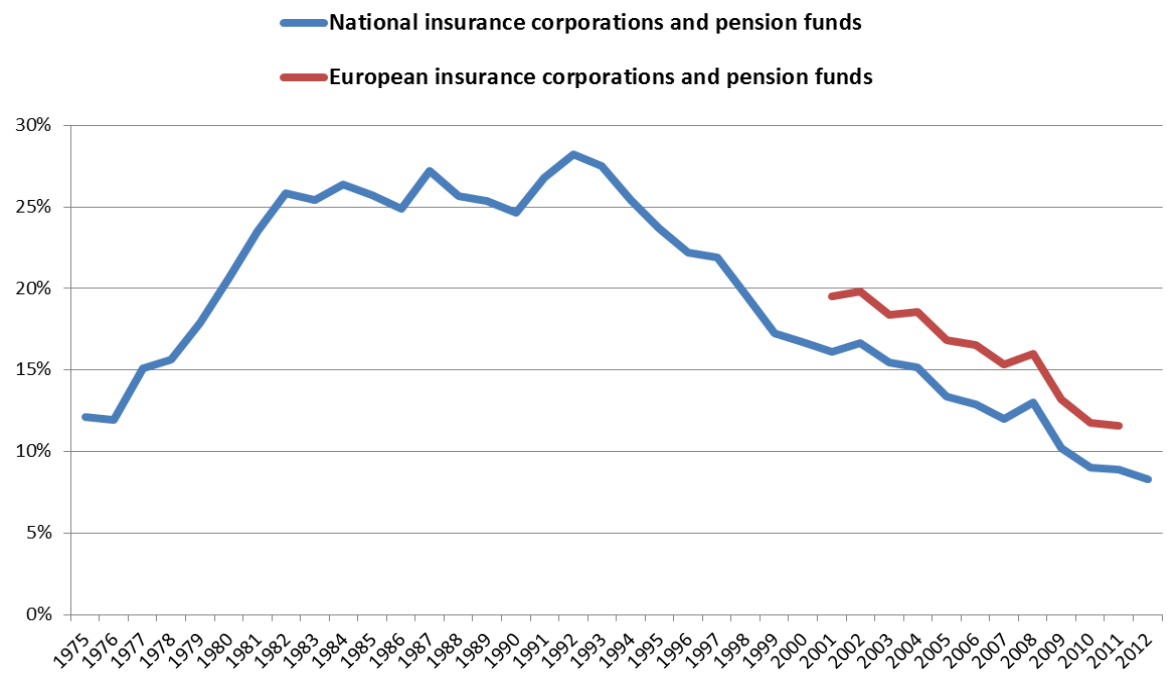
The success of Luxembourg and Dublin is due to several factors:

- Authorities in those small financial centres were more flexible in implementing European directives.
- They also attracted investment flows from some countries, like Italy, where the taxation discriminated domestic funds.
- Their offer met the need for more pan-European funds, especially after the creation of the euro that allowed both private and institutional investors to escape from the currency risk.

The UCITS 4 Directive implemented in July 2011 could result in a new impetus given to cross-border sales of funds domiciled in all EU countries as it improves cross-border recognition of home Member State regulatory approval.

3.6 Life insurance and pension funds

Share of insurance corporations and pension funds in the share ownership structure of European listed companies



Although there are Pay-as-you-go (PAYG) retirement schemes in all European countries, they contribute unevenly to the revenue of the retired population across countries. For example, pre-funded schemes play a major role in the United Kingdom, the Netherlands, Denmark and Finland while they are marginal in France, Italy and Spain.

Even in countries where PAYG schemes are predominant, the latter are subject to growing financial imbalances due to an increase in life expectancy which deteriorates the ratio of contributors to beneficiaries. More recently, rising unemployment exacerbated imbalances. As a result, confidence in the ability of public systems to fulfil their commitments eroded and in countries where pension funds do not play a major role, households have been investing in life insurance contracts or personal pension products on a voluntary basis to complement the revenues of PAYG systems and face the financial burden associated with the risk of dependency in the old age.

In this context, it is paradoxical that after having increased their participation to more than one fourth of the stock market capitalisation in 1992, insurance corporations and pension funds accounted for a continuously declining percentage, and reached 8% at end of 2012.

Several drivers contributed to that trend:

- Pension funds, like PAYG systems, faced the consequences of an ageing population: the ratio of contributions to benefits decreased or even became negative and the outstanding assets were only sustained by the revenues of the portfolio.
- Asset allocation has changed to the disadvantage of stocks for several reasons:
    - The ageing membership of pension funds shortened the duration of their liabilities. The Assets and Liabilities Management (ALM) therefore implemented shifts towards less risky assets.
    - Guaranteed returns of life insurance contracts have been possible in the past thanks to investments in stocks for a significant proportion of assets representative of the rights of insured clients. However, several accounting and regulatory changes (including anticipation of the Solvency 2 Directive) have deterred life insurance from the equity market. The level of guarantee offered by life insurance contracts decreased and life insurance contracts are less invested in stocks.
    - Asset allocation of occupational pension funds is often decided by stakeholders (representatives of the employers and of the employees) who might have been influenced by the succession of financial crises and decided to lower the percentage of the portfolio invested in stocks, and by the underperformance of equities versus bonds since the beginning of this century.
- Part of the decrease of insurance corporations and pension funds has its counterpart in the increase of investment funds. There are three possible ways for Institutional investors to manage their assets (see box 1): they can manage their portfolio by themselves, they can delegate the management to external portfolio managers through a mandate or they can buy investment funds shares. Mandates and dedicated funds (or funds subscribed by a few institutional investors) are very close solutions, and a shift from the former to the latter is not necessarily significant.

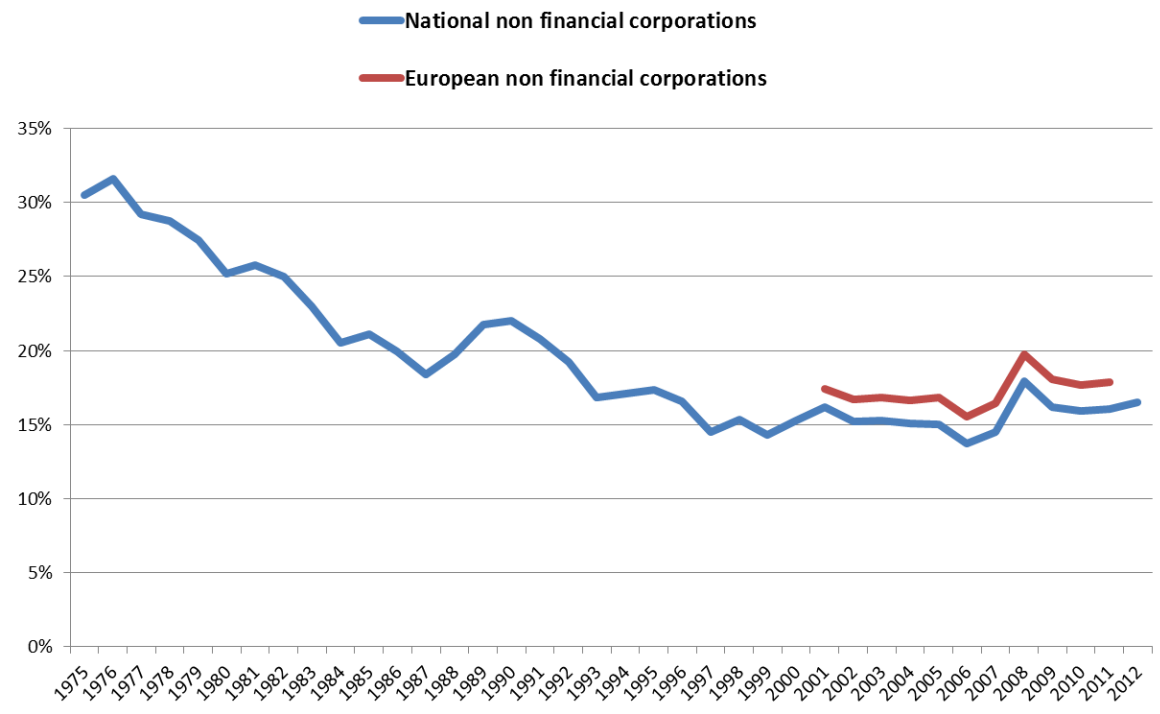
Box 1: Investment vehicles used by institutional investors

"Three types of vehicles are used by institutions outsourcing their investment management to external providers; external managers can run a mandate to manage segregated accounts, they offer pooled investment vehicles, which are often open to a limited number of investors (in some cases, only one). Finally, external managers can run advisory mandates with institutions, allowing them to keep a hand on approach with regards to investment decisions. Although the vast majority of large institutions use both segregated accounts and pooled vehicles, an increasing number of small investors have tended to shift their assets towards pooled vehicles over the last few years. However, IPE surveys did reveal that Nordic investors and those based in Great Britain and Ireland prefer investment pooled vehicles. "

Source: "*The Importance of Asset Management to the European Economy*", Didier Davydoff, Laetitia Gabaut , Grégoire Naacke, 2010

3.7 Non-financial corporations

Share of non-financial corporations in the share ownership structure of European listed companies

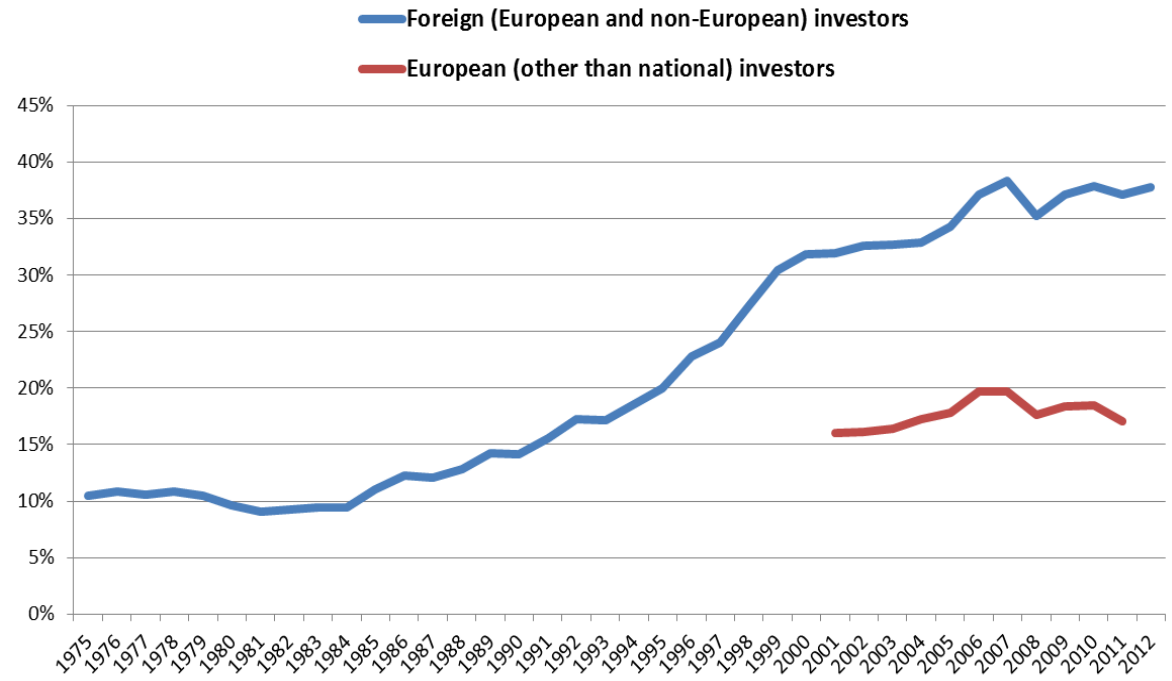


Trends in non-financial corporations share ownership show two periods: a decrease of more than 15 percentage points from 30% to 15% between 1975 and 1997, a period of stabilisation between 1997 and 2012 (16%). Industry sources mention a tendency to the "re-nationalisation" of investment and mergers-and-acquisition European markets, with foreign corporations becoming more cautious about their European investments.

The participation of non-financial corporations in the stock market varies considerably across countries: traditionally low in the United Kingdom, high in Italy, and decreasing in France, from an "Italian model" to a "British model".

3.8 Foreign investors

Share of foreign investors in the shareowner structure of European listed companies



Foreign investors are defined as any investors whose residence is different from the registration country of the company whose shares it holds. Foreign investors can be European (other than national) or non-European investors. Investment funds domiciled in Luxembourg or Ireland are excluded from the presented figures (see above the section “Defining the categories of investors”, page 17).

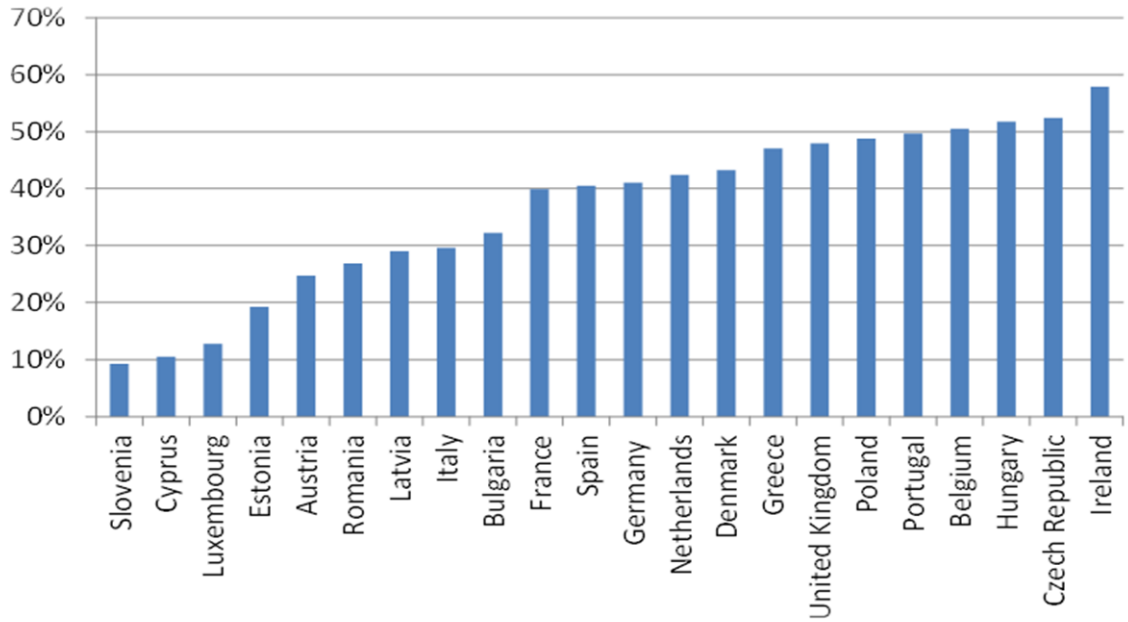
With 38% at end of 2012, this category of investors is now the largest one.

The weight of foreign investors almost quadrupled between the beginning of the 1980s and 2007. There was a need for diversification of foreign investors’ portfolios, mainly American pension funds, in the eighties and nineties. The rise accelerated in 1995 with the convergence process that stemmed from the creation of the euro and more generally from the single European market for financial services and capital flows. Recently, sovereign funds, fuelled by natural resources revenues and accumulation of currency reserves, progressively took over other types of institutional investors.

The financial crisis translated into a stabilisation of the weight of foreign investors. Institutional investors have become more cautious about the foreign stocks. A phenomenon of “re-nationalisation” of investment was observed in the governmental debt market and to some extent in the stock market.

The share of foreign investors ranges from 10% to 58% across countries (before the re-classification of Luxembourg and Irish funds mentioned above). It is superior to one third in a majority of countries, including in large countries where there is a saving pool that would be sufficient to meet the needs of the domestic market: investors have been diversifying their portfolio abroad and a symmetrical move also happened with foreign investors becoming prominent shareholders of European firms.

Share of foreign investors in total market capitalisation (2011)

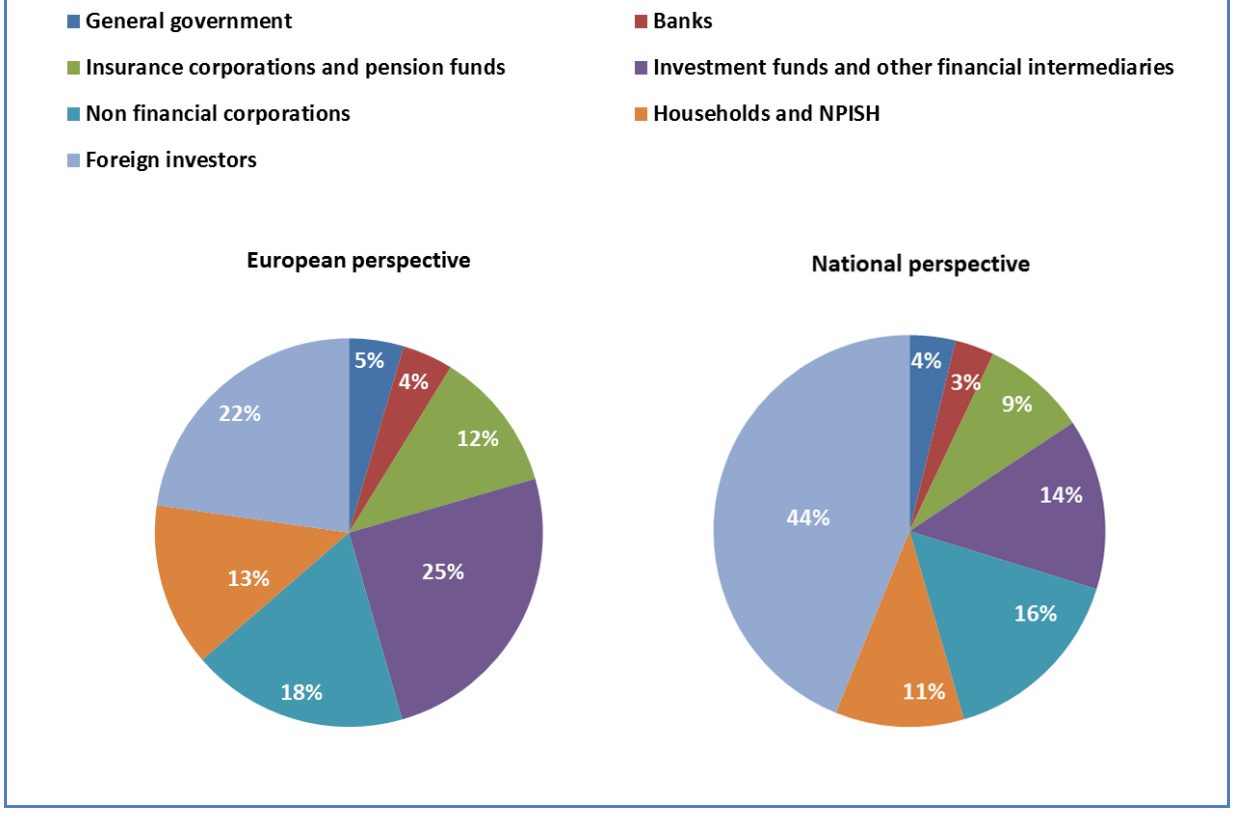


3.9 European investors

Here we aim at drawing a more precise picture by identifying what kind of investors are behind the "rest of the world" category. We are aware of limitations of such approach, detailed in box 2 but the trends can be identified using our methodology.

The left part of the graph below reflects the breakdown using the new classification of the present research: it includes only European shares, and investors are considered as non-resident only if they are not European. The right part of the table uses the traditional classification of national accounts. Only national investors are considered as domestic: all non-national investors, even European ones and investment funds domiciled in Luxembourg or Ireland are considered as foreign. But the right part of the graph differs from usually published financial accounts because it only includes domestic shares in each European country.

The ownership structure of EU listed corporations at end of 2011



In the new classification, non-European investors held no more than 22% of the market capitalisation of European shares at end of 2011, whereas the non-national investors held 44% of the total recorded in national accounts. This can be explained by the importance of intra-European cross-border investments.

Box 2: Limitations of data on cross-border holdings of securities

Custodian banks hold securities for the account of clients without having any share ownership right: they are neither allowed to sell or buy securities without an order from the client, nor to vote in General Assemblies nor, obviously, to keep in their own books dividends received for the account of their clients. However, it is likely that in several cases, investment flows recorded for the purpose of financial statistics, especially Balances of Payments, do not distinguish between custodians and ultimate owners of securities.

It is all the more difficult to solve this problem that there are chains of custodians and sub-custodians: A European bank might be in charge of the custody of European securities for an American bank, the latter being in reality itself a custodian for an Asian final investor. Global custodians based in London and other European financial centres maintain books for their clients in Europe and outside Europe. Instructions given by the IMF for running the CPIS survey insist that custodians should be clearly asked to provide information on the basis of residence of the ultimate asset holder and that sub-custodian should ignore their holdings on behalf of the global custodians. But it recognises that "look-through" the sub-custodian to the global custodian might be difficult and that it should be undertaken only if there is "a good interagency coordination of cooperation" between them. Therefore figures may somewhat under-estimate or over-estimate the weight of foreign investors.

Similarly, nominees holding securities as trustees for the account of investors should always know the country of residence of beneficial owners, but it might be the case that some of them do not transmit this information.

However, such statistics can be useful for three reasons:

- They are good indicators of the trends in the integration of European markets.

- For some categories of investors – namely private investors, non-financial corporations, most governments and most investment funds – they enable to measure the weight of European investors.

- In some cases the assets of foreign investors might be difficult to track, but the importance of their stakes requires them to disclose them in order to enforce their rights. For example, it was not possible to correct individually the figures to check individual portfolios of all sovereign funds in the framework of the present study, but further research could help getting more precise figures by using commercial databases on share ownership.

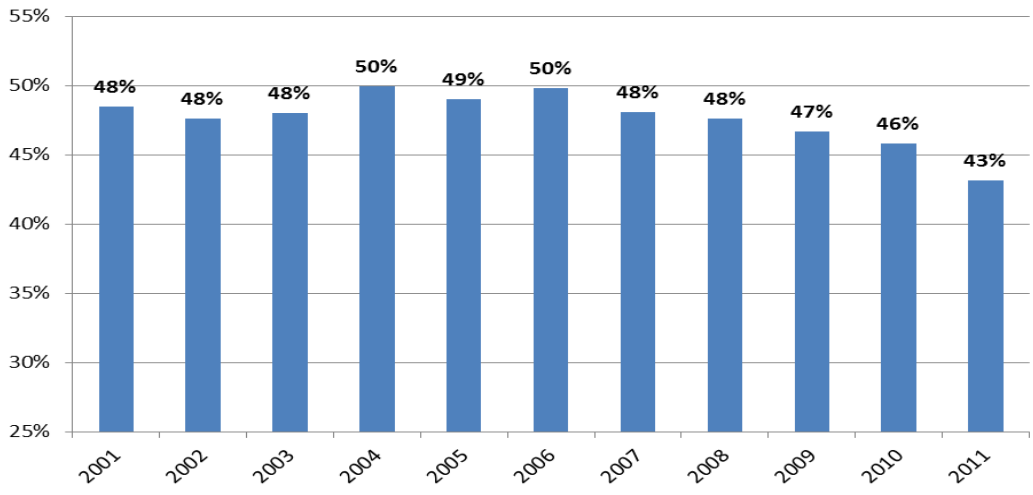
The introduction of the Euro has encouraged intra-EU cross-border investments. This move appears to be the result of reallocation of national assets by EU investors, since the share of national investors decreased over the period. The main drivers for such reallocations were:

- the disappearance of the currency risk within the euro area;
- a broad use of euro based financial products, including derivatives on euro area indexes;
- the rise of Dublin and Luxembourg as places of domicile for pan-European investment funds, despite a temporary decrease in 2008.

The relative weight of national investors increased in 2008 following the outbreak of the financial crisis but from 2009, the stake of non-EU investors grew continuously. As a result, the share of intra-EU cross-border investments in overall cross-border investments decreased from 50% in 2006 to 43% at the end of 2011.

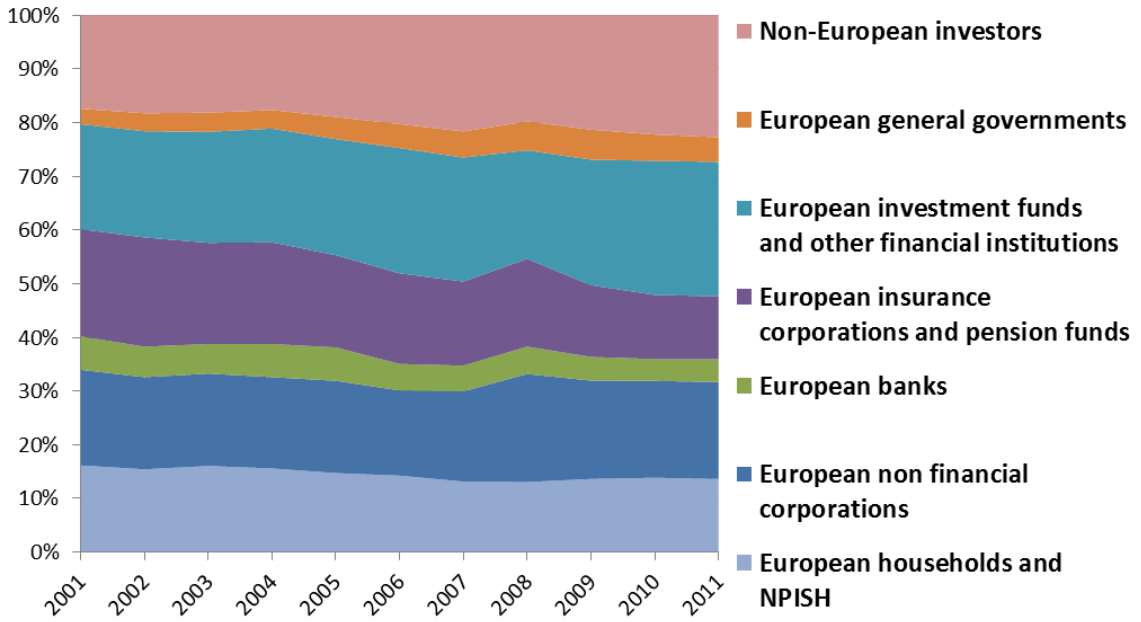
The trends described above are averages. The weight of European investors in cross-border investments varies across countries, from a minimum of 20% in the United Kingdom to nearly 90% in Portugal.

Share of European investors in cross-border equity investments towards Europe
(excluding investments to Luxembourg and Ireland)

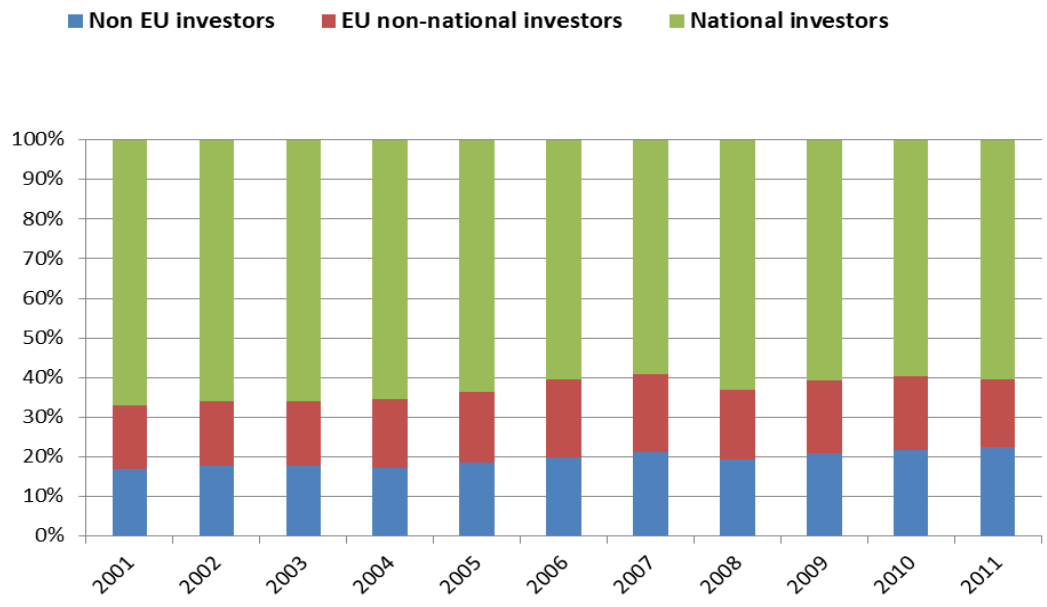


Source: OEE estimations based on CPIS

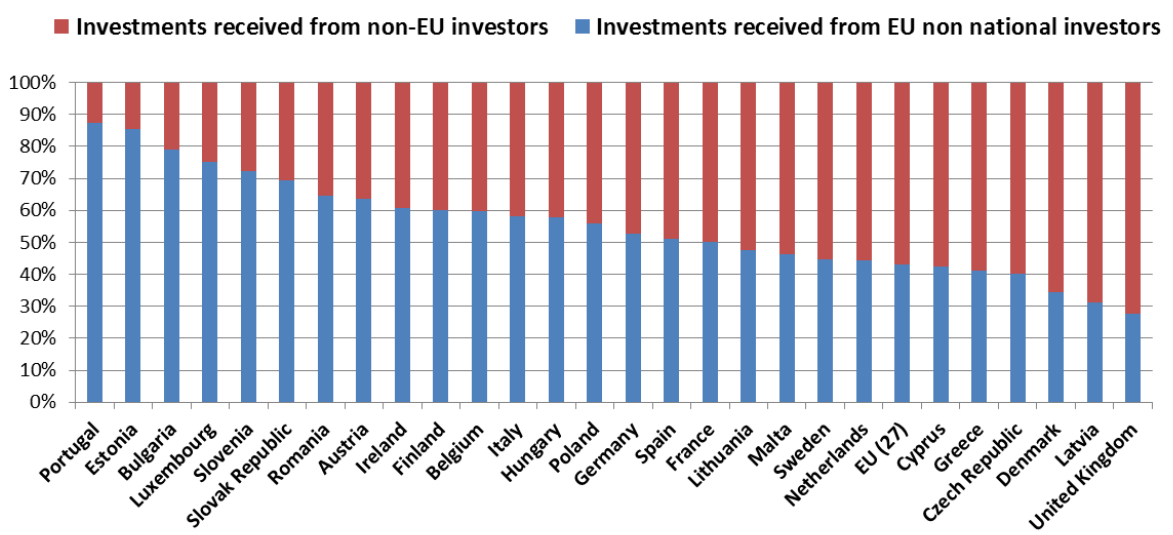
Share ownership structure of EU-listed companies: European perspective



Breakdown of holdings of European quoted shares from a European perspective



Cross border portfolio investments in EU quoted shares from EU and Non-EU investors in 2011

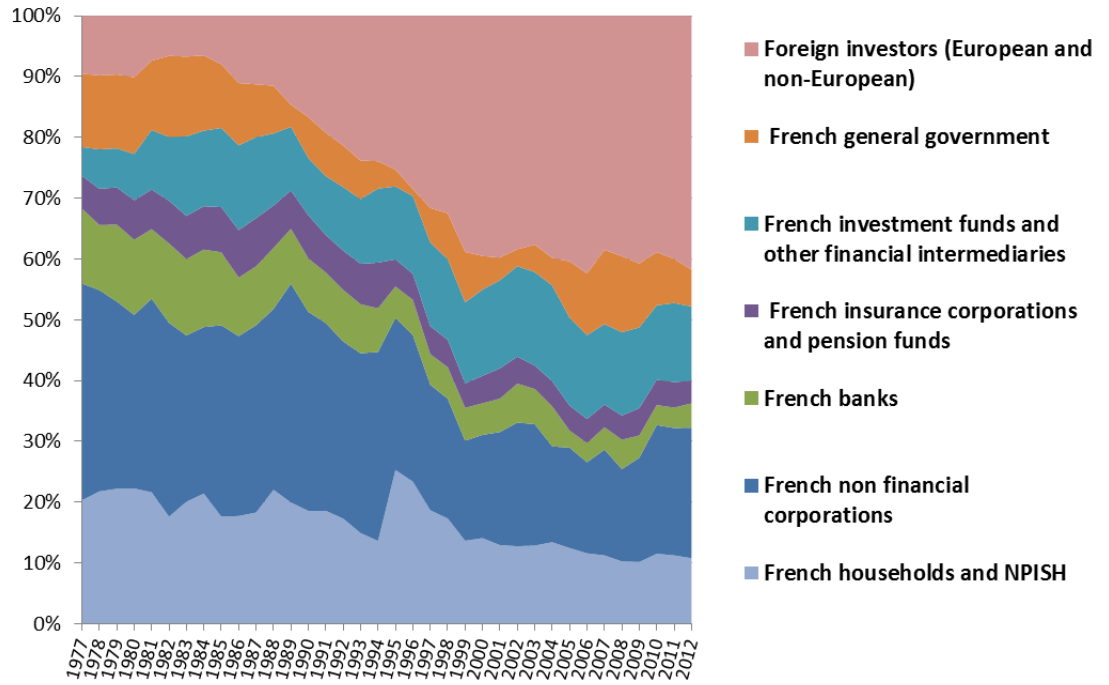


4 Country trends

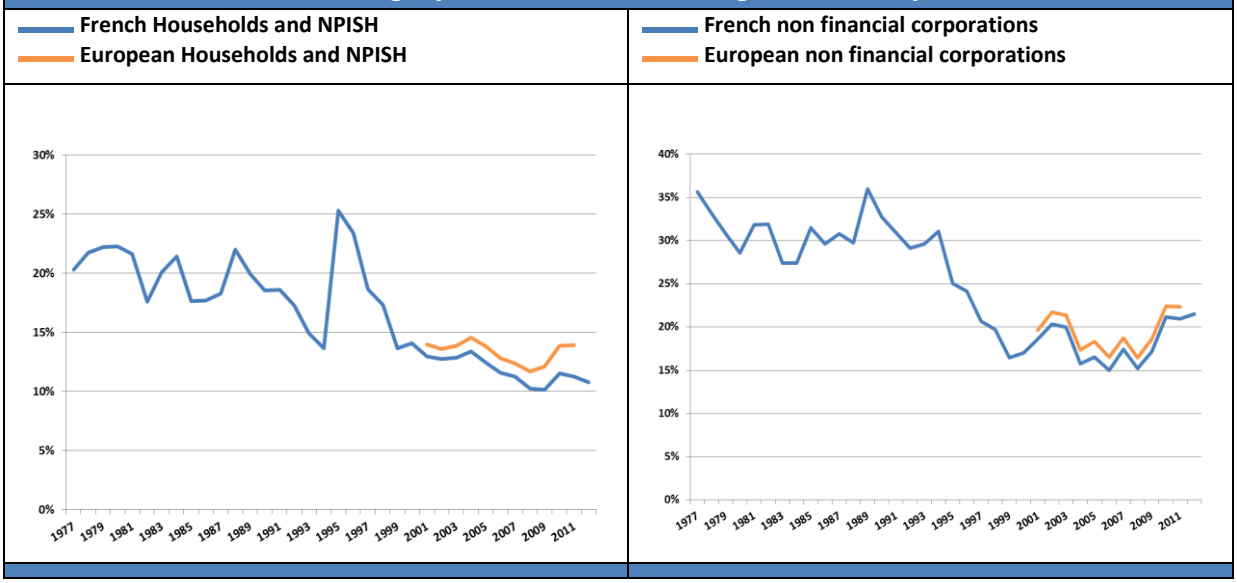
4.1 France

Although there are some inconsistencies between historical data and national accounts currently produced under SEC 95 methodology[11], there are time-series available going back to 1977 for France.

Ownership structure of French quoted shares

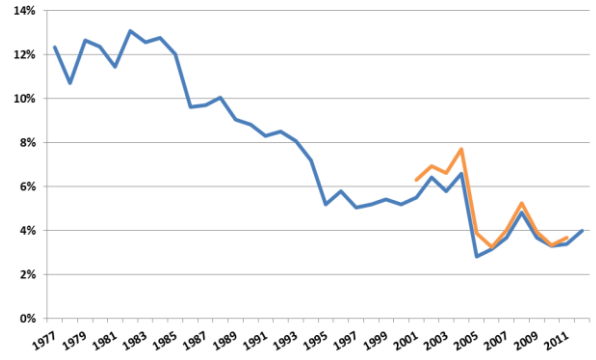


Share of each category of investors in holdings of French quoted shares

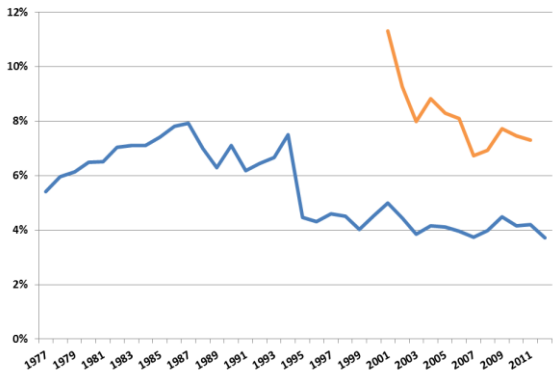


[11] There are probably some statistical breaks on the breakdown of holdings between households and non-financial corporation between the long time series and data on year 1995 onward.

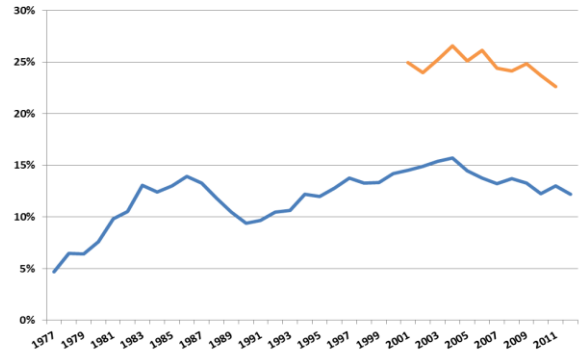
French banks
European banks



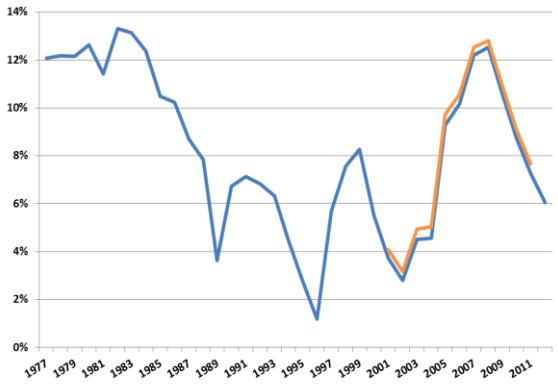
French insurance corporations and pension funds
European insurance corporations and pension funds



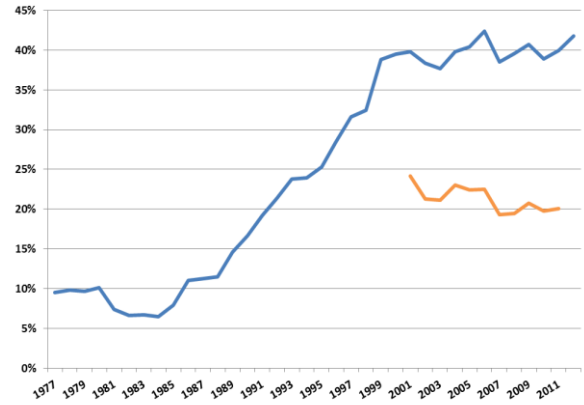
French investment funds and other financial intermediaries
European investment funds and other financial intermediaries



French general government
European general government



Foreign (European and non European) investors
European (other than national) investors



Households and NPISH

Households held approximately one fifth of the market capitalisation until the late 1980s and then their weight decreased continuously. Note that the massive privatisations in 1986-1988 and 1993-1996 did not translate into a significant rise of the share of households despite tax incentives, attractive IPO prices (especially for employees of the nationalized companies) and intense promotion: Private investors were very numerous (17 million) but each has subscribed for a low average amount.

Non-financial corporations

Non-financial corporations held about one third of French quoted shares until mi-nineties and their weight then decreased continuously and stabilized at about 15% in the mid-2000s.

French capitalism has long been characterized by circular capital links between large companies. A high proportion of their own shares was also held by public companies. The first wave of privatisations (1986-88) accentuated this trend as the government aimed at building a "hard core" of shareholders ("noyaux durs") which were supposed to keep major strategic companies under a domestic control. However the government gave up on "noyaux durs" for the second wave of privatisations (1994-1996) and French companies needing new means of financing gradually simplified their share ownership structure.

Banks

The relative weight of banks decreased from 1984 to 1995. Then it stabilized until 2004 and dropped again in 2005 and after the financial crisis. Banks held 50 billion euros in French quoted stocks at end of 2012, including more than 7 Billion held by the State-owned bank Caisse des Dépôts.

Insurance corporations and pension funds

Pension funds are marginal in France, except for some specific categories of the population (self-employed, farmers) or for employees of some large companies with specific occupational pension funds. The sector is thus mainly composed of life insurance corporations. Their weight reached 9% in 2001, when unit-linked life insurance contracts (i.e. contracts by which the client is exposed to the market risks and performances) represented approximately 70% of net subscriptions to life insurance contracts. The burst of the Internet bubble in 2000 and the financial crisis of 2008 made private investors more cautious. Meanwhile, accounting regulation and the forthcoming Solvency 2 directive deterred insurance corporations from buying shares for their own account or to sustain the performance of guaranteed life-insurance contracts. In total, their weight is down to 5% of the market capitalization in 2011-2012.

Investment funds and other financial intermediaries

The weight of investment funds and other intermediaries fell two percentage points in the late 1980s. Then it increased gradually and oscillates between 12 and 14% since the early 2000s.

General Government

After WW2 and again in 1982, the government nationalized several of the largest French companies. But this did not necessarily translate into a high percentage of holding of the market capitalization by the government, since many nationalized companies were de-listed.

The weight of the government decreased from 13% at the beginning of the eighties to 3% in 1996. The total amount of privatisations amounted to the equivalent of 12 billion euros in 1986-1988 (the largest were: Saint-Gobain, Paribas, CCF, Alcatel, Société Générale, Suez) and 11 billion euros in 1993-1996 (the largest: BNP, Rhone-Poulenc, Elf Aquitaine, Renault, UAP, Usinor, Seita and AGF). The share of the State returned to 10-12% after the financial crisis.

Between 2009 and 2012, the value of the portfolio of the State had lost around 50 billion dollars due to losses in the market value of shares in the energy sector (EDF, GDF-Suez) and Orange.

Recently, the government sold some more stakes to the private sector: a stake of 3.1% in Safran and of 2.1% in EADS in 2012, a stake of 9.5% in Aéroports de Paris in 2013.

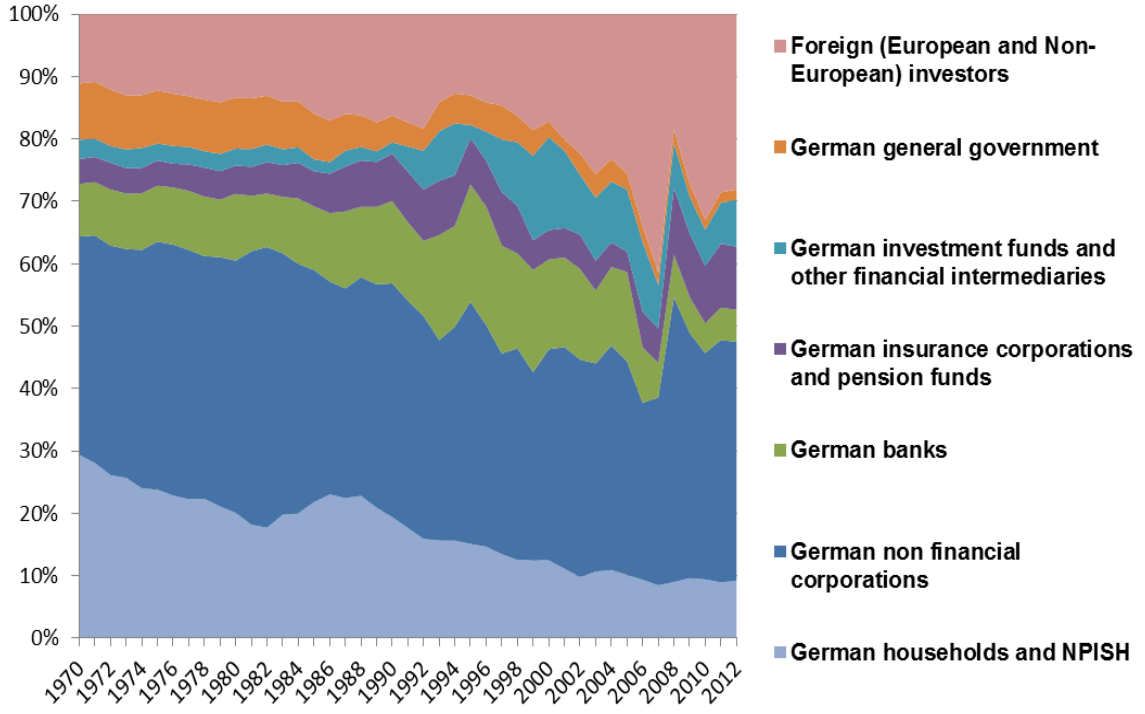
Foreign investors

The share of non-resident investors remained stable at approximately 10% until the late 1980s. It increased gradually until the late 1990s and stabilized at 40%. Their "market share" was taken away from households for 10% and from non-financial corporation for 15-20%.

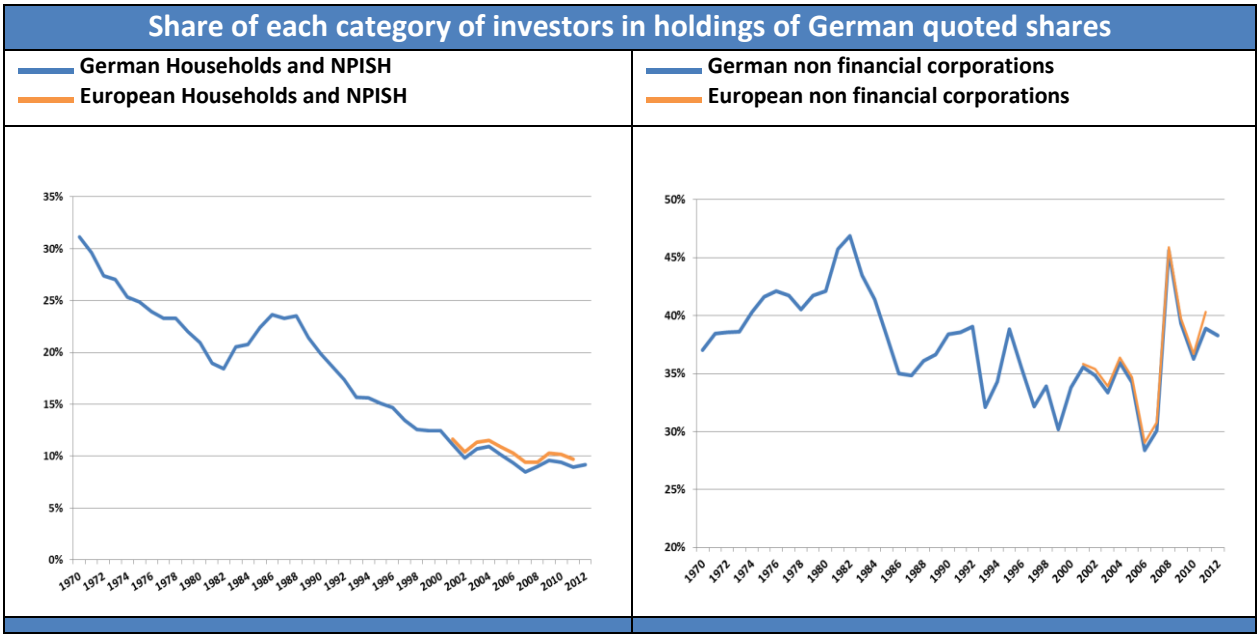
During the first wave of privatisations, the law of 6 August 1986 provided that foreign investors could not hold more than 20% of the capital of the privatized companies. But this provision did not apply to European investors and did not prevent foreign investors to hold a growing share of the French stock market capitalization. There was no restriction to foreign shareholding for the second wave of privatisations (1993-1996).

4.2 Germany

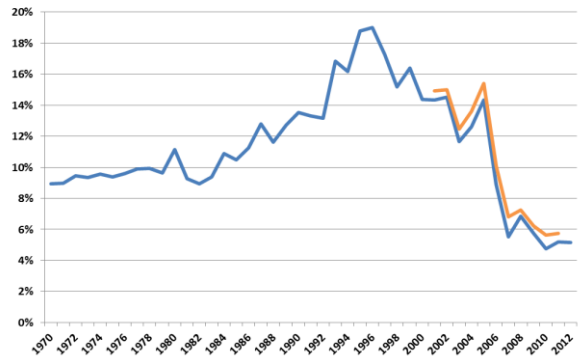
Ownership structure of German quoted shares



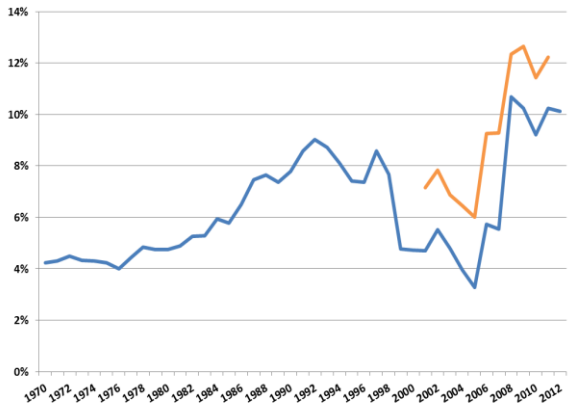
Share of each category of investors in holdings of German quoted shares



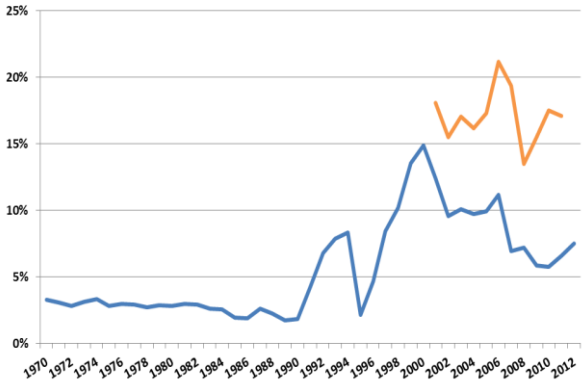
German banks
European banks



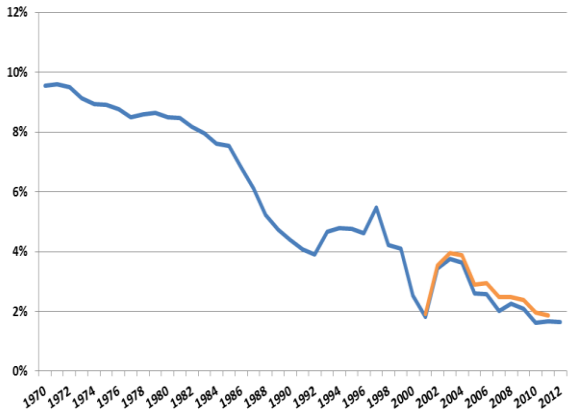
German insurance corporations and pension funds
European insurance corporations and pension funds



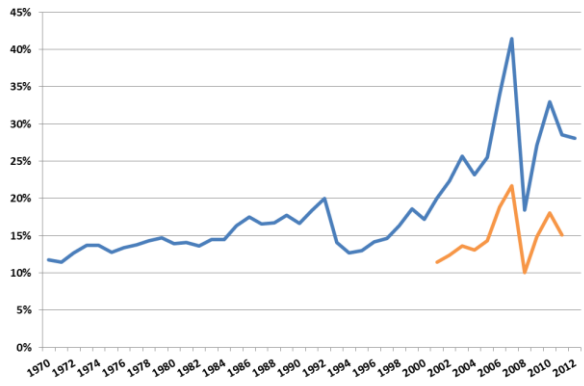
German investment funds and other financial intermediaries
European investment funds and other financial intermediaries



German general government
European general government



Foreign (European and non European) investors
European (other than national) investors



Households and non-profit institutions serving households

Family owners hold shares of quoted companies either directly or through foundations (for example: the 25% stake of the Krupp foundation in ThyssenKrupp).

Like in other European countries, the weight of households declined from one third of the market capitalization to 9% in 2011.

Non-financial corporations

The weight of non-financial corporations is still higher in Germany than the European average, although it declined from 1980 to the mid-2000s.

Banks

The weight of German banks increased during the 1980s and the first half of the 1990s, and then dropped to 5% in 2010 and 2011. The German "Hauptbank" model, in which one bank is the partner of its corporate clients for all their needs, does not cover the needs for equity capital.

Insurance corporations and pension funds

The share of insurance corporations and pension funds in German quoted share holdings is rather low, although it showed a rising trend until 2008. It has stabilized between 8 and 10% of total market capitalization since 2008.

Investment funds and other financial intermediaries

Until 1992, assets held by investment funds were very low. They surged from 1990 to 2000, from 2% to15%[12]: Investment funds began to rise sharply in institutional investors and individuals' portfolio, thanks in part to the introduction of a flat tax rate on residents' income and to the transposition of the EC Directive of 1985 in the German law in 1990. Then it stabilized during seven years and decreased to 7% since 2008. However the weight of investments funds subscribed to by German investors is higher: for tax and regulatory reasons, domestic funds have lost ground to Luxembourg and Irish funds ("round-trip" funds). Specialised funds subscribed to by institutional investors, not regulated as EU UCITS are also a significant category of investors in Germany.

General Government

Like in other countries, the weight of the Government has shrunk from 12% of the market capitalization in 1960 to 2% in 2010, although there was no massive wave of centrally managed privatisations. This reflects the specificity of Germany, where Länder were significant shareholders.

However, there was an acceleration in the decline of governments' weight from 1982 to 1989, when the Central State withdrew from the capital of most manufacturing companies.

[12] For more details: "The trend in and significance of assets held in the form of investment funds", Deutsche Bundesbank Monthly report, October 1994.

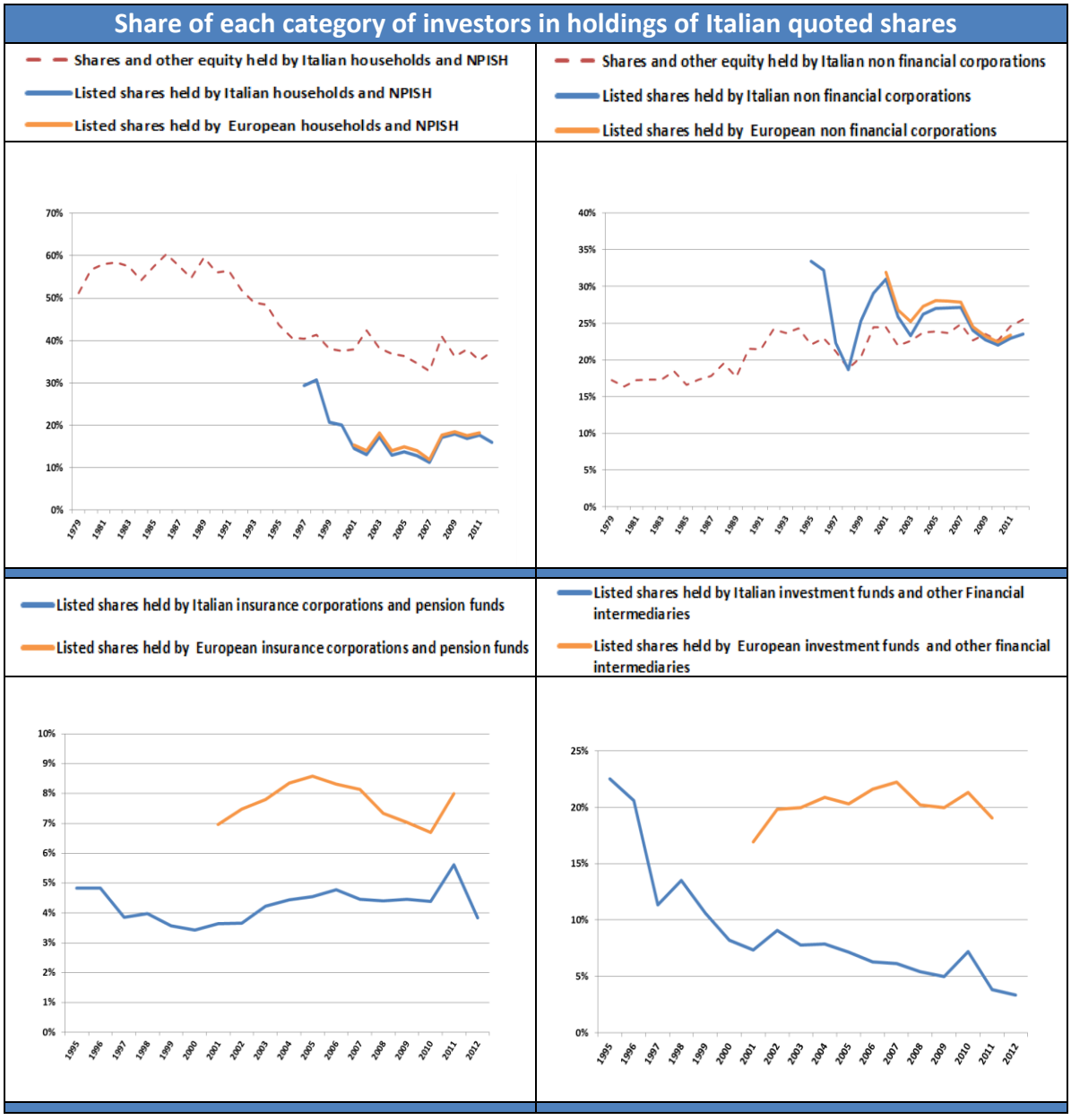
Treuhandanstalt was created in 1990 to manage the privatisation of the East-German companies after the reunification, but few of them became public companies.

Foreign investors

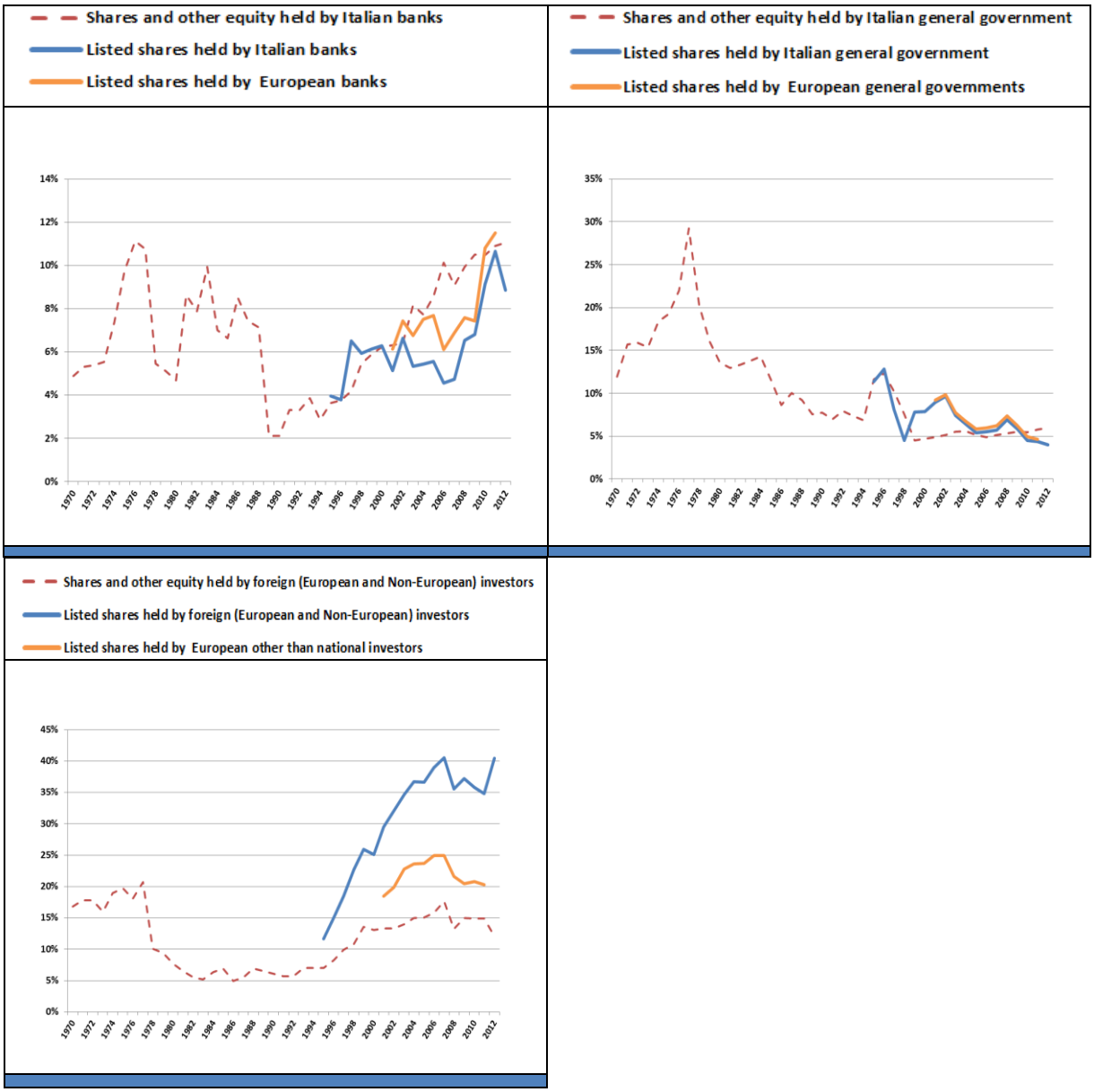
The share of foreign investors in the market capitalisation of German stocks remained rather stable until 2000, at 17%. Then it increased to 28% in 2012 (NB: the sharp fall in 2008 and 2009 might be due to a statistical break).

4.3 Italy [13]

There are historical data available going back to 1950 for Italy and enabling to measure the amount of shares held by each institutional sector. However, these data do not distinguish quoted shares from unquoted ones. Hence, we present data relating to all shares since 1970 and data relating to quoted shares only since 1995.



[13] More details on the structure of share ownership in Italy can be found in A. Aganin and Palolo Volpin: "*The History of Corporate Ownership in Italy*", Chapter 6 of a volume published by the National Bureau of Economic Research (NBER): A History of Corporate Governance around the World: Family Business Groups to Professional Managers, University of Chicago Press, November 2005.



Households and non-profit institutions serving households

Family capitalism controlled the Italian economy until the late 1980s. This was a characteristic of both SMEs and large listed companies (Fiat, Pirelli, Benetton…).

From 1993 to 2000, the government implemented a massive privatisation program which translated into an increase of the share of households in the holding of quoted shares. However the share of households declined in the 2000s and dropped to a minimum of 12% in 2007. Households were more stable than other investors in the financial crisis but their representation decreased again in 2012.

Investment funds and other financial intermediaries

Investment funds were introduced in 1983 in Italy. They held one fifth of the domestic market capitalisation until the middle of the 1990s, but then their share decreased continuously. Investors have diverted from Italian funds for tax reasons and have reallocated their investments to "round-trip" funds domiciled in Luxembourg and Dublin.

Non-financial corporations

Non-financial corporations hold 20 to 25% of both listed and non-listed capital of non-financial Italian corporations. Their share in quoted shares decreased in the late 1990s.

Banks

The weight of banks and other monetary financial institutions in Italian quoted share increased to 9% in2012.

Insurance corporations and pension funds

The share of insurance companies and pension funds in Italian quoted share holdings is still low, despite a certain growth until 2011.

General Government

After the crisis of 1929, the Italian State substituted to defaulting banks in the financing of the economy. State agencies were created for that purpose: IRI (1933), ENI (1952), Gepi (1972) etc. Electrical groups were nationalized in 1962. At the end of the seventies, the State owned almost one third of all shares in Italy. However, a massive plan of privatisations (the largest were: Credito Italiano, Comit, IMI, INA, ENI) had to be implemented in the 1990s to finance the public deficit. The equivalent of $99 Bn was thus raised through privatisations from 1990 to 2000[14], translating into a declining weight of the State in both listed and non-listed share value (around 5%).

Since the mid-2000s, there are little changes in the weight of the State, varying between 4% and 6%.

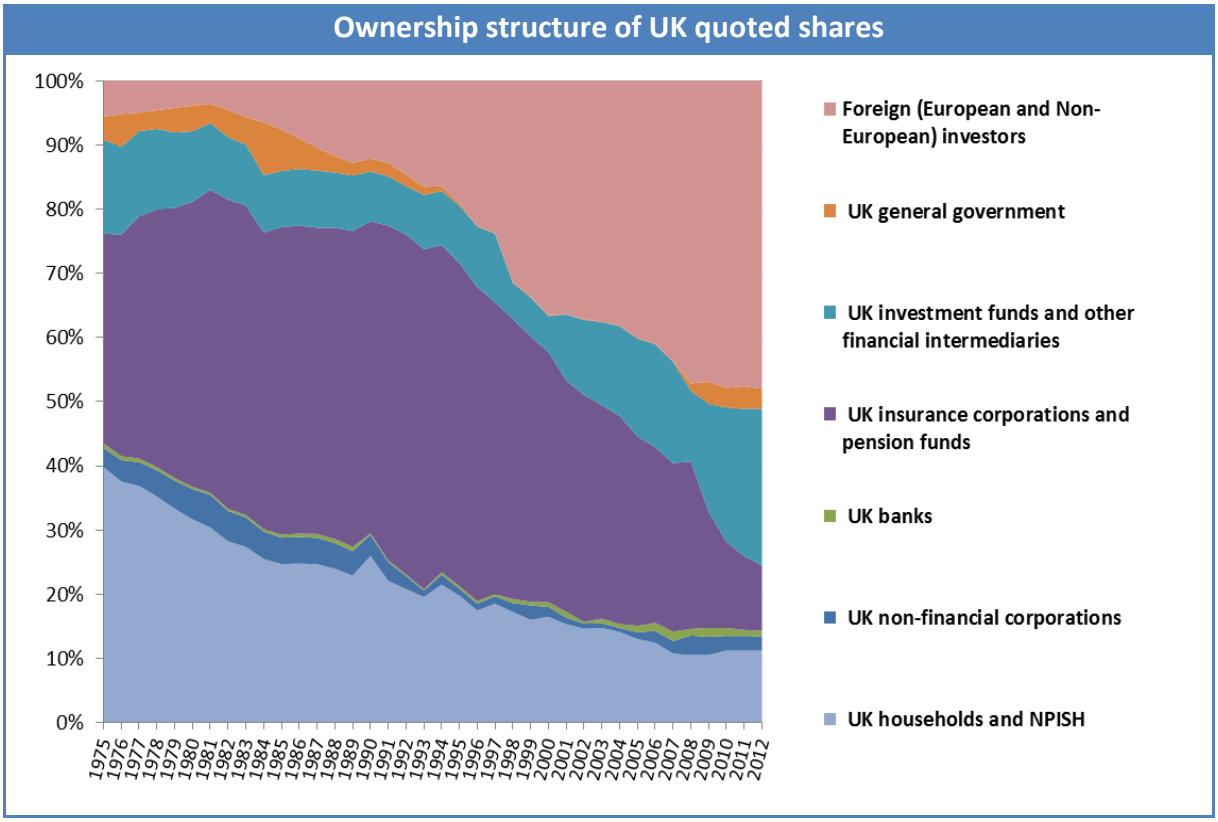
Foreign investors

The weight of foreign investors used to be much lower in Italy than the European average. However it increased dramatically and it is comparable to other European countries since the mid-2000s.

[14] Source: Friedrich Schneider, *"Privatisation in OECD Countries: Theoretical Reasons and Results Obtained"*, August 2003

4.4 United Kingdom

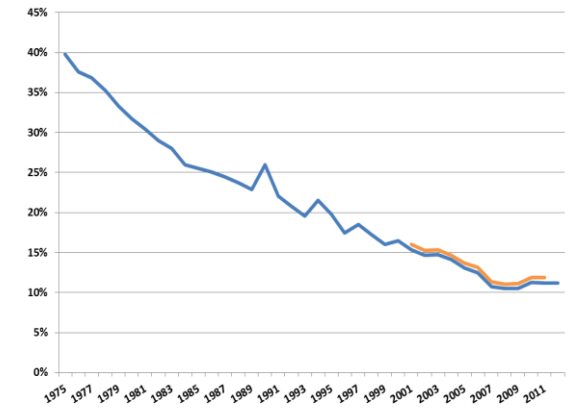
The UK national financial accounts in accordance with ESA 95 standard are the only ones in Europe that record domestic quoted shares only, which simplifies the present research. There are also long time series available but they do not cover all years and we had to process some estimation of the missing data. Moreover the methodology for estimating the beneficial owners in pooled nominee accounts[15] has been completely revised in 2010, resulting in a sharp increase of unit trusts and other financial intermediaries.



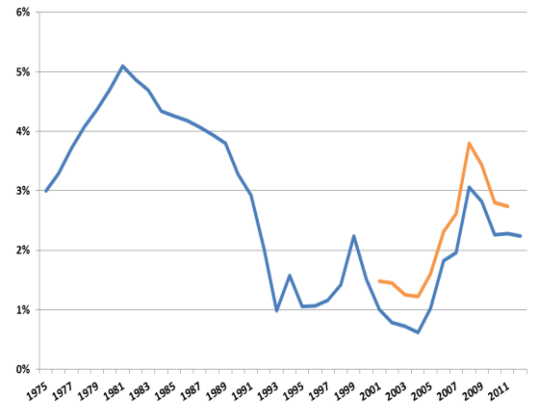
[15] Pooled nominee accounts holdings represented 44.9% of the total value of UK quoted shares in 2010 (source: "*Ownership of UK Quoted Shares, 2010*", Office for National Statistics, February 2012)

Share of each category of investors in holdings of UK quoted shares

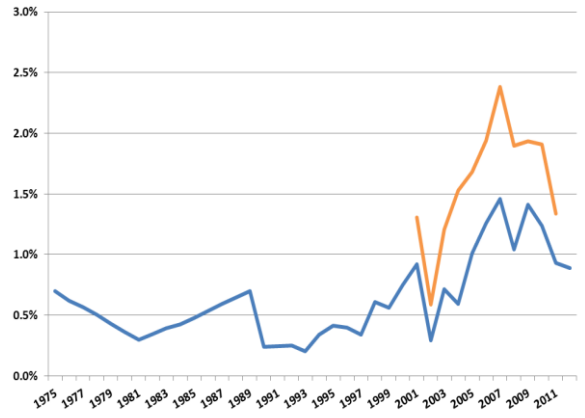
UK Households and NPISH
European Households and NPISH



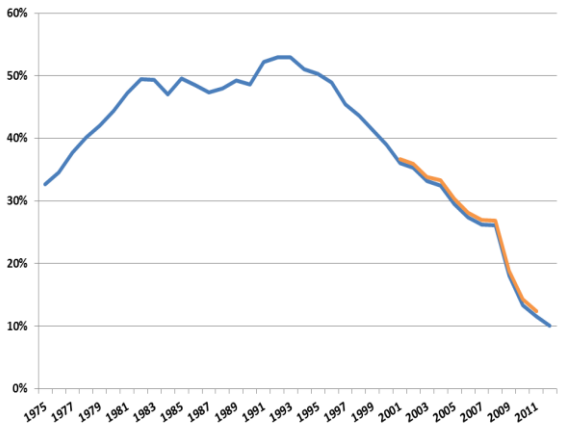
UK non financial corporations
European non financial corporations

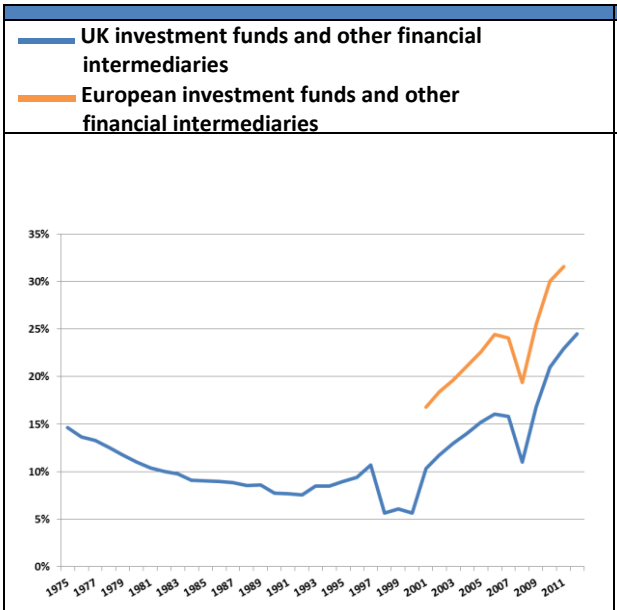


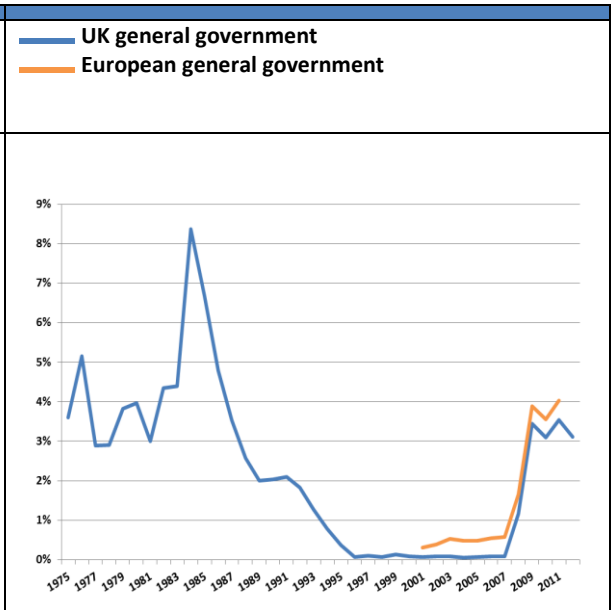
UK banks
European banks

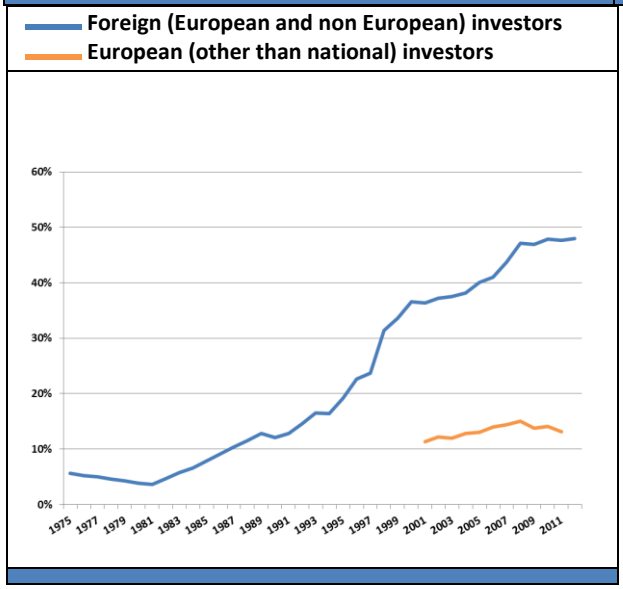


UK insurance corporations and pension funds
European insurance corporations and pension funds









Household and NPISH

The weight of households decreased from 40% in 1975 to 11% since 2007. The downward trend stopped in 2007 and since then the share of households has slightly increased.

The privatisation program implemented by the government from 1979 to 1992 was intended to increase individual share ownership (with attractive IPO prices and heavy promotion). In 1993, there were 10 million individual shareholders, against 3 million in 1979. However, it did not reverse the

steady downward trend. More recently, the decline of private investors has been offset by a rise of employees and directors direct ownership[16].

Non-financial corporations

Non-financial corporations hold only 1%-5% of UK quoted shares, a level well below the European average.

Banks

The weight of banks in UK listed share ownership remains at a very low level.

Insurance corporations and pension funds

The share of insurance corporations and pension funds in UK quoted share holdings increased from the 1960s to the end of the 1970s: during this period, these institutions increased their exposure to the equity market, while their overall assets grew thanks to the expansion of occupational pension schemes among UK employees[17].

Since 1993, the relative weight of insurance corporations and pension funds in UK quoted shares holdings gradually reduced from 53% to 10% in 2012. Fund managers have diversified their portfolios to improve their efficiency in terms of risks and returns. Moreover, the size of many pension funds has decreased, with contributions exceeding benefits.

A sharp drop of 8 percentage points has occurred in 2008, symmetrical to the increase of investment funds. Outsourcing of investment to specialised asset managers contributed to the declining direct share ownership and a symmetrical increase of investment funds subscriptions.

Investment funds and other financial intermediaries

The evolution of the weight of investment funds and other financial intermediaries has been characterized by three periods of increase (1990-1997, 2001-2007 and 2009-2012) and two periods of sharp declines (1998-2000 and 2008). Over the long-term, investment funds' weights in UK quoted share ownership show an uptrend. However, recently "other financial intermediaries" other than investment funds heavily contributed to this rise, a trend that should be interpreted with caution as there could be a classification issue of beneficial owners in pooled nominee accounts before 2010, generating a statistical break[18]. As an indicative reference, total net sales of UK domiciled investment funds from 2009 to 2012 represented 33% of the outstanding value of those funds at end of 2008, whereas the share of "Other Financial Intermediaries" holdings of quoted shares more than doubled over the same period. The relative weight of other financial intermediaries was probably underestimated before 2010.

[16] Source: The Kay review of UK equity markets and long-term decision making, chapter 3: "*The structure of shareholding*", July 2012
[17] Source: ibid
[18] See "*Share Ownership Methodology Review*" , Office for National Statistics, available on ONS website: www.ons.gov.uk, February 2012

General government

The weight of governments in the stock market capitalisation is traditionally much lower in the United Kingdom than the European average.

The UK government was the first in Europe to launch a massive privatisation wave in 1979 and the privatisation of British Telecom in 1984 gave a new impetus to that process. Inflows from privatisations between 1979 and 1992 amounted to £33 Bn. From 1986 to 2007, the government held almost no quoted shares.

However, the government had to recapitalize distressed banks following the 2008 financial crisis (including 70%[19] of RBS's capital and 43%[20] of Lloyds Banking Group). The share of the government in UK quoted shares represents nearly 3% of total share holdings since 2009, which is still lower than the European average.

Foreign investors

The presence of foreign investors in UK quoted share ownership shows an uptrend that started in the 1980s. It was first triggered by the privatisation program that started in 1979. Memorandum of Understanding (MOUs) with some foreign regulators especially the US ones, facilitated dual listings. Dual listings were important to enable, not only large US pension funds, but also small ones not allowed to invest on foreign stock exchanges, to increase their exposure to UK companies. The trend accelerated in the second half of the 90s. The increase has stopped since 2008 and stabilized at about 47% in the last 5 years, but sovereign funds are gradually growing in importance. For example, the Chinese sovereign fund China Investment Corp (CIC) recently acquired a 10% stake in Heathrow airport and a 8.68% stake in Thames Water.

[19] This stake has been reduced to 64.8% at the end of June 2013
[20] This stake has been reduced to 38.7% at the end of June 2013

5 Who really owns the European economy?

Direct share ownership is associated to two core attributes:

- Decision-making power in the General Assembly
- Dividends corresponding to the part of the profits which are not re-invested to increase the capital of the firm.

The Kay report recently highlighted that rights of ownership can be held by different players, mainly financial intermediaries acting for the account of final clients (see box 1).

Extract from the Kay report

"The term 'share ownership' is often used, but the word 'ownership' must be used with care. It is necessary to distinguish:
• Whose name is on the share register? (often a nominee)
• For whose benefit are the shares held? (e.g. a pension fund trustee)
• Who makes the decision to buy or hold a particular stock? (normally an asset manager)
• Who effectively determines how the votes associated with a shareholding should be cast? (this might be an asset manager, a pension fund trustee, or a specialist proxy voting service); and
• Who holds the economic interest in the security? (i.e. who is the saver who bears the gains and losses from investment?)

It is possible, and in fact common, for each of these rights of ownership to be held by different people."

Taking into account indirect holdings of quoted shares through investment funds, life insurance policies and pension funds, households are still major owners of listed companies, although such ownership has become more and more intermediated in the last 30 years.

Measuring households' indirect stakes for the whole Europe would require gathering national statistics on the amount of European quoted shares in the portfolio of pension funds, of investment funds held by households and by insurance companies in representation of life insurance contracts. Such an exercise would be beyond the scope of the present study and it might be unsuccessful for most countries, given the lack of availability of data.

As an example, available data published by the Banque de France enable to estimate French households' indirect holdings of French quoted shares at end of 2011: the percentage of quoted shares in representation of unit-linked contracts and guaranteed return life-insurance contracts held by French households was estimated by the Banque de France at around 3-5% and 48% respectively, of which 53% were French quoted shares[21]. The total value of French quoted shares in the portfolio

[21] Source: Gaël Hauton, Omar Birouk, Alain-Nicolas Bouloux: "*Les placements financiers des organismes d'assurance à fin 2011 »*, Bulletin de la Banque de France n°189, 3d quarter 2012

of investment funds held by households was estimated at 96 billion euros. Pension funds are negligible in France.

Table 1: Households' holdings of domestic quoted shares by French households and NPISH (end of 2011)		
	Bn Euros	Percentage of total market capitalisation
Direct holding	119	10,8%
Indirect holding	142	12,9%
Through investment funds	*73*	6,6%
Through capital guaranteed life insurance contracts	*19*	1,7%
Through unit-linked life insurance contracts	*50*	4,6%
Total holding	261	23,7%

The relative weight of French households' direct holdings in market capitalization was divided by almost two from 1977 (20%) to 2011 (11%). But table 1 shows that households, combining their indirect holdings to direct ones, are still significant owners of French quoted shares. Their indirect holdings are superior to direct ones. One key consequence in terms of corporate governance is that roughly half of the share of voting rights held by households 25 years ago, has now been transferred into the hands of financial intermediaries who do not necessarily have an economic interest in those shares.

However the slowdown of net subscriptions to life insurance contracts since 2011 diminishes the percentage of market capitalization held directly or indirectly by households.

6 Updating the database

The present research is based on the compilation of various data sources, especially for its historical scope (before 1995). Historical time-series could be further improved if national statisticians from all Member States (National Central Banks and National Offices of Statistics) participated in the effort to gather data and assess the relevance of estimations when data are missing.

It is advisable to regularly update the database built for the present research.

If the responsible for such updates is not an expert specialised in financial statistics, our recommendation is to use each year the sector financial balance sheets available on Eurostat and ECB websites. The method to be used for that purpose is described in annex 4.

This exercise will give a good perception of the general trends of share ownership structure in Europe. However, there are limitations to such updating which cannot be overcome without specific resources: quoted shares held by domestic investors include national, European (other than national), and foreign (other than European) shares.

Getting more precise data requires using many complementary sources:

- National sources to split domestic versus foreign shares.
- Balance of Payments, or CPIS data disseminated by the IMF, to split European versus non-European investors. CPIS data are not simple to use because they are gathered and disclosed from the investing country viewpoint. This implies that data from all countries in the world have to be processed to measure their exposure to European listed companies.
- CPIS data have to be reprocessed to include cross-border direct investments in quoted shares and to exclude cross-border investments in investment funds and non-quoted shares.

Annex 1: A brief review of studies on share ownership in Europe.

As an introduction to the assessment of existing studies on share ownership in Europe, we should emphasise that one should always keep in mind (1) the macro rather than micro scope of this research and thus of the databases of reference and (2) the evolution and improvement of statistical databases across time.

(1) There is a broad literature on micro aspects of equity ownership, focusing especially on features such as the distribution of direct and indirect ownership of equities by household population quantiles (see for example Jappelli and Padula, 2012)[22]. The IMF has focused on the risk exposure of individual portfolios and their measures. The present study focuses instead on the macro/sector figures and contributions.

(2) The latter are, as expected, strongly affected by the nature and availability of underlying databases. These are represented basically by the System of National Accounts (SNA) and its sub-systems such as the Balance of Payments Statistics. Since the System of National Accounts was first established in the early fifties under the United Nations Organizations and with the contribution of many important international organizations, such as the IMF, the OECD and, more recently, Eurostat, statistics have undergone successive waves of developments and refinements.

1. National financial accounts

Most existing studies use reference data on the breakdown of share ownership between various types of investors available from national financial accounts. Eurostat database (freely accessible) provides figures for all 28 EU members.

National Accounts are compiled in accordance with the European System of Accounts (ESA 1995) adopted in the form of a Council Regulation dated 25th June 1996, N° 2223/96. They include financial balance sheets of institutional sectors composed of institutional units with similar characteristics and behaviour: households and non-profit institutions serving households (NPISH), non-financial corporations, financial corporations, the government and the "rest of the world". Assets are recorded at current market price.

Financial assets of each institutional sector are broken down in subcategories: Monetary gold and special drawing rights (AF.1), Currency and deposits (AF.2), Securities other than shares (AF.3), Loans (AF.4), Shares and other equity (AF.5), Insurance technical reserves (AF.6) and Other accounts receivable/payable (AF.7).

For the purpose of the present study, national financial accounts raise several difficulties:

- EU countries should transmit data from 1995 onwards only. Several national Offices of Statistics or Central Banks publish financial accounts for the years prior to 1995 but this coverage is neither exhaustive nor consistent in terms of methodology and time period. Indeed, the methodology and classifications evolved since the first "Standard National

[22] Tullio Jappelli and Mario Padula, Investment Literacy, Social Security and Portfolio Choice , OEE Study, 2012

Accounts" (SNA) were adopted by the United Nations in 1953 (see Box 3). Among other difficulties, not all countries distinguish quoted shares from unquoted shares and "other equity", and among those who publish this breakdown, few of them distinguish national shares from foreign shares. In the framework of the present study, we have asked experts from national central banks and offices of statistics for any data or study that might help filling or estimating the missing figures.

- The concept of "Rest of the world" in national accounts is composed of any non-national unit. It does not consider European (other than national) investors as domestic investors. Reallocating European investors to their corresponding category raises difficult issues because it implies identifying the institutional unit of each "European non-national" investor according to the ESA 95 classification.

Box 3 – The successive waves of SNA releases

At its first session in 1947, the United Nations Statistical Commission (UNSC) emphasized the need for international statistical standards for the compilation and updating of comparable statistics in support of a large array of policy needs. In view of the emphasis on international statistical standards throughout the history of the Commission, the following national accounts standards were produced:

The 1953 SNA was published under the auspices of the UNSC. It consisted of a set of six standard accounts and a set of 12 standard tables presenting alternative classifications of flows in the economy. The concepts and definitions of the accounts were widely applicable for most countries, including developing countries. Two slightly modified editions of the 1953 SNA were published.

The first revision in 1960 reflected comments on country experience in the implementation of the 1953 SNA.

The second revision in 1964 improved consistency with the International Monetary Fund's Balance of Payments Manual.

The 1968 SNA extended the scope of the national accounts substantially by: adding input-output accounts and balance sheets, giving more attention to estimates at constant prices, and making a comprehensive effort to bring the SNA and the Material Product System (MPS) closer together.

The 1993 SNA represents a major advance in national accounting and embodies the result of harmonizing the SNA and other international statistical standards more completely than in previous versions.

The 2008 SNA, which is an update of the 1993 SNA, addresses issues brought about by changes in the economic environment, advances in methodological research and the needs of users. The 2008 SNA is expected to be implemented starting from 2014, though some countries have already made available some of the more detailed classifications that the 2008 standards will make available.

2. The OECD finer classification of financial instruments and related analyses.

The development of financial markets has revealed the need for a more detailed classification of financial instruments and institutional investors. Some OECD studies have anticipated in this respect, developments that have, eventually, become part of the new SNA 2008.

A ground-breaking study by André Babeau and Teresa Sbano[23] made an international comparison of Household Wealth across major OECD countries and was followed by the collection by OECD of additional data with a more detailed classification of assets and special reference to the role of institutional investors. Babeau and Sbano highlight many important trends, among which the increasing role of indirect holdings of shares through institutional investors relative to direct holdings. Isabelle Ynesta[24] looks both at real and financial household assets across countries, including for the latter a more detailed analysis of institutional holdings and finds a very strong variance in their composition across countries.

The OECD database on Institutional Investors' Assets presents the main assets, including some assets split by type of issuers (resident/non-resident), according to a detailed breakdown by type of financial sectors, which are the major collectors of savings and are the suppliers of funds to financial markets, and which have a significant impact on investment strategies.

The OECD database on Households' Assets and Liabilities aims at a better identification and analysis of households' wealth in OECD countries. It presents a finer classification of selected financial assets and liabilities, as well as some relevant non-financial assets.

3. The reconstruction of longer time-series of stocks and flows and related analyses

Time series are not easily available, given the discontinuities that each new release of the System of National Accounts entails (as illustrated in Box 3 above).

3.1 Flows

As far as flows are concerned, Fano and Trovato[25] analyse long series in net lending and net borrowing, with a special focus on France and the USA, for which data are available since the early 1950s. They highlight that the crisis of the early seventies has impacted the different sectors not simultaneously but rather in succession. The equilibrium of financial flows has deeply changed with increasing government borrowing, greater involvement of the "Rest of the World" in assuring equilibrium, non-financial corporations becoming more independent and households with very variable and different savings patterns.

3.2 Stocks

As far as stocks are concerned, one should, first of all, mention the reconstruction and interpretation works done at the single country level.

[23] Babeau, A. e Sbano T., (2002), "*Household Wealth in the Financial Accounts of Europe, the United States and Japan*", OECD

[24] I. Ynesta (2008), "*Progress Report on the Oecd Household Assets Database*" , OECD

[25] Fano D. , Trovato, G (2013, forthcoming): "*Patterns in Financial Flows? A Longer-Term Perspective on Intersectoral Relationships*", in L. Paganetto, "Public Debt, Global Governance and Economic Dynamism",DOI: 10.1007/978-88-470-5331-1_7, _ Springer-Verlag Italia 2013

For Italy, Bonci and Coletta[26] have reconstructed stocks for Italy since 1950. De Bonis[27] has interpreted these data by showing, among other things, the strong increase in overall national financial wealth over GDP in the post-war period, with the role of the Rest of the World strongly increasing after 1990, the role of equities relative to GDP rising strongly in the recent decades (from about 0,5 in the early eighties to over 1,5 after 2000). Equities have also increased their weight relative to other financial instruments and, last but not least, have been expanding their importance as assets of Financial Corporations since the late nineties. Sbano[28] has worked on the UK series for financial stocks and liabilities, showing that, among other things, compared with other countries, the UK households are more oriented towards longer-term assets and towards debt.

Thanks to the work carried on single countries, international comparisons have been made possible.

De Bonis, Fano and Sbano[29] have reconstructed the households' stock of wealth in the main OECD countries since 1980 and have highlighted that there are discontinuities in the series that reflect the important changes in the economic and regulatory environment. The role of institutional investors is very different from country to country, though it has a tendency to increase across time. More specifically they show that

(1) The size of household financial wealth relative to GDP varies significantly across developed countries
(2) There has been a certain tendency of convergence of systems, with a declining role of deposits vs. securities
(3) The growth of household debt before the financial crisis was seen as a way to improve inter-temporal allocation through the development of new contracts. More cautious considerations have subsequently been expressed because of the subprime crisis and the global recession
(4) Last but not least, since the 1980s the bank-based systems like those of France and Italy introduced reforms to increase the efficiency of the Stock Exchange, but holdings of shares declined following the two negative cycles of share prices in 2000-03 and 2007-09.

4. The detailed breakdown of asset holdings by country and by sectors

Since its inception in 1997, the CPIS has allowed important analyses on specific aspects of international asset holdings.

[26] Bonci R, Coletta M , (2005) I conti finanziari dell'Italia dal 50 ad oggi, "*I conti finanziari: storia, metodi, confronti internazionali"*, Banca d'Italia, Perugia
[27] de Bonis R, Ricchezza finanziaria e indebitamento delle famiglie italiane "*I conti finanziari: storia, metodi, confronti internazionali*", Banca d'Italia, Perugia
[28] Sbano T., [2008], "*Reconstructing the financial assets time series in the UK*", Economic and Labour Market Review, vol.2, N.4, April.
[29] De Bonis, R, Fano D.Sbano T. (2012) " *Household Wealth in the Main OECD Countries from 1980 to 2011: what do the data tell us?*", OECD

A good example of the use of the database with reference to Italy is provided by Franzosi and Geranio[30] who show, among other things, that there appears to be a greater propensity of Italians who diversify their portfolios internationally rather than domestically.

One issue addressed by Felettigh and Monti[31] concerns institutional portfolios and specifically those of investment funds that, though held in another country, may be classified as equities, while in fact holding mainly bonds and all the while still investing in securities of the country of the resident holder. In the presence of sizeable cross-border positions in investment funds, which are indistinctly classified as equity assets, the economic interpretation of the instrument and geographic composition of a country's foreign assets might be distorted. The instrument composition tends to be skewed towards equity assets; the geographical one tends to be biased towards the countries hosting the investment funds.

Another issue considers potential underreporting of assets (Pellegrini and Tosti[32]). The approach is based on the comparison of mirror statistics on portfolio assets and liabilities, mainly using data coming from the Coordinated Portfolio Investment Survey (CPIS) conducted by the IMF, with the addition of information derived from several international databases. For the years from 2001 to 2010 the global discrepancy is estimated to be equal to 7.3% of world GDP on average.

5. Research on Foreign Direct Investment (FDI)

Foreign direct investment is composed of cross border investments providing the holder with a significant influence on the management of a company. In practice, ownership of equity by a foreign investor with a 10% or more stake of the capital is used to determine influence. The IMF and the OECD issued methodological standards and compile data provided by the Balances of Payments of each country.

Such data and research is complementary to the present study. However, we have not used such data because we are only interested in cross-border investments on quoted shares. As shown by The McKinsey Institute (MGI)[33], institutional investors (insurance corporations and pension funds) face restrictions in the geographical scope of their investments, although some pension funds are considering direct deals with foreign companies. We had to take into account the few stakes of this magnitude in order to split foreign investors between European and non-European ones, in addition to the bulk of cross-border portfolio investments, available from the CPIS database.

6. FESE share ownership survey

The Federation of European Stock Exchanges (FESE) first ran a "share ownership survey" concerning EU listed companies in 1993. The data were provided and verified by the representatives of the

[30] Franzosi A, Geranio M (2007): "*Gli investimenti azionari internazionali:quale ruolo per l'Italia*", Borsa Italiana Bit Notes, N.18

[31] Felettigh A, Monti P (2008): "*How to interpret the CPIS data on the distribution of foreign portfolio assets in the presence of sizeable cross-border positions in Investment Funds. Evidence for Italy and the main Euro–Area countries*", Questioni di Economia e Finanza 16, Bank of Italy

[32] Pellegrini V; Tosti E (2012): " *In search of lost capital: an estimation of undeclared portfolio assets*", Questioni di Economia e Finanza, Occasional Papers 131 , Bank of Italy

[33] Mc Kinsey Global Institute (2013) "*Financial Globalization, Retreat or Reset*?"

different exchanges in the Economic and Statistics Committee of FESE. In most cases, data originated from National Accounts corrected by national experts when inconsistencies were noticed. For example, national accounts in some countries recorded holdings at book rather than market value. Some exchange statisticians in countries where the data were not available in national accounts provided estimations based on a sample of listed companies, representing a high proportion of the domestic market capitalisation. The added value of this survey was also the country-specific comments by stock exchange experts.

The quality, coverage and consistency of national accounts improved progressively and the last FESE survey was published in 2008[34] (data relating to end of 2007). Hence, there is no longer any periodic study on this subject.

The main findings of the last survey were the following (period: 1999-2007):

- An increase of the share of non-resident investors, with a weighted average of 37% at end of 2007.
- A large reduction in the weight of banks and a decrease of the share of domestic shares in the portfolio of collective investment institutions.
- Big differences in the participation of non-financial companies in the different markets. On this period, there was an increase of the share of non-financial companies, the weighted average share being 17% at end of 2007.
- A continuous decline in the participation of individual investors, with again significant differences between markets.
- A low participation of the Public Sector (weighted average: 5%)

[34] *"Share ownership structure in Europe",* Federation of European Exchanges (FESE), Economics and Statistics Committee, December 2008

Annex 2: Processing of CPIS and Financial Accounts data

The objective of this annex is to describe methods we used to assess the share ownership of EU listed shares from CPIS data and national financial accounts.

1. The general framework

The basic data are the holdings of national quoted shares in the national financial accounts. These data are complemented by processing CPIS data in order to include the portfolio of European investors in European quoted shares and to split foreign investors between European and non-European ones.

The first step consists in converting CPIS statistics by country of origin into statistics by country of destination.

However, investment amounts broken down by sectors of holders are not available for all of the 27 member countries in the whole period of observation. Table 2 summarizes availability of sector breakdown information for each EU country from 1997 to 2011. It is notable that CPIS data do not cover the period of 1998-2000.

As shown in the table 2, from 1977 to 2011, sectoral breakdown information is not available for the following countries: Belgium, Latvia, Luxemburg, Malta, Slovakia, Slovenia and Ireland. Concerning Germany, there are no detailed data on investing sectors from 1997 to 2006. As for UK, information is missing for 2011.

Portfolio investment amounts from Belgium, Luxembourg, Ireland, Germany and UK represent a significant part and are thus non-negligible. In this case, it is important to allocate total investment to different investor categories. We applied different data processing and estimation methods according to data availability in each country mentioned above. When no other information is available, we assume that institutional sectors have the same pattern when investing in both cross-border shares and national quoted shares.

Table2: availability of sector breakdown information in CPIS												
											(x : sector breakdown data are available)	
	1997	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Austria (1)									x	x	x	x
Belgium												
Bulgaria					x	x	x	x	x	x	x	x
Czech Republic												
Cyprus		x	x	x	x	x	x	x	x	x	x	x
Danmark		x	x	x	x	x	x	x	x	x	x	x
Estonia												
Finland		x	x	x	x	x	x	x	x	x	x	x
France		x	x	x	x	x	x	x	x	x	x	x
Germany								x	x	x	x	x
Greece		x	x	x	x	x	x	x	x	x	x	x
Hungary				x	x	x	x	x	x	x	x	x
Italy		x	x	x	x	x	x	x	x	x	x	x
Ireland												
Latvia												
Lithuania										x	x	x
Luxembourg												
Malta												
Netherlands				x	x	x	x	x	x	x	x	x
Poland											x	x
Portugal					x	x	x	x	x	x	x	x
Romania		x	x	x	x	x	x	x	x	x	x	x
Slovakia												
Slovenia												
Spain		x	x	x	x	x	x	x	x	x	x	x
Sweden		x	x	x	x	x	x	x	x	x	x	x
United-Kingdom		x	x	x	x	x	x	x	x	x	x	

(1)Data missing for other financial institutions and non-financial sectors

For each European country with available data, we compute the total investment from all other non-European countries on one hand, from European countries on the other. We further split the investment from each European country into the categories of investors mentioned above.

These successive steps enable us to get cross-border investment in each European country broken down into the categories of investors defined in section 3.9 where foreign investors are defined as non-European investors.

However, we have to implement corrections to these matrixes because portfolio investment recorded in CPIS is not exactly similar to cross-border investments in quoted securities. Equity securities covered by CPIS include three components that have to be corrected:

- Portfolio investments in investment funds should be excluded.
- Some cross-border investments in listed stocks are excluded from portfolio investments because they represent a stake superior to 10% of the market capitalization of the invested company. They should be added.
- Portfolio investments in unquoted shares should be excluded.

2. Excluding cross-border investments in investment funds

The amount of cross-border investment to investment funds included in CPIS statistics is small in most countries. As previously mentioned, there are two exceptions because they are the places of domicile of most cross-border funds, namely Luxembourg and Dublin.

National financial accounts enable to measure the relative weight of investment funds in the holdings of equity by foreign investors. This weight is huge in the two countries which concentrate most pan-European and round-trip funds and have a small market capitalization of quoted shares (Luxembourg and Ireland). It is relatively small in other countries. We apply a “hair-cut” to CPIS data relative to foreign investment in equity, based on the weight of investment funds in the holdings of equity by foreign investors as recorded in national accounts.

3. Taking account of foreign direct investments in listed shares

Portfolio investments recorded in CPIS exclude cross-border investments in unquoted shares when they represent more than 10% of the capital of the invested company because the latter are considered as foreign direct investments.

All stakes superior to 10% in the capital of large listed companies are disclosed to comply with the regulation applying to companies listed on European regulated markets. There are few stakes of this magnitude, and even fewer cross border foreign direct investments in the capital of the largest European listed companies. We have identified each of them individually using commercial share ownership databases. We have then reallocated them to the right category: European General Government, European Banks, European insurance corporations and pension funds, European Investment Funds and Other European Financial Institutions, European Non-Financial Companies, European Households or Non-European investors. We have computed the cross-border stakes

superior to 10% in the capital of UE companies belonging to the STOXX 50 index[35]. We have corrected CPIS statistics to take into account those few holdings.

4. Excluding cross-border portfolio investment in non-listed stocks

The amount of non-listed stocks included in CPIS statistics is small. The CPIS data processing described in sections 3.3.1 and 3.3.2 result in figures of cross-border investment very close to data recorded in national financial accounts. We apply a standard coefficient to eliminate the remaining discrepancies.

[35] EU companies included in the STOXX 50 represent about 27% of the total capitalisation of European listed companies.

Annex 3: Detailed country sources

France

1977-1994, All sectors: "rétropolation" available on Banque de France's website

1995-2012, All sectors: Holdings of French quoted shares according to ESA 95 methodology available on Banque de France's website. Some missing data: Holdings of quoted shares in euro are provided instead of domestic quoted shares.

Germany

1960-1992, All sectors except "Other Financial Intermediaries" (investment funds): Annual time series for the holdings in quoted shares of each institutional sector have been provided by the Deutsche Bundesbank.

1970, 1980, 1990, "Other Financial Intermediaries": Total assets of share-based funds, available in: "*The trend in and significance of assets held in the form of investment funds*", Deutsche Bundesbank Monthly report, October 1994. Assets held by investment funds assets were classified as direct investments of the purchasers of those funds in national accounts before 1993. We have added these assets to the total held by 'Other Financial Intermediaries" and subtracted an equivalent amount from other investors categories proportionally to their holdings of investment funds available in the same source. Such assets held by investment funds are recorded as a separate investment item since 1993 and available in ESA 95 financial accounts.

1971-1979, 1981-1989, 1991, 1992, "Other Financial Intermediaries": interpolation.

1993-1994, All sectors: Quarterly time series for the holdings of all shares (quoted and non-quoted) of each institutional sector have been provided by Deutsche Bundesbank. Our estimated figures for quoted shares only multiply these quarterly data at year end by the share of quoted shares in the total shares held by each institutional sector at end of 1995, known from ESA 95 data.

1995-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to exclude holdings of foreign quoted shares. We used CPIS data for that purpose.

2012: Not yet available in ESA 95 financial accounts. At this stage, we assumed that the amounts held by category of investors grew at the same rate as the Dax price index (excluding reinvestment of dividends)

Italy

1997-2011: Data on domestic listed shares held by each institutional sector available on the Bank of Italy's website.

1995, 1996, 2012: ESA 95 corrected to include holdings of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Spain

1994: ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C= (Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

1995-2012: Data on domestic listed shares held by each institutional sector provided by the Bank of Spain. The breakdown of each sub-sector of the financial corporations sector was not provided and we assumed that the proportion of domestic/versus all quoted (incl. foreign) shares, available in ESA 95 financial accounts, is the same for each of the sub-sectors.

Sweden

1980-2012: Data available on the Swedish Financial Supervisory Authority's website, based on SNA 68 from 1980 to 1994, and based on ESA 95 from 1995 to 2012.

United Kingdom

1966-1986, General Government: "*United Kingdom Economic Accounts*", Office for National Statistics. The two missing years (1987 and 1988) are interpolated with the figure for 1989 from "*Market value of UK quoted shares by sector of beneficial owner 1963 to 20101 "*.

1975, 1981, 1989: "*Market value of UK quoted shares by sector of beneficial owner 1963 to 20101 (bn £)*", Office for National Statistics

1976-1980, all institutional sectors except General Government: interpolation of the percentage holding of each institutional sector in the total domestic market capitalization. Interpolated data: 96% of total.

1982-1988, Insurance corporations and pension funds: "*Institutional investors' assets*", OECD. Holdings of "quoted shares excluding investment funds shares" reported in ESA 95 represent 95% of "shares issued by residents" reported in OECD statistics from 1990 to 1994, and also the same percentage of the 1981 data from the ONS data mentioned above. We assume that the difference of 5% between OECD and other sources is due to holdings of non-quoted shares and we apply a 5% haircut to OECD statistics.

1982-1986, all institutional sectors except General Government, insurance corporations and pension funds: interpolation of the percentage holding of each institutional sector in the total domestic market capitalization. Interpolated data: 48% of total.

1987-1988, Other financial intermediaries: "*Institutional investors assets*", OECD. The OECD statistics relate to investment funds, which are included in the "other financial intermediaries – S123" institutional sector as defined in ESA95. OECD statistics cover a longer time span (until 2011) than the one used for the sent research. Holdings of "shares issued by residents" reported in OECD statistics in 1989 represent 92% of the 1989 data from the ONS data mentioned above. We assume that the difference of 8% between OECD and this ONS source is due to some intermediaries other than investment funds that were included in "other financial institutions" and we add this percentage to OECD data for 1987 and 1988.

1987-1988, all institutional sectors except General Government, insurance corporations and pension funds, other financial intermediaries: interpolation of the percentage holding of each institutional sector in the total domestic market capitalization. Interpolated data: 16% of total.

1990-2012: ESA 95 annual financial accounts. The UK is the only EU country for which quoted assets held by each institutional sector only include domestic shares, and not foreign quoted shares. Thus, ESA95 can be kept without any correction.

2001-2007: Survey data on cross-border equity investments of UK household and NPISH are not available in the CPIS survey before 2008. Our assessment of this category of investors is therefore based on International Investment Position data.

Bulgaria, Czech Republic, Estonia, Lithuania, Poland

1995-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C= (Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Cyprus

1996-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Latvia

2003-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Malta

2004-2012, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Hungary

1990-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Luxembourg

2006-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

The Netherlands

1994-2012, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Romania

1998-2011, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Slovakia

2001-2012, All sectors: ESA 95 annual financial accounts. Pending to availability of 2012 release, we used same data for 2012 as for 2011. ESA 95 corrected to include holding of domestic quoted shares only (and not foreign quoted shares). The fraction of domestic shares in the assets of domestic investors is known for all domestic investors as a whole without any breakdown between each institutional sector.

Coefficient of correction applied to each domestic institutional sector:

C=(Total domestic quoted shares held by domestic investors)/ (Total quoted shares held by domestic investors)

Pan-European funds

Dublin

1997, 2001-2011, Other Financial Intermediaries (investment funds): Processing of CPIS survey (equity portfolio investment invested in European countries)

1990-1996, 1998-2000, Other Financial Intermediaries (investment funds): Interpolation

2012, Other Financial Intermediaries (investment funds): Assumption that the annual growth rate of Irish equity investment funds was the same as all European equity investment funds (source: EFAMA).

Luxembourg

2001-2011, Other Financial Intermediaries (investment funds): Processing of CPIS survey (equity portfolio investment invested in European countries)

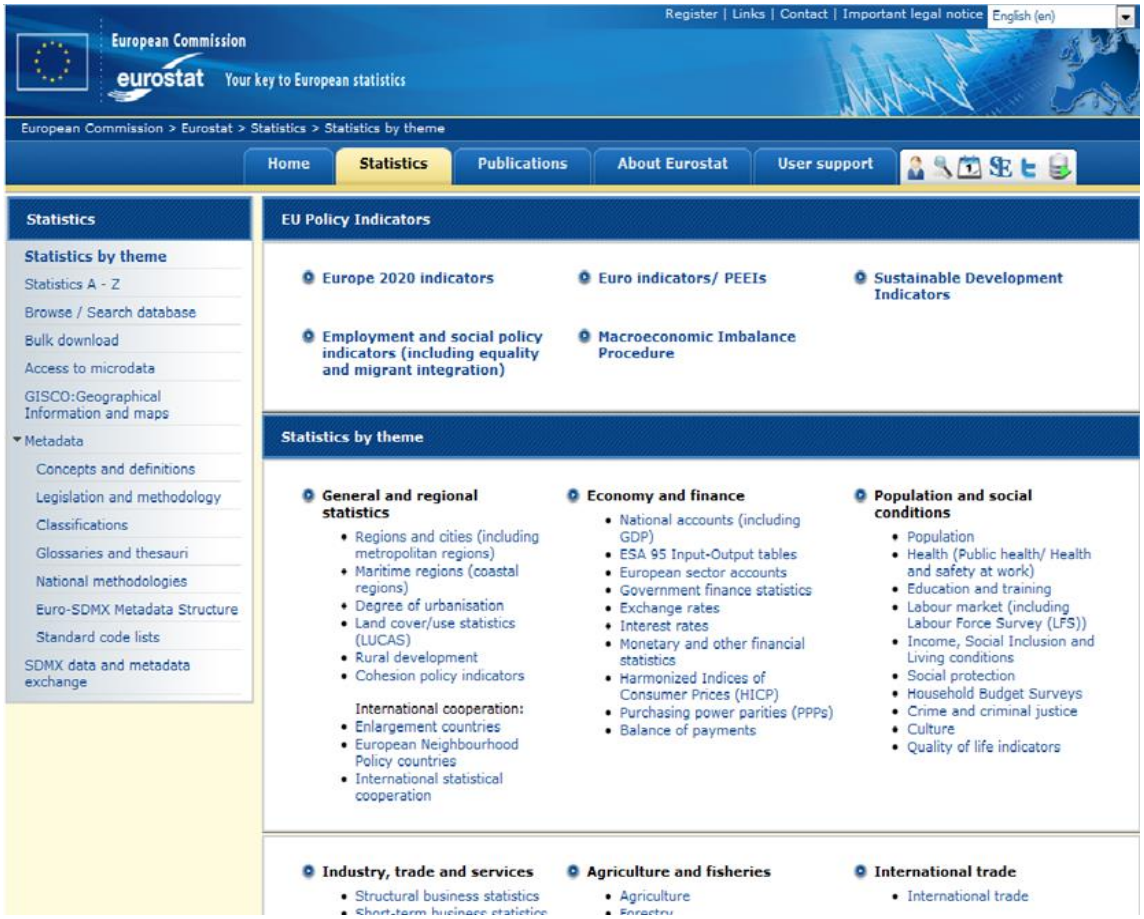
1990-2000, Other Financial Intermediaries (investment funds): Assumption that the share of European equity in total assets of Luxembourg funds (source: Commission de Surveillance du Secteur Financier –Luxembourg) remained stable at 17%, like in 2001-2002.

2012, Other Financial Intermediaries (investment funds): Assumption that the annual growth rate of Luxembourg equity investment funds was the same as all European equity investment funds (source: EFAMA)

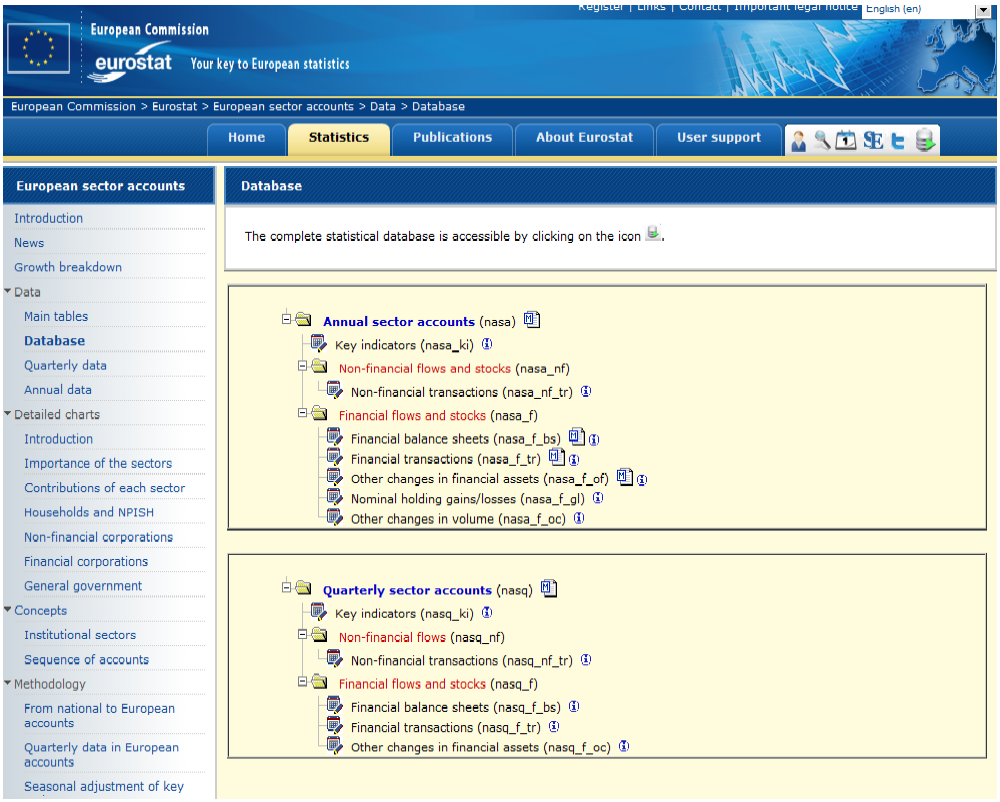
Annex 4: How to update the database

This annex explains how to use financial account data published by Eurostat to update the database on general trends in share ownership structure of EU listed corporations. The update of the database should be processed as follows:

On the website of Eurostat (http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home), click on "**Statistics**" on the masthead, in the framework of "**Statistics by theme**" click on "**European sector accounts**", and then choose "**Database**" on the left-hand menu.

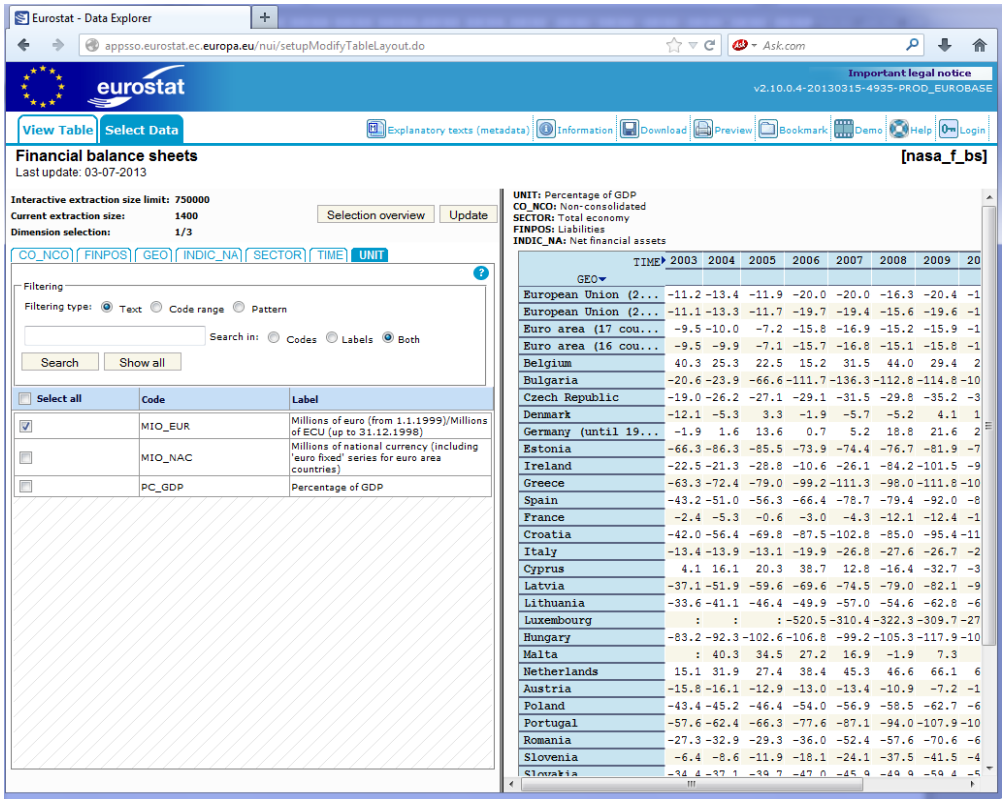


One will find the below page and should then follow these steps: in the section "**Annual sector accounts**" select sub-section "**Financial flows and stocks**" and then click on the data explorer "**Financial balance sheets**", a new table will appear.

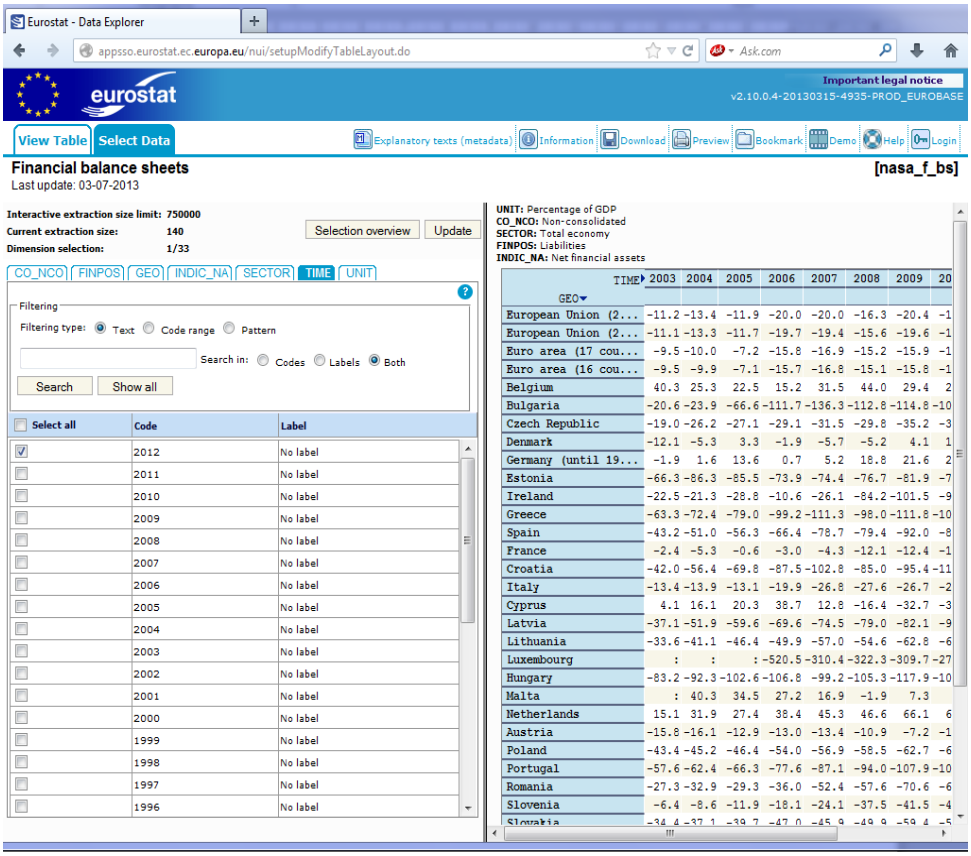


On the masthead of the data explorer, click on "**Select Data**" —> under the framework of "**Financial balance sheets"**, select data according to the following criteria:

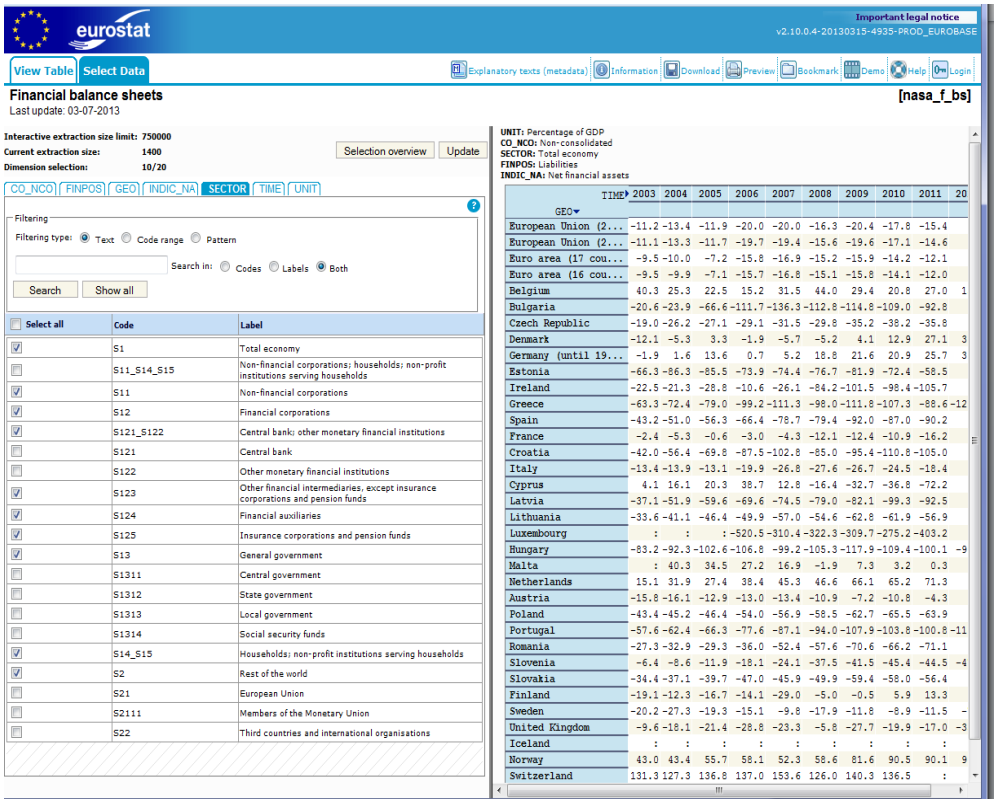
Click on the tab "**Unit**" —> check the box "**MIO_EUR**" to choose million Euro as unit of measurement



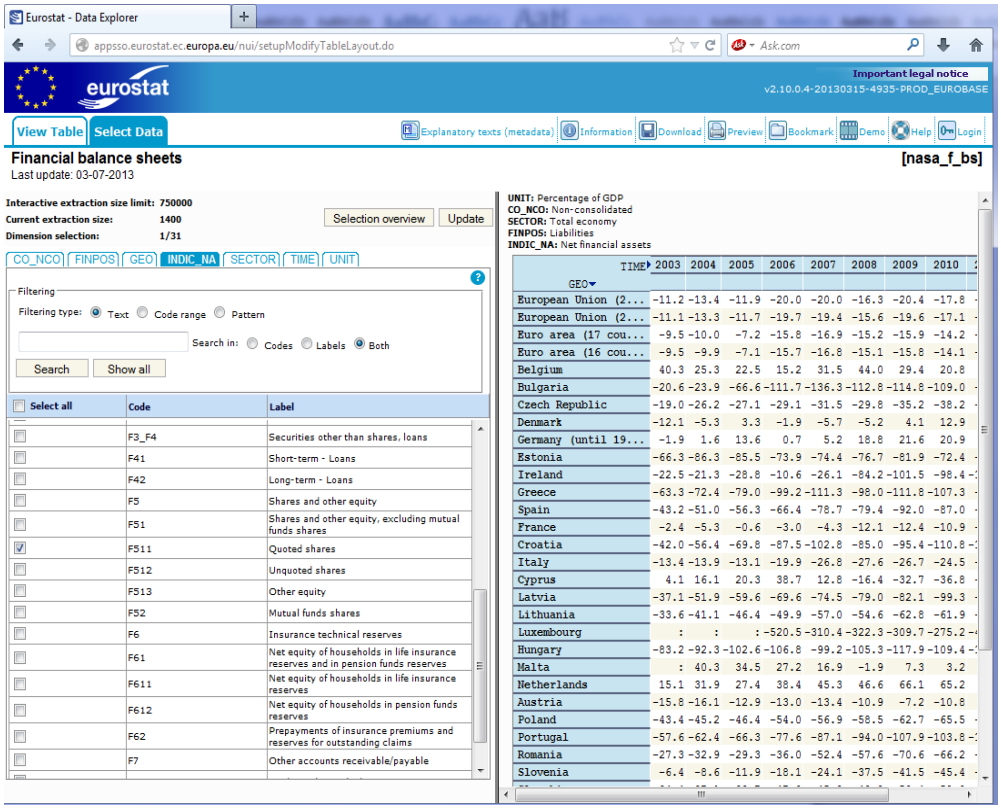
—> click on the tab “**Time**” —> check the latest date available



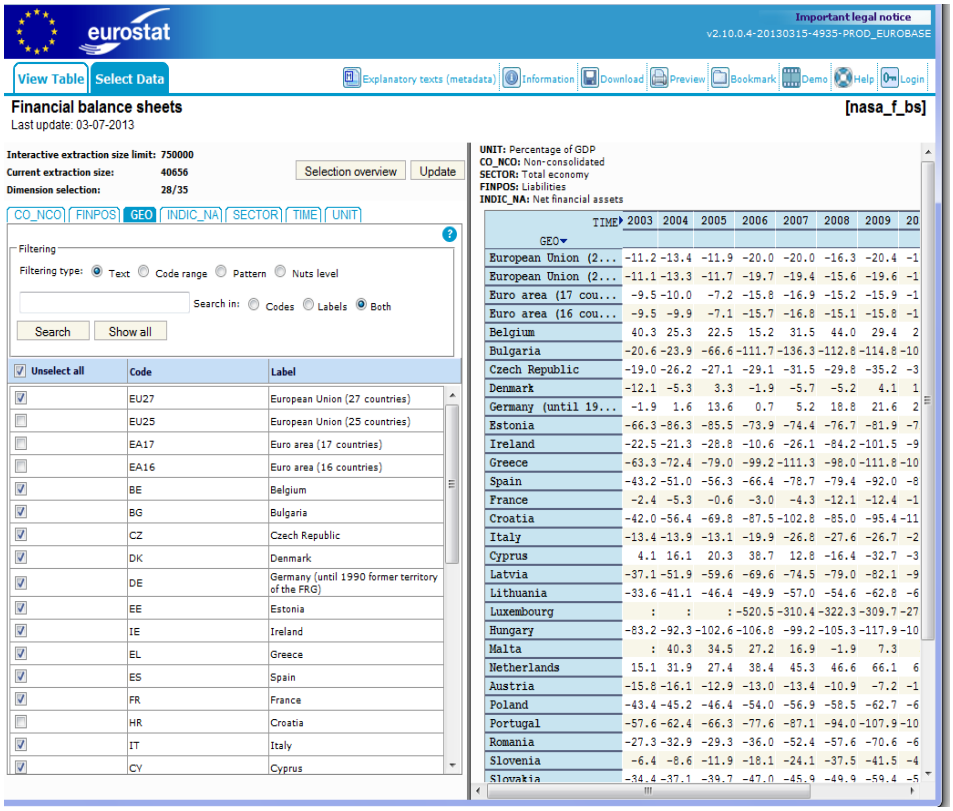
—> click on the tab “**Sector**” —> check the following sectors: S1 Total economy, S11: Non-financial corporations, S12: Financial corporations, S121: Central bank, S122: Other monetary financial Institutions, S125: Insurance corporations and pension funds, S123: Other financial intermediaries, except insurance corporations and pension funds (investment funds and other financial intermediaries), S13: General Government, S14-15: Households and NPISH and finally S2: Rest of the world.



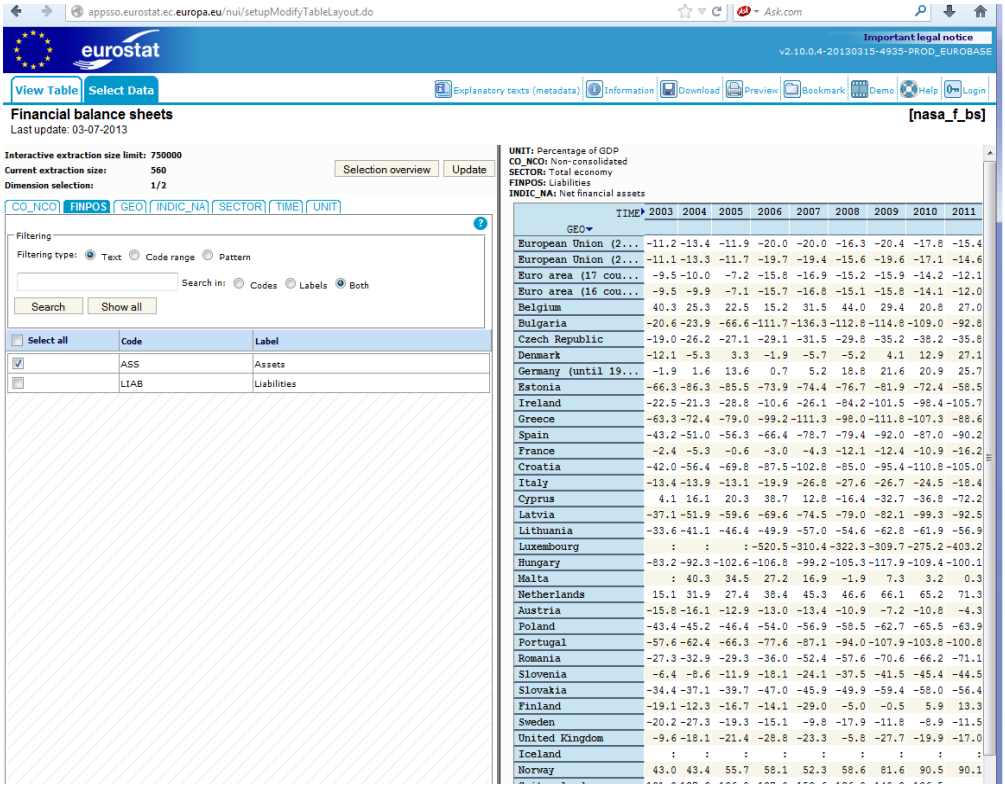
—> click on the tab “**INDIC-NA**” —> check the box “**F511: quoted shares**”



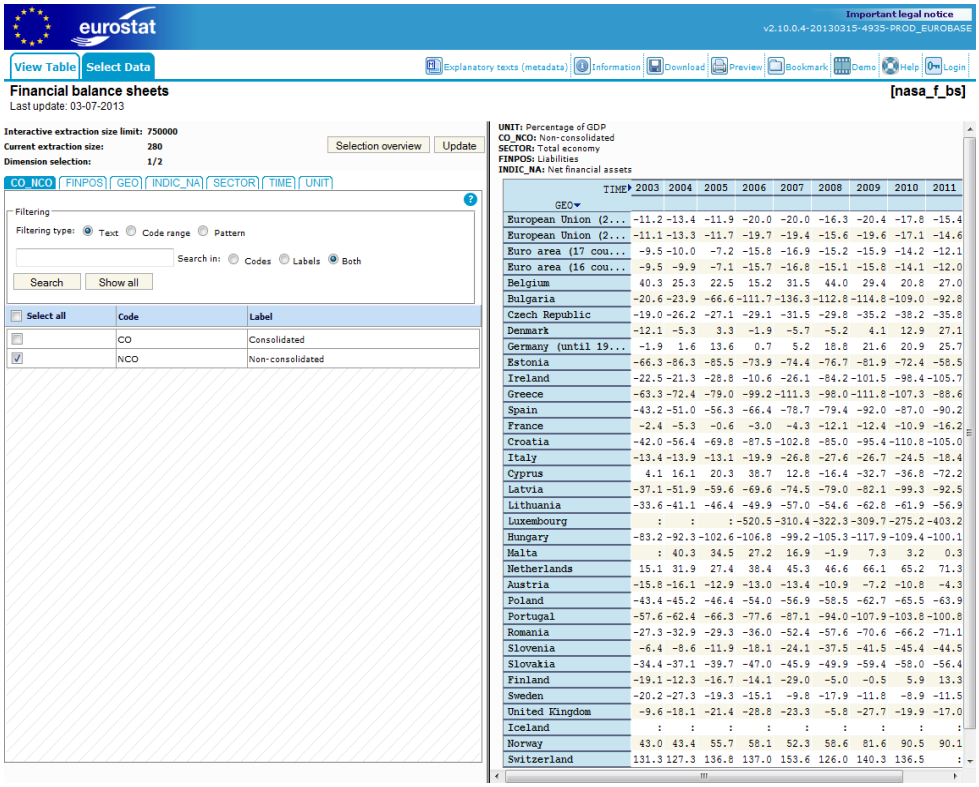
—> click on the tab “**GEO**” —> check the box “**EU 27**” to select aggregate data on the whole European level



—>click on the tab “**FINPOS**” —> check “**ASS: Assets**” to select data on quoted shares held by institutional sectors

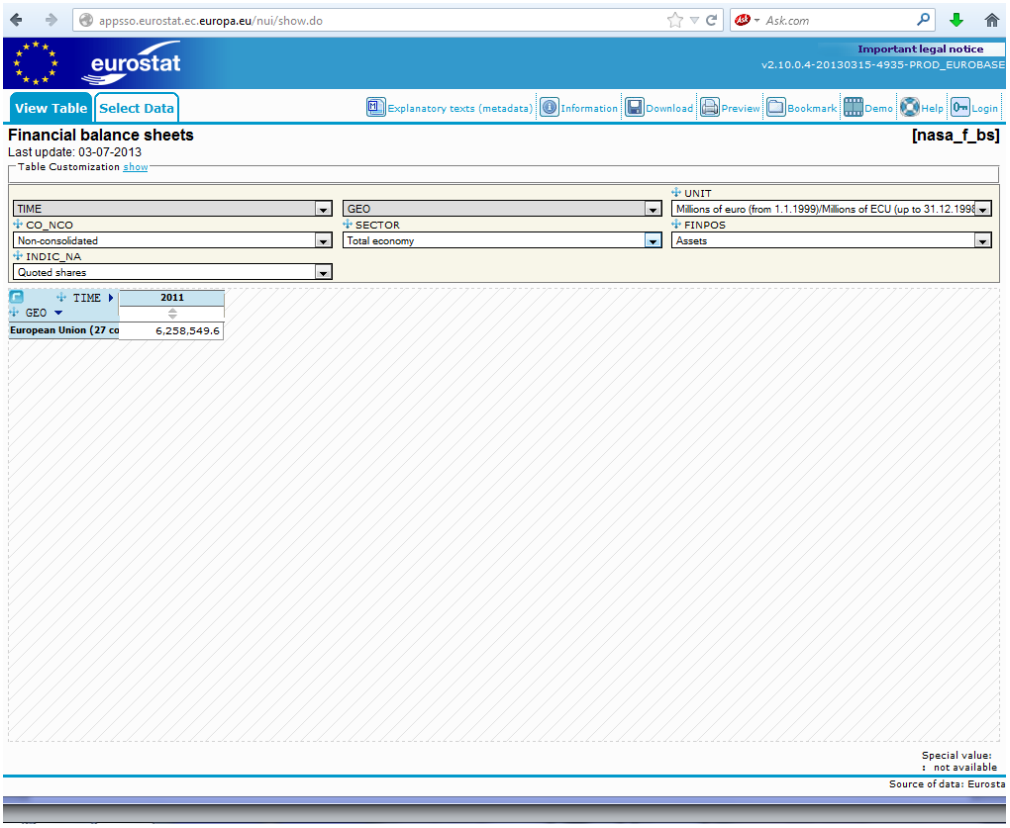


—> click on the tab “**CONOC**” —> check “**NCO: non-consolidated**” to select non-consolidated data.

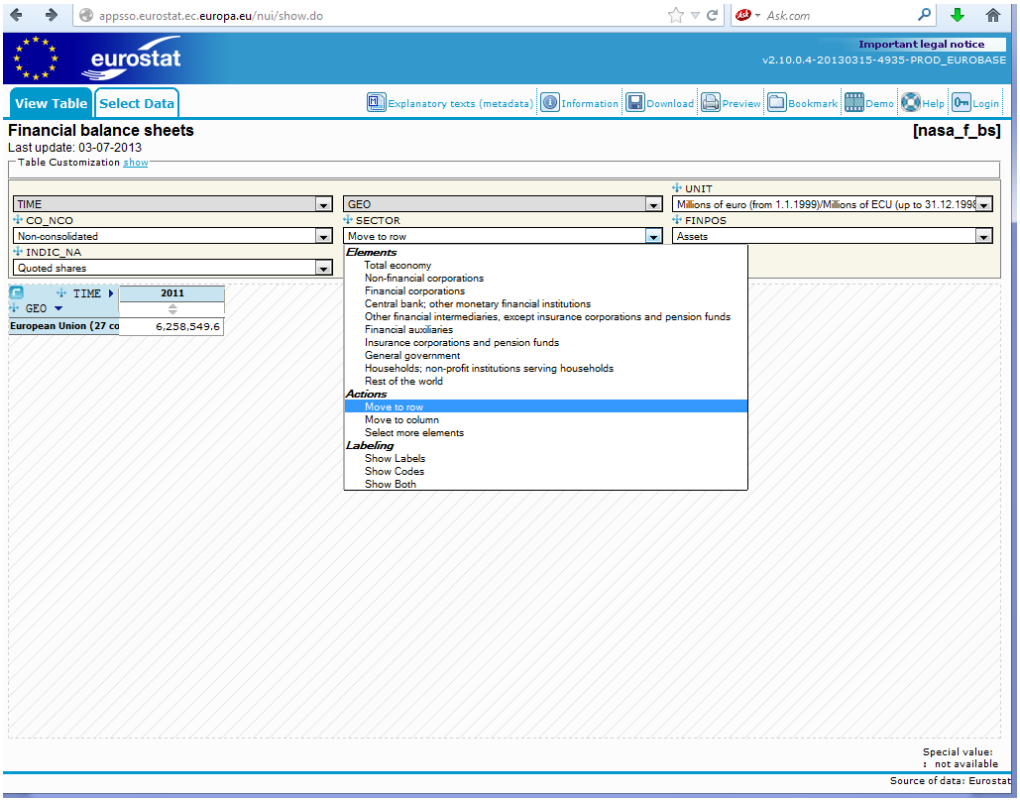


Once data selection has been completed, click on the button “**Update**”. To plan a layout allowing an easy exploration of selected data, one should use tools provided on the tab “**View Table**”. [36]

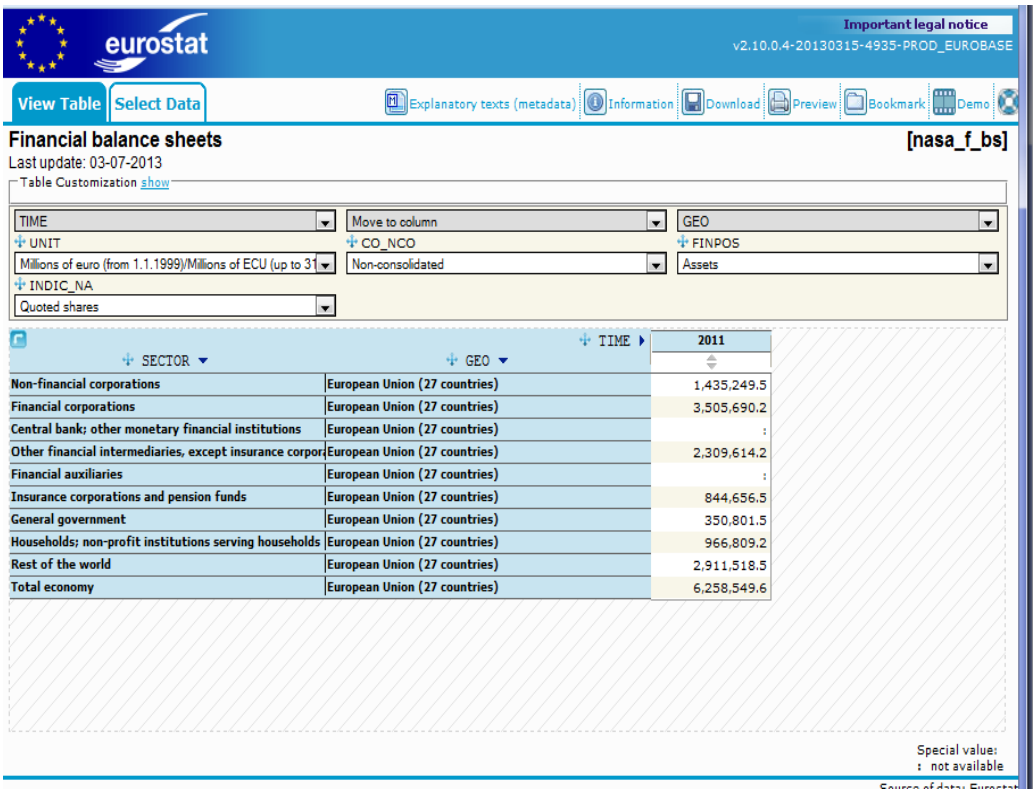
[36] Since the data on 2012 are not yet available for the EU 27, we use data on 2011 as example.



Click on the scroll down menu under the item "**Sector**" —> select "**Move to row**"



One can obtain the following result and then click on "**Download**" on the masthead.



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View Table | Select Data | Explanatory texts (metadata) | Information | Download | Preview | Bookmark | Demo

Financial balance sheets [nasa_f_bs]

Last update: 03-07-2013

Table Customization show

TIME | Move to column | GEO

UNIT: Millions of euro (from 1.1.1999)/Millions of ECU (up to 31

CO_NCO: Non-consolidated

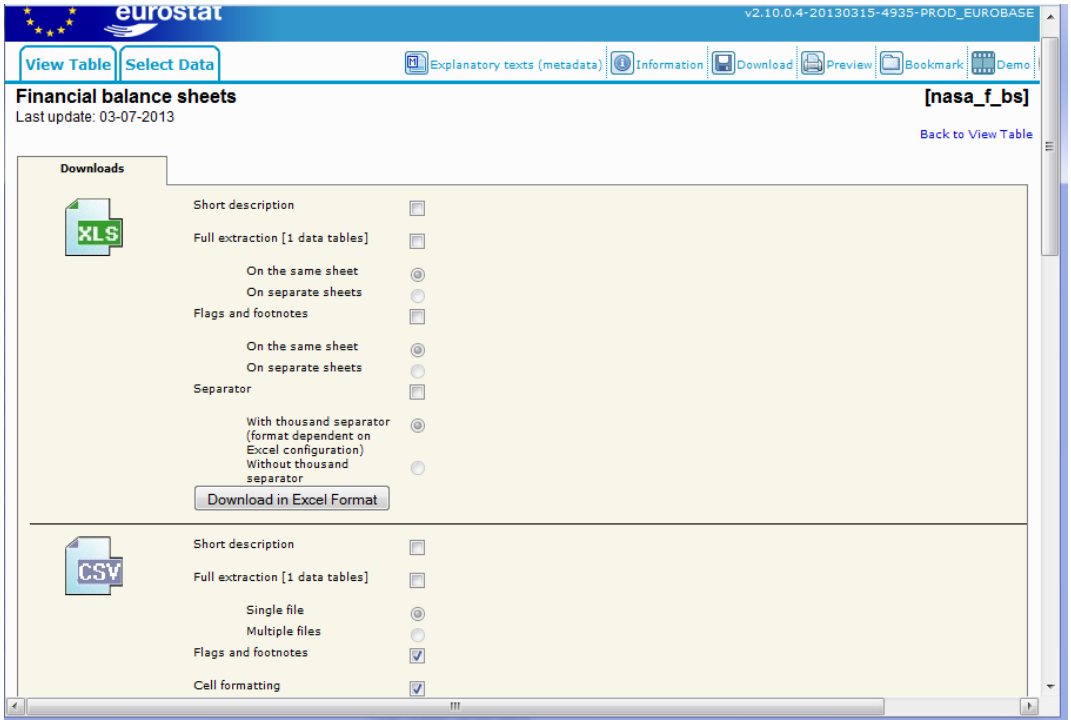
FINPOS: Assets

INDIC_NA: Quoted shares

SECTOR	GEO	TIME 2011
Non-financial corporations	European Union (27 countries)	1,435,249.5
Financial corporations	European Union (27 countries)	3,505,690.2
Central bank; other monetary financial institutions	European Union (27 countries)	:
Other financial intermediaries, except insurance corpor	European Union (27 countries)	2,309,614.2
Financial auxiliaries	European Union (27 countries)	:
Insurance corporations and pension funds	European Union (27 countries)	844,656.5
General government	European Union (27 countries)	350,801.5
Households; non-profit institutions serving households	European Union (27 countries)	966,809.2
Rest of the world	European Union (27 countries)	2,911,518.5
Total economy	European Union (27 countries)	6,258,549.6

Special value:
: not available

Click on "**Download in Excel format**" to obtain the data which will allow us to calculate the share of each category investor in share ownership structure of quoted shares.



Finally, data can be downloaded.

Annex 5: Detailed data on long-term trends of share ownership structure

Table 3: Long-term trends of share ownership structure of European listed corporations

Investor categories	National non financial corporations	National banks	National insurance corporations and pension funds	National, round trip and pan-European investment funds and other financial intermediaries*	National general government	National households and NPISH	Foreign (European and non-European) investors	Total
1969	26%	6%	11%	5%	7%	38%	7%	100%
1970	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-
1975	30%	7%	12%	6%	8%	28%	10%	100%
1976	32%	8%	12%	6%	8%	27%	11%	100%
1977	29%	7%	15%	6%	7%	27%	11%	100%
1978	29%	7%	16%	6%	7%	27%	11%	100%
1979	27%	7%	18%	6%	7%	26%	10%	100%
1980	25%	7%	21%	6%	7%	26%	10%	100%
1981	26%	5%	23%	7%	6%	25%	9%	100%
1982	25%	5%	26%	7%	6%	24%	9%	100%
1983	23%	5%	25%	8%	6%	25%	9%	100%
1984	20%	5%	26%	8%	8%	25%	9%	100%
1985	21%	5%	26%	7%	7%	25%	11%	100%
1986	20%	6%	25%	8%	6%	25%	12%	100%
1987	18%	5%	27%	8%	5%	24%	12%	100%
1988	20%	5%	26%	8%	5%	24%	13%	100%
1989	22%	6%	25%	7%	4%	23%	14%	100%
1990	22%	6%	25%	8%	4%	22%	14%	100%
1991	21%	6%	27%	9%	4%	20%	16%	100%
1992	19%	5%	28%	10%	3%	19%	17%	100%
1993	17%	6%	27%	12%	3%	17%	17%	100%
1994	17%	6%	25%	12%	3%	18%	19%	100%
1995	17%	6%	24%	10%	3%	19%	20%	100%
1996	17%	6%	22%	11%	3%	18%	23%	100%
1997	15%	6%	22%	12%	4%	18%	24%	100%
1998	15%	6%	20%	11%	3%	18%	27%	100%
1999	14%	6%	17%	12%	4%	16%	30%	100%
2000	15%	5%	17%	12%	3%	16%	32%	100%
2001	16%	5%	16%	14%	3%	14%	32%	100%
2002	15%	5%	17%	14%	3%	13%	33%	100%
2003	15%	4%	15%	15%	3%	14%	33%	100%
2004	15%	5%	15%	16%	3%	13%	33%	100%
2005	15%	5%	13%	17%	3%	12%	34%	100%
2006	14%	4%	13%	17%	4%	12%	37%	100%
2007	15%	3%	12%	17%	4%	11%	38%	100%
2008	18%	4%	13%	16%	5%	11%	35%	100%
2009	16%	3%	10%	18%	5%	11%	37%	100%
2010	16%	3%	9%	20%	4%	12%	38%	100%
2011	16%	3%	9%	21%	4%	11%	37%	100%
2012	17%	3%	8%	21%	4%	11%	38%	100%

** Including national investment funds and funds domiciled in Luxembourg and Ireland which mainly include round trip and pan-European funds.*

Table 4: Long-term trends of share ownership structure of French listed corporations

Investor categories	French non financial corporations	French banks	French insurance corporations and pension funds	French investment funds and other financial intermediaries	French general government	French households and NPISH	Foreign investors (European and non-European)	Total
1977	36%	12%	5%	5%	12%	20%	10%	100%
1978	33%	11%	6%	6%	12%	22%	10%	100%
1979	31%	13%	6%	6%	12%	22%	10%	100%
1980	29%	12%	6%	8%	13%	22%	10%	100%
1981	32%	11%	7%	10%	11%	22%	7%	100%
1982	32%	13%	7%	11%	13%	18%	7%	100%
1983	27%	13%	7%	13%	13%	20%	7%	100%
1984	27%	13%	7%	12%	12%	21%	7%	100%
1985	31%	12%	7%	13%	10%	18%	8%	100%
1986	30%	10%	8%	14%	10%	18%	11%	100%
1987	31%	10%	8%	13%	9%	18%	11%	100%
1988	30%	10%	7%	12%	8%	22%	11%	100%
1989	36%	9%	6%	10%	4%	20%	15%	100%
1990	33%	9%	7%	9%	7%	19%	17%	100%
1991	31%	8%	6%	10%	7%	19%	19%	100%
1992	29%	8%	6%	10%	7%	17%	21%	100%
1993	30%	8%	7%	11%	6%	15%	24%	100%
1994	31%	7%	8%	12%	4%	14%	24%	100%
1995	25%	5%	4%	12%	3%	25%	25%	100%
1996	24%	6%	4%	13%	1%	23%	28%	100%
1997	21%	5%	5%	14%	6%	19%	32%	100%
1998	20%	5%	5%	13%	8%	17%	32%	100%
1999	16%	5%	4%	13%	8%	14%	39%	100%
2000	17%	5%	5%	14%	6%	14%	40%	100%
2001	19%	5%	5%	15%	4%	13%	40%	100%
2002	20%	6%	4%	15%	3%	13%	38%	100%
2003	20%	6%	4%	15%	5%	13%	38%	100%
2004	16%	7%	4%	16%	5%	13%	40%	100%
2005	17%	3%	4%	14%	9%	12%	40%	100%
2006	15%	3%	4%	14%	10%	12%	42%	100%
2007	17%	4%	4%	13%	12%	11%	39%	100%
2008	15%	5%	4%	14%	13%	10%	40%	100%
2009	17%	4%	4%	13%	11%	10%	41%	100%
2010	21%	3%	4%	12%	9%	12%	39%	100%
2011	21%	3%	4%	13%	7%	11%	40%	100%
2012	21%	4%	4%	12%	6%	11%	42%	100%

Table 5: Long-term trends of share ownership structure of German listed corporations

Investor categories	German non financial corporations	German banks	German insurance corporations and pension funds	German investment funds and other financial intermediaries	German general government	German households and NPISH	Foreign (European and Non-European) investors	Total
1970	37%	9%	4%	3%	10%	31%	12%	100%
1971	38%	9%	4%	3%	10%	30%	11%	100%
1972	39%	9%	4%	3%	9%	27%	13%	100%
1973	39%	9%	4%	3%	9%	27%	14%	100%
1974	40%	10%	4%	3%	9%	25%	14%	100%
1975	42%	9%	4%	3%	9%	25%	13%	100%
1976	42%	10%	4%	3%	9%	24%	13%	100%
1977	42%	10%	4%	3%	9%	23%	14%	100%
1978	41%	10%	5%	3%	9%	23%	14%	100%
1979	42%	10%	5%	3%	9%	22%	15%	100%
1980	42%	11%	5%	3%	9%	21%	14%	100%
1981	46%	9%	5%	3%	8%	19%	14%	100%
1982	47%	9%	5%	3%	8%	18%	14%	100%
1983	43%	9%	5%	3%	8%	21%	14%	100%
1984	41%	11%	6%	3%	8%	21%	14%	100%
1985	38%	10%	6%	2%	8%	22%	16%	100%
1986	35%	11%	6%	2%	7%	24%	17%	100%
1987	35%	13%	7%	3%	6%	23%	17%	100%
1988	36%	12%	8%	2%	5%	23%	17%	100%
1989	37%	13%	7%	2%	5%	21%	18%	100%
1990	38%	14%	8%	2%	4%	20%	17%	100%
1991	39%	13%	9%	4%	4%	19%	18%	100%
1992	39%	13%	9%	7%	4%	17%	20%	100%
1993	32%	17%	9%	8%	5%	16%	14%	100%
1994	34%	16%	8%	8%	5%	16%	13%	100%
1995	39%	19%	7%	2%	5%	15%	13%	100%
1996	36%	19%	7%	5%	5%	15%	14%	100%
1997	32%	17%	9%	8%	5%	13%	15%	100%
1998	34%	15%	8%	10%	4%	13%	16%	100%
1999	30%	16%	5%	14%	4%	12%	19%	100%
2000	34%	14%	5%	15%	3%	12%	17%	100%
2001	36%	14%	5%	12%	2%	11%	20%	100%
2002	35%	15%	6%	10%	3%	10%	22%	100%
2003	33%	12%	5%	10%	4%	11%	26%	100%
2004	36%	13%	4%	10%	4%	11%	23%	100%
2005	34%	14%	3%	10%	3%	10%	25%	100%
2006	28%	9%	6%	11%	3%	9%	34%	100%
2007	30%	6%	6%	7%	2%	8%	41%	100%
2008	46%	7%	11%	7%	2%	9%	18%	100%
2009	39%	6%	10%	6%	2%	10%	27%	100%
2010	36%	5%	9%	6%	2%	9%	33%	100%
2011	39%	5%	10%	7%	2%	9%	29%	100%
2012	38%	5%	10%	8%	2%	9%	28%	100%

Table 6: Long-term trends of share ownership structure of UK listed corporations

Investor categories	UK non financial corporations	UK banks	UK insurance corporations and pension funds	UK investment funds and other financial intermediaries	UK general government	UK households and NPISH	Foreign (European and Non-European) investors	Total
1969	5%	2%	21%	13%	2%	50%	7%	100%
1970	-	-	-	-	-	-	-	-
1971	-	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-
1975	3%	1%	33%	15%	4%	40%	6%	100%
1976	3%	1%	35%	14%	5%	38%	5%	100%
1977	4%	1%	38%	13%	3%	37%	5%	100%
1978	4%	1%	40%	13%	3%	35%	5%	100%
1979	4%	0%	42%	12%	4%	33%	4%	100%
1980	5%	0%	44%	11%	4%	32%	4%	100%
1981	5%	0%	47%	10%	3%	30%	4%	100%
1982	5%	0%	49%	10%	4%	29%	5%	100%
1983	5%	0%	49%	10%	4%	28%	6%	100%
1984	4%	0%	47%	9%	8%	26%	7%	100%
1985	4%	0%	50%	9%	7%	26%	8%	100%
1986	4%	1%	49%	9%	5%	25%	9%	100%
1987	4%	1%	47%	9%	4%	24%	10%	100%
1988	4%	1%	48%	9%	3%	24%	12%	100%
1989	4%	1%	49%	9%	2%	23%	13%	100%
1990	3%	0%	49%	8%	2%	26%	12%	100%
1991	3%	0%	52%	8%	2%	22%	13%	100%
1992	2%	0%	53%	8%	2%	21%	15%	100%
1993	1%	0%	53%	8%	1%	20%	17%	100%
1994	2%	0%	51%	8%	1%	21%	16%	100%
1995	1%	0%	50%	9%	0%	20%	19%	100%
1996	1%	0%	49%	9%	0%	17%	23%	100%
1997	1%	0%	45%	11%	0%	19%	24%	100%
1998	1%	1%	44%	6%	0%	17%	31%	100%
1999	2%	1%	41%	6%	0%	16%	34%	100%
2000	2%	1%	39%	6%	0%	16%	37%	100%
2001	1%	1%	36%	10%	0%	15%	36%	100%
2002	1%	0%	35%	12%	0%	15%	37%	100%
2003	1%	1%	33%	13%	0%	15%	38%	100%
2004	1%	1%	32%	14%	0%	14%	38%	100%
2005	1%	1%	30%	15%	0%	13%	40%	100%
2006	2%	1%	27%	16%	0%	12%	41%	100%
2007	2%	1%	26%	16%	0%	11%	44%	100%
2008	3%	1%	26%	11%	1%	11%	47%	100%
2009	3%	1%	18%	17%	3%	11%	47%	100%
2010	2%	1%	13%	21%	3%	11%	48%	100%
2011	2%	1%	12%	23%	4%	11%	48%	100%
2012	2%	1%	10%	24%	3%	11%	48%	100%

Table 7.1: Long-term trends of share ownership structure of Italian corporations*								
Investor categories	Italian non financial corporations	Italian banks	Italian insurance corporations and pension funds	Italian investment funds and other financial intermediaries	Italian general government	Italian households and NPISH	Foreign (European and Non-European) investors	Total
1979	17%	5%	-	-	16%	51%	9%	100%
1980	16%	5%	-	-	14%	57%	8%	100%
1981	17%	9%	-	-	13%	58%	6%	100%
1982	17%	8%	-	-	13%	58%	5%	100%
1983	17%	10%	-	-	14%	58%	5%	100%
1984	18%	7%	-	-	14%	54%	6%	100%
1985	17%	7%	-	-	12%	57%	7%	100%
1986	17%	9%	-	-	9%	60%	5%	100%
1987	18%	7%	-	-	10%	58%	6%	100%
1988	20%	7%	-	-	9%	55%	7%	100%
1989	18%	2%	-	-	8%	60%	6%	100%
1990	22%	2%	-	-	8%	56%	6%	100%
1991	21%	3%	-	-	7%	57%	6%	100%
1992	24%	3%	-	-	8%	52%	6%	100%
1993	24%	4%	-	-	7%	49%	7%	100%
1994	24%	3%	-	-	7%	48%	7%	100%
1995	22%	4%	3%	9%	12%	44%	7%	100%
1996	23%	4%	3%	9%	12%	41%	8%	100%
1997	21%	4%	4%	11%	10%	40%	10%	100%
1998	19%	5%	4%	12%	8%	41%	11%	100%
1999	20%	6%	4%	14%	5%	38%	14%	100%
2000	24%	6%	4%	10%	5%	37%	13%	100%
2001	24%	6%	4%	9%	5%	38%	13%	100%
2002	22%	6%	4%	7%	5%	42%	13%	100%
2003	23%	8%	4%	8%	6%	38%	14%	100%
2004	24%	8%	4%	7%	6%	37%	15%	100%
2005	24%	9%	4%	7%	5%	36%	15%	100%
2006	24%	10%	4%	7%	5%	35%	16%	100%
2007	25%	9%	5%	6%	5%	33%	18%	100%
2008	23%	10%	3%	5%	5%	41%	13%	100%
2009	24%	11%	4%	5%	6%	36%	15%	100%
2010	23%	10%	3%	5%	5%	38%	15%	100%
2011	25%	11%	4%	5%	6%	35%	15%	100%
2012	25%	11%	4%	4%	6%	37%	12%	100%

* *including quoted shares, unquoted shares and other equity*

Table 7.2: Long-term trends of share ownership structure of Italian listed corporations

Investor categories	Italian non financial corporations	Italian banks	Italian insurance corporations and pension funds	Italian investment funds and other financial intermediaries	Italian general government	Italian households and NPISH	Foreign (European and Non-European) investors	Total
1995	33%	4%	5%	22%	11%	-	12%	100%
1996	32%	4%	5%	21%	13%	-	15%	100%
1997	22%	7%	4%	11%	8%	29%	18%	100%
1998	19%	6%	4%	14%	4%	31%	23%	100%
1999	25%	6%	4%	11%	8%	21%	26%	100%
2000	29%	6%	3%	8%	8%	20%	25%	100%
2001	31%	5%	4%	7%	9%	14%	29%	100%
2002	26%	7%	4%	9%	10%	13%	32%	100%
2003	23%	5%	4%	8%	7%	17%	35%	100%
2004	26%	5%	4%	8%	6%	13%	37%	100%
2005	27%	6%	5%	7%	5%	14%	37%	100%
2006	27%	5%	5%	6%	6%	13%	39%	100%
2007	27%	5%	4%	6%	6%	11%	41%	100%
2008	24%	7%	4%	5%	7%	17%	36%	100%
2009	23%	7%	4%	5%	6%	18%	37%	100%
2010	22%	9%	4%	7%	4%	17%	36%	100%
2011	23%	11%	6%	4%	4%	18%	35%	100%
2012	24%	9%	4%	3%	4%	16%	40%	100%

Annex 6: Detailed data on share ownership structure: European perspective

Table 8: Share ownership structure of EU listed corporations: European perspective

Investor categories	European non financial corporations	European banks	European insurance corporations and pension funds	European investment funds and other financial intermediaries	European general governments	European households and NPISH	Non-European investors	Total
2001	17%	6%	20%	19%	3%	16%	17%	100%
2002	17%	6%	20%	19%	3%	15%	18%	100%
2003	17%	5%	18%	20%	3%	16%	18%	100%
2004	17%	6%	19%	21%	3%	15%	17%	100%
2005	17%	6%	17%	21%	4%	14%	19%	100%
2006	16%	5%	17%	23%	4%	14%	20%	100%
2007	16%	5%	15%	23%	5%	13%	21%	100%
2008	20%	5%	16%	20%	5%	13%	19%	100%
2009	18%	4%	13%	23%	6%	13%	21%	100%
2010	18%	4%	12%	24%	5%	14%	22%	100%
2011	18%	4%	12%	25%	5%	13%	22%	100%

Table 9: Share ownership structure of French listed corporations: European perspective

Investor categories	European non financial corporations	European banks	European insurance corporations and pension funds	European investment funds and other financial intermediaries	European other Financial Institutions	European general governments	European households and NPISH	Non-European investors	Total
2001	20%	6%	11%	25%	2%	4%	14%	16%	100%
2002	22%	7%	9%	24%	2%	3%	14%	17%	100%
2003	21%	7%	8%	25%	3%	5%	14%	17%	100%
2004	17%	8%	9%	27%	3%	5%	15%	17%	100%
2005	18%	4%	8%	25%	2%	10%	14%	18%	100%
2006	16%	3%	8%	26%	2%	11%	13%	20%	100%
2007	19%	4%	7%	24%	2%	13%	12%	19%	100%
2008	16%	5%	7%	24%	2%	13%	12%	20%	100%
2009	19%	4%	8%	25%	2%	11%	12%	20%	100%
2010	22%	3%	7%	24%	2%	9%	14%	19%	100%
2011	22%	4%	7%	23%	3%	8%	14%	20%	100%

Table 10: Share ownership structure of German listed corporations: European perspective

Investor categories	European non financial corporations	European banks	European insurance corporations and pension funds	European investment funds and other financial intermediaries	European other financial institutions	European general governments	European households and NPISH	Non-European investors	Total
2001	36%	15%	7%	18%	0%	2%	12%	9%	100%
2002	35%	15%	8%	15%	0%	4%	10%	10%	100%
2003	34%	12%	7%	17%	2%	4%	11%	12%	100%
2004	36%	14%	6%	16%	1%	4%	12%	10%	100%
2005	35%	15%	6%	17%	1%	3%	11%	11%	100%
2006	29%	10%	9%	21%	1%	3%	10%	15%	100%
2007	31%	7%	9%	19%	1%	2%	9%	20%	100%
2008	46%	7%	12%	14%	1%	2%	9%	8%	100%
2009	40%	6%	13%	16%	1%	2%	10%	12%	100%
2010	37%	6%	11%	18%	1%	2%	10%	15%	100%
2011	39%	6%	12%	17%	0%	2%	10%	13%	100%

Table 11: Share ownership structure of UK listed corporations: European perspective

Investor categories	European non financial corporations	European banks	European insurance corporations and pension funds	European investment funds and other financial intermediaries	European other financial institutions	European general governments	European households and NPISH	Non-European investors	Total
2001	1%	1%	37%	17%	1%	0%	16%	25%	100%
2002	1%	1%	36%	18%	1%	0%	15%	25%	100%
2003	1%	1%	34%	20%	3%	1%	15%	25%	100%
2004	1%	2%	33%	21%	2%	0%	15%	25%	100%
2005	2%	2%	30%	23%	2%	0%	14%	27%	100%
2006	2%	2%	28%	24%	2%	1%	13%	27%	100%
2007	3%	2%	27%	24%	3%	1%	11%	29%	100%
2008	4%	2%	27%	19%	3%	2%	11%	32%	100%
2009	3%	2%	19%	25%	2%	4%	11%	33%	100%
2010	3%	2%	14%	30%	2%	4%	12%	34%	100%
2011	3%	1%	12%	32%	2%	4%	12%	34%	100%

Table 12: Share ownership structure of Italian listed corporations: European perspective

Investor categories	European non financial corporations	European banks	European insurance corporations and pension funds	European investment funds and other financial intermediaries	European other financial institutions	European general governments	European households and NPISH	Non-European investors	Total
2001	32%	6%	7%	17%	0%	9%	15%	11%	100%
2002	27%	7%	7%	20%	0%	10%	14%	12%	100%
2003	25%	7%	8%	20%	2%	8%	18%	12%	100%
2004	27%	8%	8%	21%	2%	7%	14%	13%	100%
2005	28%	8%	9%	20%	1%	6%	15%	13%	100%
2006	28%	6%	8%	22%	2%	6%	14%	14%	100%
2007	28%	7%	8%	22%	1%	6%	12%	16%	100%
2008	25%	8%	7%	20%	1%	7%	18%	14%	100%
2009	23%	7%	7%	20%	1%	6%	18%	17%	100%
2010	22%	11%	7%	21%	0%	5%	18%	15%	100%
2011	23%	12%	8%	19%	1%	5%	18%	15%	100%