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THE STOCK OF SPANISH PORTFOLIO INVESTMENT AND THE CO-ORDINATED SURVEY OF THE INTERNATIONAL MONETARY FUND

Balance of Payments Department

The growing globalisation has shaped the development of economies and of financial markets in the last few decades. Against this background characterised by progressive deregulation of capital flows and by economic and monetary integration, there has been a significant increase in the volume of funds raised and, simultaneously, a diversification of transactions and of the instruments used to finance them. Investments in the form of tradable instruments quoted on organised markets ("portfolio investments" in balance of payments terminology) have played a major role in the increase in cross-border financing. For this reason, it is vital to have reliable and accurate information on these international capital flows and on the related stocks. In fact, this is one of the areas on which the available information and the efforts to increase its quality have more important in recent years within balance of payments statistics.

One of the main steps forward in this respect was the International Monetary Fund's so-called Co-ordinated Portfolio Investment Survey commenced in 1997. This survey, undertaken as a result of the conclusions of the so-called Godeaux report, was intended, inter alia, to reduce the asymmetries that the Godeaux report had disclosed through its calculations of international portfolio investment capital flows. But, apart from its contribution to this aim and, therefore, to increasing the quality of available data, the survey is important mainly because it is the only reliable way to obtain essential information such as the geographical disaggregation of the stocks held by non-resident investors in securities issued by the residents of an economy, i.e. an economy's foreign liabilities under the portfolio investment heading.

Spain has participated in a Co-ordinated Portfolio Investment Survey since it was first introduced in 1997. It has been conducted on a yearly basis since 2001. Analysis of the Spanish data in the survey, i.e. the foreign portfolio investment positions, indicates the process of internationalisation at work in the domestic holdings of securities issued by foreign countries financial asset portfolios of resident sectors, the predominance of investments in debt securities and the concentration in holdings of securities issued by euro area residents. Regarding the portfolio investment liabilities of the Spanish economy, as indicated above the survey is the only means of carrying out the geographical allocation of the final creditor by country of residence. This breakdown also confirms the importance of euro area countries at the final holders of securities issued by residents in Spain.

The paper is organised as follows. Section 1 summarises the background and aims of the Co-ordinated Portfolio Investment Survey. Section 2 analyses the information contained in the survey for Spain relating to the investment of residents in tradable securities issued by non-residents, broken down by instrument, issuer country and institutional investor sector. Non-residents' investments in securities issued by residents in Spain are analysed in Section 3, which contains a disaggregation by instrument and by country of residence of the final investors. Finally, the main conclusions are presented.

1. Co-ordinated Portfolio Investment Survey: background, progress and matters pending

1.1 Background

At the end of the 1980s, the Esteva report[1] showed that, although the world current account (total credits and debits of all economies) should theoretically balance, world payments exceeded receipts by a significant amount. Subsequently, the Godeaux report[2] revealed that this problem extended also to the statistics on capital flows and that there was a positive discrepancy in the world financial account balance, i.e. the aggregate value of capital inflows (liabilities) exceeded the value of the related outflows (assets).

WORLD BALANCE OF PAYMENTS TABLE 1
Discrepancies by component

US bn

	1986	1987	1988	1989	Average 86-89
Current Account (a)	-27,1	-10,2	0,8	-9,5	-11,5
Financial Account (b)	3,0	8,4	31,7	25,5	17,0
Direct investment	3,3	-9,9	-13,6	1,3	-4,7
Portfolio investment	7,1	11,2	-5,6	40,0	13,2
Other investment	-9,1	7,6	51,0	-18,4	7,8
Reserve assets	1,7	-0,5	--	2,4	0,9

SOURCE: International Monetary Fund.

a. A positive sign indicates an excess of receipts over payments.
b. A positive sign indicates an excess of capital inflows (liabilities) over outflows (assets).

The Godeaux report analysed the discrepancy for each component of the financial account (see Table 1 for results) and concluded that measurement errors in the portfolio investment were one of the main causes of this discrepancy. Its recommendations therefore included conducting an international survey on portfolio investment. Acting on this recommendation, the International Monetary Fund (IMF) instigated a Co-ordinated Portfolio Investment Survey (CPIS) in which, to ensure the reduction of the difference detected, it was essential for all participants to apply a common methodology.

1.2 Early experience: the 1997 and 2001 CPISs

The first CPIS was conducted in 1998 with data relating to 31 December 1997 (1997 CPIS). 29 countries participated in it, that represented 70% of total world investment portfolio assets, and reported the value, at market prices, of their stock of portfolio investment assets as at 31 December 1997[3], broken down geographically on the basis of the country of residence of the

[1] International Monetary Fund (1987).
[2] International Monetary Fund (1992).

[3] The CPIS excludes holdings of securities that should be classified as direct investment.

security issuer, and by instrument distinguishing between equity securities (basically, equities and shares in mutual funds) and long-term debt securities.

This information was supplemented with that obtained from two other surveys: one of central banks on the geographical distribution of the securities comprising their reserve assets and another on the geographical distribution of securities held by international organisations. In addition, data on debt security holdings of banks provided by the Bank for International Settlements (BIS) was used by the IMF to estimate the stock of some of the major countries that did not participate in the survey.

Although the 1997 CPIS was unable to eliminate the asymmetry between global portfolio investment assets and liabilities, which continued to be high ($1,675 billion, 18% of total liabilities), it did manage to identify the possible causes, and advocated greater harmonisation in the production of portfolio investment statistics. The persistence of the discrepancy between total world assets and liabilities was attributed to the lack of participation of certain large investors (Germany, Switzerland, Luxembourg and most offshore financial centres, among them), to the difficulty in estimating households' investments, especially when made through non-resident financial institutions, and to the problems of identifying certain securities transactions (repos, sell/buy-back transactions and securities loans[4]). Regarding progress in harmonisation, the first CPIS, in addition to demonstrating that it was possible to successfully undertake an international project of this size and importance, helped to disseminate optimum statistical practices in the design and implementation of surveys. The achievements of the 1997 CPIS and the matters still remaining unresolved persuaded the IMF to undertake a second CPIS, with data relating to 31 December 2001, which was to become the first of a series of regular yearly surveys.

The successive CPISs introduced certain methodological changes with respect to the original survey,[5] but above all they increased its coverage. 70 countries participated in the 2003 survey, including the large investors that did not participate in the previous CPIS and some economies with international financial centres.

STOCKS OF WORLD PORTFOLIO INVESTMENT
Results of the 1997, 2001 and 2002 CPIS

TABLE 2

US bn

	Assets	Liabilities	Liabilities less Assets	
			Amount	% of liabilities
1997	7.664	9.339	1.675	17,9
2001	12.837	14.867	2.030	13,7
2002	14.426	16.387	1.961	12,0

SOURCE: IMF.

Despite this progress, the discrepancy in the stock of global portfolio investment assets and liabilites was not eliminated, although it was reduced in relative terms (see Table 2). To make further progress, it will probably be necessary to continue increasing the coverage and to resolve

4 Under balance of payments and CPIS methodology, the acquisition/delivery of securities in repos, sell/buy-back transactions and securities loans should not be included as portfolio investment, but rather under "Other investment". Accordingly, the stocks of securities acquired via these transactions may not be included in the CPIS.
5 In addition to including money market instrument data not considered in 1997, the successive surveys have incorporated as voluntary data, inter alia, breakdowns of asset holdings both by the resident sector holding the securities and by currency.

certain methodological problems associated with households' holdings and with the aforementioned reverse transactions involving securities.

1.3 Uses of the CPIS

In the field of production of statistics, the CPIS has meant a notable increase in the information available on portfolio investment, and in its quality. This improvement basically takes the form of generalizing the application of security-by-security data collection procedures, the use of databases with detailed information on the characteristics of each security and the promotion of multinational projects in parallel with the CPIS, such as those to construct centralised securities databases. The combination of these three factors generally yields more detailed, reliable and homogeneous information.

However, although these benefits are notable, the main contribution of the CPIS is that it offers the only means of obtaining reliable information on the country of residence of the actual non-resident investors holdings of securities issued by the residents of an economy, i.e. on portfolio investment liabilities. All the existing information systems are inefficient for obtaining this information and can only provide a geographical breakdown based on the residence of the financial intermediaries through which these investments are channelled (i.e. the first known counterparty, but not the final investor that holds the securities). In practice, the only way of obtaining this information is from the geographical breakdown of the data of the creditor countries of securities, and for this information to be usable it is necessary that all, or at least a significant majority, of them provide this information compiled according to a harmonised methodology, on a regular basis and as at standard dates. In summary, the CPIS, which meets these requirements, is currently the only source of reliable information for generating a geographical breakdown of the outstanding portfolio investment liabilities of the different economies.

In view of this fundamental contribution and of the other information disseminated within the framework of the CPIS, it can be said that, owing to the dissemination of geographical data on portfolio investment assets and liabilities, this survey provides a means of assessing the degree of dependence and vulnerability of a country or sector to certain areas or countries (risk of contagion of crisis from other countries, risk of default on external debt by debtor countries, etc.). Also, since the CPIS includes a classification by the resident sector holding the securities, it enables this type of risk to be assessed more adequately. In addition, the disaggregation by currency enables an economy's risk exposure to exchange crises to be assessed. As regards the structure of the portfolio investment position in terms of instruments, this is an indicator of a country's ability to attract more or less stable financing and at the same time enables a specific country's probability of default or the interest rate risk to be assessed.

1.4 Participation of Spain in the CPIS

Spain has participated in all the CPISs. This participation fell to the Ministry of Economy and Finance and the Banco de España working in co-ordination. In the 1997 and 2001 surveys, the information was drawn from the Foreign Investment Register[6] and, from the following survey onwards, the survey response was made by the Banco de España (the latest as at 31 December 2004), using a new information system[7].

The use of this new system to compile CPIS data relating to Spain from 2002 onwards introduced a break with the data reported in the earlier 1997 and 2001 CPIS surveys. The main differences between the data before and after the 2002 survey were: improved coverage, mainly of Spanish securities deposited in non-resident financial intermediaries with accounts at resident central securities depositories and of securities issued by residents abroad; direct identification of repo transactions in order to exclude them from CPIS data; and improved identification of the country of residence of securities issuers through the use of a securities database set up by the BIS. Finally, it should be mentioned that the Spanish CPIS data since 2002 are consistent with those of the Spanish international investment position and of the Spanish external debt, which are also compiled and disseminated by the Banco de España.

The methodological advances introduced in this new system have improved the quality of the data on the stock of portfolio investment compiled by the Banco de España and, in particular, that of the data on the stock of liabilities, as illustrated in Table 3. This table compares the stock of portfolio investment liabilities reported by Spain in the 2001, 2002 and 2003 CPISs with that estimated by the IMF by aggregating the cross-border holdings of securities vis-à-vis Spain reported by the rest of the countries participating in the CPIS. Since, as indicated above, the coverage of the CPIS is not total, the value of the portfolio investment liability stocks of the Spanish contribution to the survey should be greater than that obtained by aggregating the data of the creditor countries of Spain participating in the survey. This is so in the 2003 and 2002 surveys, but not in the 2001 survey.

[6] To respond to the CPIS, the Ministry of Economy and Finance drew on aggregate (not security-by-security) information available in the Foreign Investment Register (currently the responsibility of the Ministry of Industry, Tourism and Trade). This register contains, inter alia, data on assets and liabilities position in tradable Spanish securities vis-à-vis the rest of the world, classified into equity holdings, debt securities and mutual fund shares. The data were obtained from reporting by resident depositories of securities and, in the case of securities deposited in non-resident institutions, by the investment holders. However, this register had certain limitations as a source of information for the CPIS: the register did not include foreign-currency-denominated Spanish securities issued in foreign markets and held by non-residents; and the geographical breakdown of the assets was based on the country where the securities were issued, regardless of the residence of the issuer.

[7] A description of the information system used by the Banco de España to collect data on portfolio investment flows and stocks is beyond the scope of this paper, but its main characteristics can be summarised as follows: (i) collection of security-by-security data, i.e. for all stocks and transactions the security involved is identified, (ii) collection of data on resident financial intermediaries -- depositories and settlement agents in securities markets -- and on resident end-investors when they do not use the services of those resident intermediaries in their transactions, and (iii) harmonisation of the information for transactions (flows) and positions (stocks). The design of this system also seeks to resolve some of the methodological problems mentioned above (repo transactions) and to enable the use of centralised databases conducive to greater harmonisation with the data collected by other EU countries. In this respect, the ECB, in collaboration with the EU countries, is working on an ambitious project to prepare a tool known as the Centralised Securities Data Base (CSDB). For a more detailed description, see Duce (2002) and Banco de España (2004).

POSITION OF FOREIGN PORTFOLIO INVESTMENT IN SPAIN (LIABILITIES) TABLE 3
Breakdown by instrument and comparison with IMF data (a)

EUR m

	2001			2002			2003		
	SPAIN	IMF	DIFFERENCE	SPAIN	IMF	DIFFERENCE	SPAIN	IMF	DIFFERENCE
Equity securities	161,643	128,223	33,420	116,966	94,949	22,016	147,878	114,882	32,996
Debt securities	121,055	185,973	-64,918	242,432	222,751	19,681	267,217	263,696	3,521
Long term	120,762	180,288	-59,526	237,624	217,846	19,778	260,209	256,640	3,568
Short term	293	5,685	-5,392	4,808	4,905	-97	7,009	7,056	-47
TOTAL	282,698	314,196	-31,498	359,398	317,700	41,697	415,095	378,578	36,516

SOURCE: Banco de España and IMF.

a. The IMF data are those reported for assets in the CPIS for each creditor country vis-à-vis Spain.

2. The stock of Spanish portfolio investment abroad

This section contains a descriptive analysis of the Spanish holdings of securities issued by non-residents (Spanish investment abroad) based on the Spanish contribution to the CPIS, paying special attention to the data relating to 2002, 2003 and 2004, the period in which this contribution was compiled by the Banco de España. Since the CPIS does not include a geographical breakdown of the portfolio investment assets held by monetary authorities, it has been preferred to omit such assets from this analysis.

2.1 Securities in which Spanish residents invest

On 2004 CPIS data (see Table 4), the tradable securities issued by non-residents that are held by residents, excluding the Banco de España, amounted to €359,258 million in December 2004, of which €78,053 million were equity securities (21.7% of the total), €271,394 million were long-term debt securities (75.5%) and €9,812 billion were short-term debt securities (2.7%). In 2004, equity assets grew appreciably, followed by long-term debt, while short-term debt decreased, cutting short the recovery seen in 2003. By contrast, equity securities held on the path of recovery commenced following the decline in 2002, against a background of stock market recovery.

Comparison of these figures with the total Spanish resident holdings of portfolio investment assets by the Spanish economy[8], i.e. including both the foreign and domestic portfolios investment securities, highlights the intense process of internationalisation of the Spanish economy in recent years. On 1997 CPIS data, foreign assets had a weight of 6.5% in that total[9]. At the end of the 1990s, the value of holdings of portfolio investment assets abroad grew spectacularly at a much faster rate than that of domestic assets, increasing fivefold in the period 1997-2001. As a result, according to 2001 CPIS data, the foreign portfolio reached a weight of 19.7% in that year. This growth, although moderating between 2001 and 2004, continued to be significant (averaging around 28% per annum) and enabled the proportion of foreign assets in the total portfolio to rise to 28.6% by the end of the period under analysis. Accordingly, although the domestic bias in the composition of the tradable securities portfolio of the Spanish economy as a whole remained in place, it has tended to moderate in recent years.

[8] Total portfolio investment assets were approximated from the headings "Securities other than shares", "Quoted shares" and "Mutual fund shares" in Table II.6.a (Total economy. Financial balance sheet of the Financial Accounts of the Spanish Economy, Banco de España (2005). However, the item "Quoted shares" includes a portion relating to direct investment assets that was unable to be isolated.

[9] All comparisons with 1997 are made excluding short-term debt securities, which were included in post-1997 surveys but not in the 1997 CPIS because they were a voluntary category in that first survey.

The internationalisation of portfolios noted in the previous paragraph was accompanied by an increase in the weight of long-term debt securities in the Spanish economy holdings of foreign securities, which rose from 59.7% in 2001 to 75.5% in 2004 (see Table 4). Simultaneously, the weight of equities in the total decreased from 33.9% to 21.7% in the same period. This shift becomes even plainer on analysis of the equity /long-term debt ratio since 1997. In that year, this ratio was 90.1%, indicating that the two types of instrument had similar weights in the foreign portfolio, while in 2004 the ratio decreased to 28.8%.

POSITION OF FOREIGN PORTFOLIO INVESTMENT IN SPAIN (ASSETS) TABLE 4
Breakdown by instrument (a)

EUR m

	AMOUNT					% OF TOTAL				
	1997	2001	2002	2003	2004	1997	2001	2002	2003	2004
Equity securities	20,339	66,604	50,712	62,677	78,053	n.a.	33.9	19.7	19.6	21.7
Debt securities	n.a.	129,859	206,094	257,106	281,206	n.a.	66.1	80.3	80.4	78.3
Long term	22,585	117,321	199,598	246,137	271,394	n.a.	59.7	77.7	77.0	75.5
Short term (b)	n.a.	12,538	6,496	10,969	9,812	n.a.	6.4	2.5	3.4	2.7
TOTAL	n.a.	196,463	256,806	319,783	359,258	n.a.	100.0	100.0	100.0	100.0

SOURCE: Banco de España.

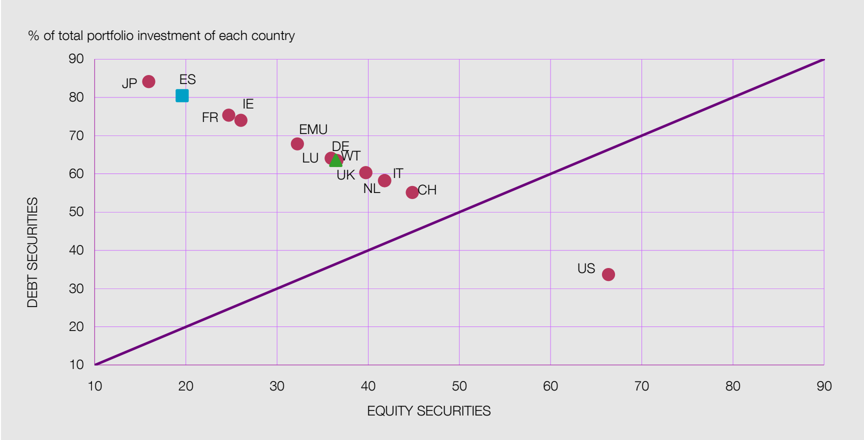
a. Excluding Banco de España.
b. In the 1997 CPIS this category was voluntary and the breakdown was not provided.

The many possible reasons for this dual shift of the securities investments of Spanish residents towards foreign locations and towards debt securities are linked to both structural and transitory factors. Worthy of mention among the former are the introduction of the euro, which has had a highly significant effect on the foreign portfolio of residents by enabling the diversification of credit risk (linked to the issuer) without any exposure to currency risk, and the legislative reforms which have boosted investment in portfolio investment institutions which, at times of uncertainty in the markets, have placed a high proportion of their portfolios in low risk assets. Temporary factors may have had a major influence on the preference for debt securities. Among them are the successive financial crises in developing countries (Asia, Russia and Latin America) since the late 1990s, which spread throughout the international financial markets, the bursting of the stock market bubble and, more recently, the geopolitical uncertainty in the wake of the 11-S terrorist attacks. These events heightened the risk aversion of agents, which meant that the process of restructuring their portfolios towards equity assets after the last stock market crisis was slower than in other earlier crises[10]. Against this background the proportion of debt securities increased in the period 2001-2004, not only because of the shift towards safer investments (quantity effect), but also because of the effect of falls in the prices of the assets producing equity income (price effect).

It is important to note that the composition of Spanish foreign portfolio investment has behaved differently from that of the total (aggregating the domestic and foreign portfolio securities). In the period 2001-2004, equity and debt securities had similar weights in the aggregate portfolio (51% and 49%, respectively). This was quite different from the composition of the foreign portfolio investment securities which, as pointed out above, increased its bias towards debt securities from 66.1% in 2001 to 78.3% in 2004. Factors that could explain this asymmetric behaviour are the higher information costs associated with foreign investment in equity securities, which are more volatile than debt securities, and the insufficient supply of securities in the Spanish debt markets, which only in recent years have grown strongly, partly due to the surge in asset securitisation.

[10] See ECB (2004).

STOCK OF PORTFOLIO INVESTMENT (ASSETS) CHART 1
Breakdown by instrument and international comparison (a). 2003



SOURCE: Banco de España and IMF.

a. United States (US), Japan (JP), United Kingdom (UK), Luxembourg (LU), Germany (DE), France (FR), Italy (IT), Netherlands (NL), Ireland (IE), Switzerland (CH), Spain (ES), Euro area (EMU) and World Total (WT).

Finally, if these figures are compared with those for the rest of the countries, it can be seen that the Spanish economy also shows a greater preference for debt securities (see Chart 1), although the total holdings of world foreign portfolio investment assets, according to the countries contribution to the CPIS is similarly biased towards these securities. According to the latest 2003 CPIS data, total world foreign portfolio investment assets are comprised of 36.5% equity securities and 63.5% debt securities. By individual country, the composition of the foreign portfolio assets shows a certain amount of dispersion, although the weight of debt is likewise higher in most of the economies analysed. The most extreme cases are the United States, 66.4% of whose portfolio consists of equity securities, in contrast to Japan, where equity securities represent only 15.9% of the total. Germany, the Netherlands and Italy stand close to the average, while the composition of the foreign portfolio of France is more similar to that of Spain.

2.2 Countries in which Spanish residents invest

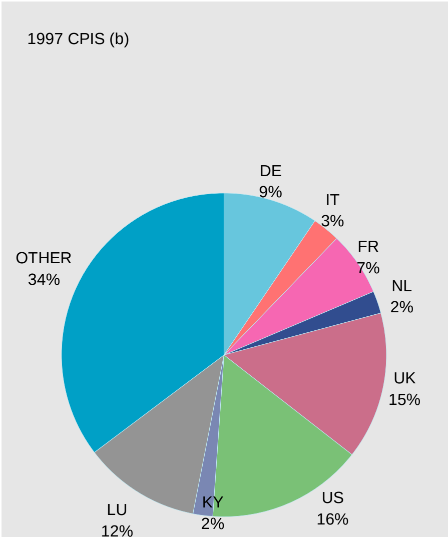
Geographically speaking, the stock of Spanish portfolio investment abroad as 2004 December is highly concentrated, since of the 82 countries issuing securities held by residents, just 10 account for practically 90% of the total (89%). The euro area – headed by Germany, Italy, France and the Netherlands -- accounts for 66.8% of the total. The United Kingdom has a weight of 10.2%, the United States 8.8% and the Cayman Islands 5.9%. Comparison of these figures with those of 1997[11] shows a strong shift towards securities issued by euro area residents, since in that year the countries currently forming the euro area only represented 36.2% of the total, against 66.8% in 2004.

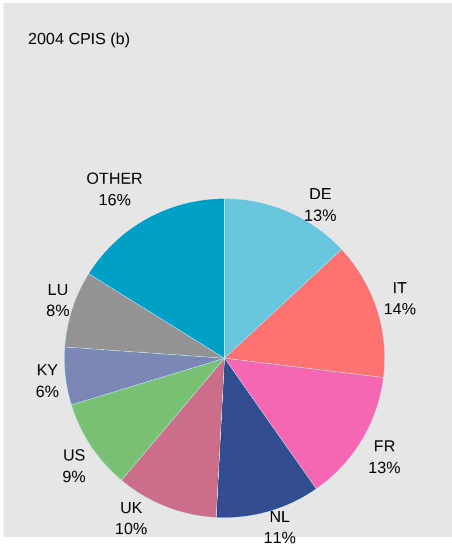
[11] Note that the 1997 CPIS did not include holdings of short-term debt securities.

Hence the internationalisation of portfolios referred to in the previous section has basically looked to the euro area. Other European countries show a similar pattern, with the exceptions of Luxembourg, Ireland and the Netherlands, a high percentage of whose investment is in the United States. Thus for example, France increased the weight of its portfolio investment assets vis-à-vis the euro area countries to 64.3% in 2003, compared with only 43% in 1997; in the case of Italy, this percentage stood at 64.4% in 2003, well above the 31% of 1997; finally, in Germany the weight of the euro area was 66.2% in 2003 (Germany did not participate in the 1997 CPIS).

SPAIN'S STOCK OF PORTFOLIO INVESTMENT (ASSETS)
Geographical breakdown evolution (a)

CHART 2





SOURCE: Banco de España.

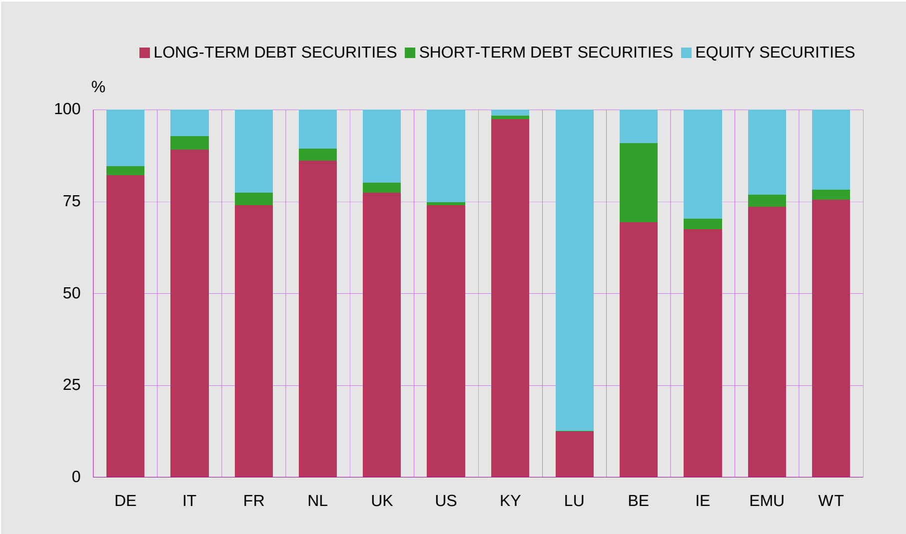
a. United States (US), Cayman Islands (KY), United Kingdom (UK), Luxembourg (LU), Germany (DE), France (FR), Italy (IT), Netherlands (NL).
b. Includes only equity securities and long-term debt securities.

These figures seem to indicate that the reduction of national bias in the portfolio investment securities by the Spanish residents following the introduction of the single currency also produced a higher geographical concentration of foreign assets in the euro area, in an attempt to diversify credit risk by investing in an area with a certain economic stability and free from exchange risk. The fact that most of the foreign assets arising from portfolio investment abroad by Spain are issued by residents in developed economies and, more specifically, in the euro area, means that the risk exposure is moderate, particularly insofar as exchange risk and default risk are concerned. This high concentration may be satisfactorily explained by a gravity model, in which market size and geographical proximity (as a proxy for information costs) could adequately explain the level of foreign investment[12].

[12] See Faruqee, Li and Yan (2004), and Portes and Rey (2000).

SPAIN'S STOCK OF PORTFOLIO INVESTMENT (ASSETS) CHART 3

Breakdown by geographical location (a) and by instrument. 2004



SOURCE: Banco de España.

a. Germany (DE), Italy (IT), France (FR), Netherlands (NL), United Kingdom (UK), United States (US), Cayman Islands (KY), Luxembourg (LU), Belgium (BE), Ireland (IE), Euro area (EMU) and World Total (WT).

As shown in Chart 3, at the end of 2004 most Spanish portfolio investment assets vis-à-vis euro area countries were in long-term debt securities (around 73.7%). Equity securities were of scant importance, with the exceptions of Luxembourg (87.3% of the total), basically because of the high weight of the positions in mutual funds issued in that country, Ireland (30%), which is a similar case to Luxembourg, and France (23%). In the case of the United Kingdom, the weight of investment in equity securities was also significant (20%), while for the United States this percentage was 25%. Finally, regarding the Cayman Islands, Spanish assets were basically in the form of preference shares issued by the subsidiaries of Spanish corporations set up in that country, which are classified as debt securities[13].

Finally, it is of interest to analyse to what extent the geographical distribution of Spanish portfolio investment abroad is related to the relative importance of the markets of those countries[14]. To this end, Table 5 presents a country-by-country breakdown of the 2003 stock of portfolio investment abroad by Spain, the euro area and the CPIS reporting countries as a whole; the bottom row gives the weight that the equity and debt markets of the countries or areas considered have in the world market.

[13] The new Spanish regulations on these securities will, however, very likely mean that the new issues of these instruments will be in Spain in the future. Past issues continue to have a significant weight in the stock of portfolio investment, although it is possible that they will be transferred to Spain via a reclassification of the residence of the securities holder. 2003 saw the enactment of the new law on capital movements and cross-border transactions and on measures to prevent capital laundering (Law 14/2003), whereby, in order for preference shares to be able to form part of the own funds of credit credit institutions, they must be issued in Spain or in an EU territory not deemed to be a tax haven.

[14] According to the international capital asset pricing model (ICAPM), the foreign portfolio of an investor is geographically distributed between debt securities and equity securities based on the weight in the world total that is represented by the markets of the countries in which he invests, i.e. if the US stock market represented 42% of world stockmarket capitalisation at the end of 2003, the weight of US equities in the total equities portfolio of a country would be 42% under the ICAPM model.

STRUCTURE OF FOREIGN PORTFOLIO OF SECURITIES TABLE 5
Breakdown by recipient country of investment. International comparison (a)

% of the total of each instrument

	RECIPIENT COUNTRY							
	Euro area		United States		United Kingdom		Japan	
INVESTOR COUNTRY	Equity	Debt	Equity	Debt	Equity	Debt	Equity	Debt
Spain (b)	60.3	68.6	11.1	7.8	17.1	7.6	1.4	0.1
Euro area (c)	48.8	62.3	21.4	13.1	10.3	7.6	4.2	1.0
CPIS (c)	33.5	44.7	18.4	24.0	12.9	7.4	7.1	2.1
Memorandum item:								
Weight of each market in world total	15.7	26.5	42.2	38.6	7.7	4.8	10.6	15.6

SOURCE: IMF, Bloomberg, BIS and Banco de España.

a. Weight of recipient country in the equity/debt portfolio of the investor country.
b. 2004 data.
c. 2003 data. Euro area: sum of the individual positions of each euro area country. CPIS: sum of the individual positions of each CPIS reporting

In the case of equity securities, according to stock market capitalisation figures as at 31 December 2004[15], the United States is the main world market, with a weight of 42.2% of the total, followed by the euro area (15.7%), Japan (10.6%) and the United Kingdom (7.7%). However the United States only has a weight of 18.4% in the total foreign portfolio of the 2003 CPIS participants, a percentage which rises to 21.4% in the total foreign portfolio of the euro area countries and drops to 11.1% in the case of Spain. The main destinations of investment in equity securities by Spain are the euro area countries (60.3%), and this is also true of the euro area as a whole (48.8%), whereas for the total CPIS participants this percentage is 33.5%. This latter figure is strongly influenced by the high weight of the bilateral positions between euro area countries. In fact if only the non-euro area countries are considered, the weight of the euro area in the foreign portfolio of these countries drops to 29.8%, which, nevertheless, is still higher than its relative weight in the world equity market.

As regards debt securities, the main issuers, determined by aggregating domestic and international issues[16], are the United States (38.6%), followed by the euro area (26.5%), Japan (15.6%) and the United Kingdom (4.8%). However, as in the previous case, US securities have a lower weight in the total foreign portfolio of the 2003 CPIS reporting countries (24.0%), due to the importance of bilateral investment between euro area countries (62.3% of their portfolio investment abroad), where the weights far exceed those of these countries' investments vis-à-vis the United States (13.1%). Here too the Spanish portfolio investment abroad also showed a greater preference for the euro area (68.6%) than for the rest, followed by the Cayman Islands (8.8%), the United States (7.8%) and the United Kingdom (7.6%).

It thus seems clear that investors' holdings abroad are not distributed according to the weight of the respective markets. In the case of Spain in particular, and in that of the total euro area countries in general, the position vis-à-vis the euro area countries as a whole has a much higher weight than is commensurate with the significance of this area in the world markets.

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[15] Source: Bloomberg. The stock market capitalisation figures issued by Bloomberg are based on the securities for which it has information in each country and are calculated by multiplying the number of shares outstanding by the price per share expressed in dollars.
[16] Based on the value of the outstanding stocks of these issues as at December 2003. Bank for International settlements (2004).

2.3 Portfolio investment abroad by institutional sector

In December 2004, *other resident sectors* (ORS, basically comprising non-monetary financial institutions, non-financial corporations and households) were the main sector responsible for investment abroad and accounted for 69.9% of total Spanish portfolio investment abroad, amounting to €251,256 million. The weight of this sector was somewhat higher than in 2003 (69.0%), since the value of the assets of monetary financial institutions (MFIs) grew less (8.1% per annum) than that of ORS assets (13.8%), reaching €107,108 million in 2004. Within ORS, non-monetary financial institutions[17] -- particularly resident capital market mutual funds -- held the highest volume of foreign assets (57.2% of total portfolio investment), while the non-financial sector was much less significant (12.7%).

Non-monetary financial institutions were the sector with the least domestic bias in their portfolio, since their foreign assets represented 58.3% of their total portfolio investment, against 30.5% for MFIs and 8.6% for the non-financial sector. It should be kept in mind that the non-financial sector and, in particular, households hold a significant portion of their financial saving in the form of shares of resident mutual funds that invest abroad, and therefore, albeit indirectly, the portfolio investment of the non-financial sector has a much stronger foreign focus than is reflected in the CPIS figure.

STOCK OF PORTFOLIO INVESTMENT ABROAD
Breakdown by sector of the holder (a). 2004

CHART 4

SOURCE: Banco de España and IMF.

a. TOT (All sectors). MFI (Monetary Financial Institutions). ORS (Other resident sectors). OFI (Non-monetary financial institutions). NFC (Non-financial corporations). H (Households).

As regards the composition by instrument of the portfolios of the various sectors (see Chart 4), in 2004 the MFIs held a majority position in long-term debt securities (88.9%), mainly issued in euro area countries, with a minimal proportion of equity securities. This composition is qualitatively similar to that of their global portfolio investment securities assets (i.e. including securities issued by residents and by non-residents). The portfolio of other financial institutions was less concentrated than that of MFIs in terms of instruments (76.4% debt securities and 23.6% equities), and this was also so of their domestic portfolio, mainly because of the holdings of foreign assets of resident pension funds and mutual funds, since insurance companies held practically all their portfolio in the form of long-term debt securities. However, analysis by country shows that these institutions, like MFIs, had a preference for securities issued by euro area residents (72.3% of their foreign

[17] Collective investment undertakings (except those defined as MFIs) and other financial intermediaries, insurance corporations, pension funds and financial auxiliaries.

portfolio), which was more marked in the case of debt securities (72.5%) than in that of equities (71.4%).

Finally, the non-financial sector held a much more diversified portfolio, with 52.6% in equities and 47.5% in debt securities. However, the behaviour of households and non-financial corporations differed greatly. Whereas the former held mainly debt (58.3%), basically that issued in the Cayman Islands, in corporations this percentage was 26.7%, with the United Kingdom having a significant weight. Consequently, households' holdings of equity assets represented 41.7% of their portfolio, against 73.3% for non-financial corporations; in both cases securities issued in the euro area were in the majority. In view of this higher percentage of equity securities in its foreign portfolio, the non-financial sector, and corporations in particular, seems to be relatively more sensitive to variations in asset prices, although the weight of these assets in its total portfolio is small.

3. The stock of foreign portfolio investment in Spain

This section presents a descriptive analysis of the figures for the stock of foreign liabilities under the portfolio investment heading (foreign portfolio investment in Spain), based on a breakdown by instrument and geographical location. It is important to note that, thanks to the information provided by the CPIS, this is the first time that an analysis has been conducted of the geographical breakdown of the portfolio investment of non-residents in Spain by country of the end-investor, which is the only one of relevance for analysis.

3.1 Instruments in which non-residents invest

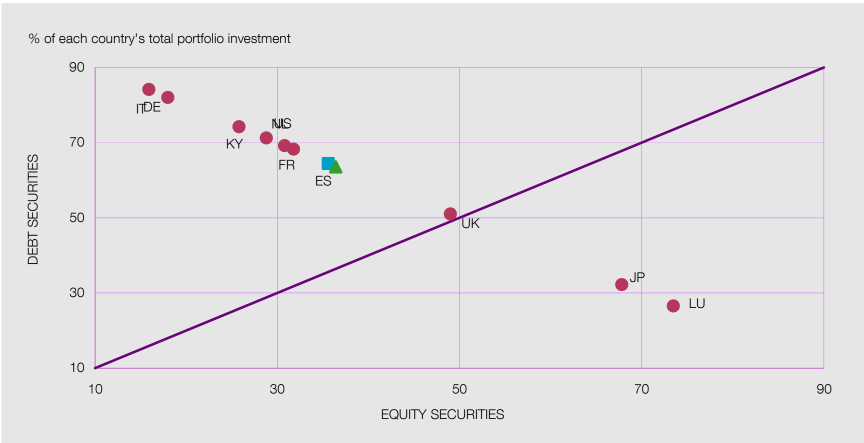
In December 2004, the holdings of Spanish securities by non-residents amounted to €561,905 million, of which €183,210 million related to equity securities (32.6% of the total), €371,395 million to long-term debt (66.1%) and €7,300 million to short-term debt (1.3%). All types of securities grew notably with respect to 2003, with the largest rises in long-term debt securities (42.7% per annum) and equity securities (23.9%), the amount of which decreased in 2002 with respect to the 2001 figure, basically due to the fluctuations in the price of these securities over those years. In 2003 and 2004, the stock market price indicators for Spain rose significantly.

Just as with the stock of portfolio investment assets, the stock of portfolio investment liabilities of held by Spain has grown spectacularly in recent years as a result of the Spanish economy's intense process of internationalisation and of the development of its domestic financial markets. Thus Spain became one of the main recipients of international capital in the form of portfolio investment (it was ranked 10th in the 2003 CPIS). Non-residents' holdings of securities issued by residents tripled in the period 1997-2001, their growth slowing to an average annual rate of 33% between 2001 and 2004. In a similar way to the developments described for portfolio investment assets, there was a shift to debt securities, particularly those with longer terms, which in 2004 represented 66.1% of the total, against 42.7% in 2001. The strong development of Spanish debt markets, particularly those for corporate debt and securitisation, in which non-residents have participated actively, was thus reflected in the structure of foreign liabilities under the portfolio investment heading, as also was the performance of the stock markets, which, after the significant falls in 2001 and 2003, have improved significantly in recent years.

he composition of foreign has followed a different course from that of the total securities issued by Spanish residents[18]. In the period 1997-2004, the structure of total liabilities remained steady, with equity securities accounting for around 52% of the total, against 48% for debt securities. Hence foreign financing of residents in the form of negotiable securities showed a clear bias towards debt with respect to domestic financing.

STOCK OF PORTFOLIO INVESTMENT (LIABILITIES) CHART 5

Breakdown by instrument of each country's portfolio (a). 2003



SOURCE: Banco de España and IMF.

a. US (United States), JP (Japan), UK (United Kingdom), LU (Luxembourg), DE (Germany), FR (France), IT (Italy), NL (Netherlands), IE (Ireland), KY (Cayman Islands), Spain (ES), World Total (WT).

Lastly, if we compare these figures with those of the CPIS world totals for 2003 (see Chart 5), it can be seen that the weight of equity securities in the foreign portfolio investment of the Spanish economy is similar to that in the world total (35.6% and 36.4%, respectively) and, therefore, so is that of debt securities. The most extreme cases are Luxembourg (with 73.5% of its foreign portfolio liabilities in equity securities), Japan (67.8%) and the United Kingdom (49.0%). Around the halfway mark are countries like the United States and France, while the foreign liabilities of Germany and Italy show a very significant bias towards debt securities (82.0% and 84.1%, respectively). However, in the case of debt securities, the short-term variety represents a much lower percentage in the Spanish economy (2.7% of total debt securities, against 12.7% on average in the rest of the world). Extreme cases also exist, such as the United Kingdom (29.2%) and the United States (17.4%), while the weight of short-term debt in the main euro area countries is below the average, but higher than in Spain: 13.4% in France, 9.1% in Germany and the Netherlands, and 4.0% in Italy.

3.2 Main countries that invest in Spain

A useful geographical distribution of the stock of portfolio investment liabilities must take into account the country of residence of the end-investor, i.e. the person or entity that actually owns the securities. However, as indicated above, the chain of intermediaries interposed between the issuer and the end-investor means that in practice it is impossible to identify the latter in the

[18] An attempt has been made to approximate the total portfolio investment liabilities of the economy from the headings "Securities other than shares", "Quoted shares" and "Mutual fund shares" in Table II.6.a (Total Economy. Financial Balance Sheet) of the Financial Accounts of the Spanish economy, Banco de España (2005).

customary information systems. Therefore the geographical breakdown of these liabilities is usually based on the country of the first known counterparty, which usually coincides with that of a financial intermediary. Additionally, in certain cases, such as that of international securities issues, not even the country of residence of this first intermediary is known, so that the geographical assignment remains undetermined (see Table 7). In this respect, the magnitude of the problem can be appreciated thanks to the CPIS, because it enables the figures for the liabilities of country A assigned to country B to be compared with the figures assigned by country B in its assets to country A. Moreover, more importantly, the high coverage achieved by this survey makes it the only reliable means of estimating the geographical distribution of the foreign investment in an economy according to end-investor.

SPAIN'S PORTFOLIO INVESTMENT (LIABILITIES) TABLE 7
Breakdown by geographical location and by instrument, and comparison with CPIS data (a). 2003

EUR m

	EQUITY SECURITIES		DEBT SECURITIES		TOTAL		WEIGHT IN TOTAL (%)	
	FKC	EI	FKC	EI	FKC	EI	FKC	EI
France	18,977	17,626	28,252	68,104	47,229	85,731	11.4	23.3
Germany	11,072	12,306	21,597	49,637	32,669	61,943	7.9	16.8
United States	33,901	34,680	5,308	6,133	39,209	40,813	9.4	11.1
Luxembourg	10,905	8,875	75,253	17,968	86,158	26,843	20.8	7.3
United Kingdom	42,792	13,247	14,675	13,551	57,467	26,799	13.8	7.3
Netherlands	5,163	4,366	4,957	16,985	10,119	21,351	2.4	5.8
Ireland	595	3,346	2,303	17,894	2,898	21,240	0.7	5.8
Japan	141	2,946	362	14,282	503	17,229	0.1	4.7
Belgium	5,205	1,882	87,093	12,712	92,298	14,594	22.2	4.0
Italy	2,549	3,410	2,128	9,060	4,677	12,470	1.1	3.4
Switzerland	7,458	1,888	617	1,846	8,075	3,734	1.9	1.0
Unassigned territories	-621	0	23,100	0	22,479	0	5.4	0.0
Other	9,741	10,165	1,572	25,776	11,313	35,941	2.7	9.7
Total liabilities	147,878	114,738	267,217	253,949	415,095	368,687	100.0	100.0

SOURCE: Banco de España and IMF.

a. FKC: geographical assignment of liabilities under the first-known counterparty principle. EI: geographical assignment by end-investor based on the stock of assets of the credit countries.

Table 7 includes the geographical assignment of the portfolio investment liabilities of Spain based on the first known counterparty (FKC), i.e. that communicated by the Banco de España, and that obtained by aggregating the assets figures of the countries investing in Spain as stated in the CPIS[19], which reflects the country of residence of the end-investor (EI). Under this latter classification, the only one relevant for analysis of results, in 2003 the largest investor in Spanish tradable securities was France, with 23.3% of the total, followed by Germany (16.8%) and the United States (11.1%). These weights contrast with those based on the FKC, which awarded the first places to Belgium (22.2%), Luxembourg (20.8%) and the United Kingdom (14%), in consonance with their role as international financial centres and/or locations of major financial intermediaries specialised in the custody of securities.

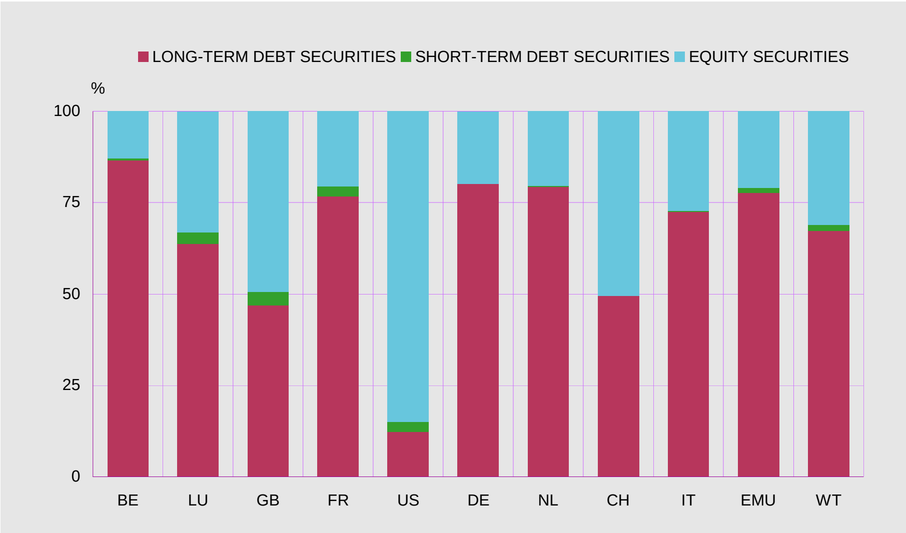
We analyse below the geographical breakdown of the stock of Spain's liabilities based on the asset figures for the investor countries drawn from the CPIS, which, as indicated above, are the only significant ones.

[19] The latest available figures are those of the 2003 CPIS, which can be found at the Internet address http://www.imf.org/external/np/sta/pi/CPIS.htm. Note that these figures do not include the Spanish portfolio liabilities that constitute the reserve assets for other countries, since the geographical distribution of these is confidential. However, this would not change the percentage geographical distribution obtained from the figures reported by other countries, since only 2.2% of Spain's liabilities correspond to reserve assets of other countries.

The most notable feature of the stock of foreign portfolio investment in Spain is its high degree of concentration. Of the 60 creditor countries in 2003, the first 10 accounted for 89% of the total. The euro area countries were the main investors, with a weight of 68%, including most notably France and Germany. As regards non-euro area countries, there was a concentration of liabilities vis-à-vis the United States, the United Kingdom and Japan, with 11%, 7% and 5% of the total, respectively.

POSITION OF FOREIGN PORTFOLIO INVESTMENT IN SPAIN
Breakdown by instrument and geographical location (a). 2003

CHART 6



SOURCE: IMF.

a. IMF data drawn from the CPIS geographical breakdown of creditor country assets. Belgium (BE), Luxembourg (LU), United Kingdom (UK), France (FR), United States (US), Germany (DE), Netherlands (NL), Switzerland (CH), Italy (IT), Euro area (EMU) and World Total (WT).

Portfolio investment in Spain by investors resident in the euro area was concentrated in long-term debt securities (78%), whereas that of investors not resident in the euro area contained a higher proportion of equity securities (50%). Notable among the latter investors was the United States, which in December 2003 held 85% of its portfolio investment in Spain in the form of equity securities. The largest investors in Spanish debt securities were France (25.8% of the total), Germany (18.9%) and Luxembourg and Ireland (6.8%); while in equities the top-ranked investor countries were the United States (30.2%), France (15.3%) and the United Kingdom (11.5%).

4. Conclusions

The brisk development of international financial markets in recent decades and, in particular, of the markets for negotiable securities, has prompted the appearance of major problems in measuring international financing flows and the need to adapt information systems for collecting external statistics to this new situation. In this setting, the CPIS has become an important instrument for driving these changes and, in addition, is the only means of estimating the geographical composition of the end-investors (creditors) in negotiable securities in the various economies.

According to the figures on the stock of Spain's portfolio investment abroad drawn from the CPIS, since 1997 Spain's economy has been becoming financially more open in a process characterised by sharp growth, which has reduced the domestic bias in investment of this type. This increase has been accompanied by a shift in the composition of investment towards long-term debt securities, mainly towards those issued in the euro area. A domestic sector holding analysis shows that the largest investors are financial institutions, particularly mutual funds and, to a lesser extent, MFIs. The non-financial sector has a much lesser importance, although its portfolio is more diversified between debt and equity securities, as compared with the higher concentration of debt securities in the investments of financial corporations. In all cases, the foreign portfolio contains a high percentage of assets issued in the euro area, which is higher in MFIs than in the rest.

This picture differs somewhat from that in the main European countries. Although the euro area countries hold their portfolio investment assets mainly in the form of long-term debt securities, these represent a lower percentage than in Spain and, consequently, equities and short-term debt have a higher weight. Further, the concentration in securities issued by euro area residents is higher in Spain.

Finally, as regards the stock of foreign portfolio investment in Spain, here too the amount has grown notably, rising fivefold in the period 1997-2004. As in the case of assets, portfolio investment in Spain has tended to be concentrated in long-term debt securities as a consequence of the strong development of this market in Spain and of the volatility of equity markets. As for the geographical breakdown, the CPIS is the only source of the information needed to accurately determine the distribution of liabilities by ultimate creditor – which is the only relevant one -- using the information furnished by the investor countries participating in the survey. This paper presents, for the first time in the case of Spain, an analysis of this geographical breakdown; it can be concluded that the residents of other euro area countries are the main investors in negotiable securities issued by residents in Spain. Also, investment from the euro area is more concentrated in debt securities, whereas investors not resident in the euro area have a greater importance in equity securities.

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