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How to interpret the CPIS data on the distribution of foreign portfolio assets in the presence of sizeable cross-border positions in mutual funds. Evidence for Italy and the main euro-area countries

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HOW TO INTERPRET THE CPIS DATA ON THE DISTRIBUTION OF FOREIGN PORTFOLIO ASSETS IN THE PRESENCE OF SIZEABLE CROSS-BORDER POSITIONS IN MUTUAL FUNDS. EVIDENCE FOR ITALY AND THE MAIN EURO-AREA COUNTRIES

by Alberto Felettigh and Paola Monti*

Abstract

The data collected by the IMF in the Coordinated Portfolio Investment Survey (CPIS) provide a unique source for foreign portfolio asset holdings, with details on the breakdown by instrument and counterpart country. In the presence of sizeable cross-border positions in mutual 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 mutual funds. This is the case of Italy, whose position in Irish and Luxembourgian mutual funds represents more than half of its entire foreign portfolio equity assets. France, Germany and Spain are in a similar, yet less disproportionate, situation. The paper proposes a correction method in order to 'pierce the veils' introduced by positions in foreign mutual funds.

JEL classification: F36, G11.

Keywords: CPIS, asset allocation, mutual funds, index of foreign bias.

Contents

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1. Introduction and main conclusions[1]

The data collected by the IMF in the Coordinated Portfolio Investment Survey (CPIS) provide a unique source for foreign portfolio asset holdings, with details on the breakdown by instrument and counterpart country, compiled according to the balance of payments criteria. For countries with sizeable cross-border positions in mutual funds, the economic interpretation of the instrument and geographic composition of the CPIS data might be biased because investment in foreign mutual fund shares is included without distinction in equity assets vis-à-vis the country where the mutual fund resides.

Distortions mainly concern the instrument and counterpart country breakdowns. In fact, the assets held through the intermediation of foreign mutual funds might not consist of equity securities only (an effect we dub 'intermediation veil') and the country of residence of their issuer might differ from that of the mutual fund ('geographical veil').[2] For instance, US Treasury bonds indirectly held by an Italian family via the intermediation of an Irish fund are recorded in the CPIS as equity assets vis-à-vis Ireland, rather than debt instruments vis-à-vis the US.

The 'veils' created by investment in mutual funds might have a non-negligible impact on results of economic analyses aimed, for example, at evaluating to which extent the actual foreign asset allocation of a country diverges from the predictions of the Capital Asset Pricing Model (CAPM), or at highlighting the possible channels of cross-border transmission of financial shocks.

In this paper we attempt a reclassification exercise that 'looks through' assets held in foreign mutual funds, in order to draw preliminary indications on the nature and magnitude of the possible instrument and counterpart-country distortions implicit in the CPIS asset positions. We consider the CPIS data for France, Germany, Italy and Spain and focus on Luxembourgian and Irish mutual funds, whose well-known localization advantage in the European mutual fund industry is evident in the CPIS data for the four countries under examination.

Our reclassification method first distinguishes the mutual fund share within the equity assets held vis-à-vis Luxembourg and Ireland. It then reallocates the corresponding amounts,

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[2] Similar distortions are present in the internal portfolio of the household sector, for example, due to the intermediation of domestic mutual funds: this paper focuses exclusively on aggregate foreign portfolios.

by instrument and by counterpart country. To do this, it uses available information on the instrument composition of Luxembourgian and Irish mutual funds, and the geographical breakdown by instrument of the foreign portfolio assets of Luxembourg and Ireland.

We do not claim that replicating the portfolio of a given mutual fund is equivalent to purchasing shares of that mutual fund. For instance, from a legal point of view the direct purchase of debt instruments typically comes with the right to the repayment of a definite amount, whereas investment fund shares only give the holder a residual claim on the assets of the fund. Nonetheless, the risk-return profile of the shares issued by mutual funds is closely linked to the composition of their portfolio. Investment funds invest in a range of assets: "debt securities, equity, commodity-linked investments, real estate, shares in other investment funds, structured assets" (IMF, 2008) that are generally considered as distinct financial assets, both from a statistical and an analytical point of view. Our reclassification exercise goes in the direction of making investment in foreign mutual funds more transparent in respect of the underlying assets and the corresponding risk-return profile. In doing so we regard mutual funds as intermediaries of agents' desire for diversification instead of considering them as a financial instrument. We concentrate on financial assets that are typically classified as portfolio investment: debt and equity securities.

Initially, our exercise focuses on Italian data, for two main reasons. Firstly, investment in foreign mutual funds is particularly sizeable for Italy and heavily concentrated in Luxembourg and Ireland: the combined weight of mutual fund investment in these two countries was on average 53.2 per cent of total foreign equity assets between 2001 and 2005. Secondly, for Italy we have more details on the data required to perform our correction exercise.

We also apply our reclassification exercise to the data of France, Germany and Spain because they offer good benchmarks for comparison. In fact, ex-ante, the composition of Germany's foreign portfolio assets shows remarkable similarities to Italy's, whereas for France and Spain investment in foreign mutual funds is comparatively less sizeable than for Italy and Germany.

While for Italy we have data on the portfolio strategies of the Irish and Luxembourgian mutual funds in which Italians actually invest, for France, Germany and Spain the best proxy we can propose is the asset allocation by instrument of the Irish and Luxembourgian mutual fund industry. We repeat the correction exercise for Italy using this second allocation, in order to guarantee the homogeneity of our international comparison. By comparing the two sets of results we obtain for Italy, the outcome of our reclassification exercise proves to be rather robust to the change in the underlying assumptions.

Our main conclusion is that, by ‘piercing the veil’ of mutual funds, the instrument composition of foreign portfolio assets becomes more similar among the four euro-area countries under investigation, although even more biased towards debt securities than in the official CPIS data. Our correction has little impact on the geographical composition of foreign debt securities, while sizeable differences emerge for equity assets. In particular, the share of intra-euro-area securities on total equity assets decreases for all the four countries under examination, with reductions ranging from 33 percentage points (for Italy) to 8 (for France). Similar indications emerge from the analysis of indices that roughly assess to which extent the asset composition by counterpart country complies with the predictions of the CAPM: the ‘mutual fund correction’ does not significantly change a common tendency of the four euro-area countries to underinvest in securities issued by the main countries outside the euro area. This is especially true for the US and this result is in line with the findings of Bertaut and Kole (2004), who show how underinvestment in US securities tends to be a widespread phenomenon.

Our reclassification exercise has one major implication for the production of statistics: although we are aware that ‘looking through’ mutual funds might have a number of drawbacks in the compilation of foreign official statistics, the information set available to the analyst would improve greatly if investment in shares of foreign mutual funds was disentangled from positions in other equity assets and if all countries satisfied the CPIS requirements on publishing the geographical breakdown of foreign assets by sector of resident holder.

The paper is organised as follows. Section 2 provides summary information on the CPIS and its main uses in the economic literature and in the production of official statistics. It also discusses distortions related to the inclusion of investment in mutual funds shares within equity assets. Section 3 presents some introductory evidence from the CPIS data for Italy, France, Germany and Spain over the 2001-2005 period. Section 4 contains the core contribution of the paper: the method used to perform the ‘mutual fund correction’ is described and the main results are presented. Section 5 concludes.

2. The CPIS: main features and uses

In 1997 the CPIS was undertaken in response to the growing concerns about the gaps and imbalances that had emerged in the early nineties in the statistics on global capital flows. In

1992 the group in charge of studying the issue delivered the *Report on the Measurement of International Capital Flows (Godeaux Report)*, leading to the proposal for a new survey, which was developed by the IMF Committee on Balance of Payments Statistics. The first CPIS was conducted for 1997 year-end data on an experimental basis; in the light of its success and the increasing growth of worldwide transactions in international securities, it has been carried out yearly since year-end 2001.

To overcome the problem of asymmetries in the reporting of bilateral international portfolio positions, the CPIS was conceived as a 'single-flow' survey: for each country, only assets are surveyed directly, while liabilities can be derived as (or cross-checked with) the sum of the assets declared by the other *n-1* survey participants, under the assumption that *n* is close to the total number of countries in the world. The 'single-flow' approach and the pursuit of coherence with other external statistics like the International Investment Position (IIP) has led to the agreement that reporting countries should compile their portfolio asset positions according to the balance of payments concepts and definitions both for the instrument and the country classification. As a result, the classification by financial instrument does not 'look through intermediaries'; in particular, investment in foreign mutual funds is considered entirely as investment in equity securities.

One of the main advantages of this 'single-flow' approach is that information on positions in foreign portfolio assets can be obtained with a fairly reliable degree of confidence at the national level; by contrast, the compilation of the liability position, particularly as regards its geographical breakdown, remains a much more challenging task for national statisticians. The disadvantages are related mainly to two aspects affecting the degree of coverage of worldwide foreign portfolio investment positions: country participation in the survey and third-party holdings.

Country participation has been less than complete, although the number of reporters has risen from 29 in 1997 to 73 in 2006 (referring to end-2005 data); among the relevant missing reporters are many Middle-Eastern countries and off-shore centres, whose combined share of total cross-border holdings of portfolio securities is likely to have been sizeable and rising over the past few years.

The lack of coverage of third-party holdings is another potentially important issue. In general, national compilers find it difficult to estimate the amount of foreign securities owned by residents, particularly resident families, that are entrusted to custodians in a third country, unless these positions are declared by investors themselves or information is exchanged with the country where the securities are deposited. There are no reliable estimates of the phenomenon, but it is generally thought to be sizeable.

These caveats notwithstanding, the CPIS data have contributed to building one of or 'the' most extensive worldwide database on cross-border positions in portfolio investments,[3] which has been increasingly used as a source both for the compilation of official statistics and for economic analysis in the literature on international capital flows.

For instance, Italy uses information from the CPIS to compile the asset position of the annual IIP,[4] the ECB uses it to assess the geographical breakdown of the portfolio liability position of the euro area. In the literature, Lane and Milesi-Ferretti have extensively used the CPIS data, not only as a building block to set-up a multi-country IIP database (Lane and Milesi-Ferretti, 2006) but also to examine the determinants of international financial integration in Europe and worldwide (Lane and Milesi-Ferretti, 2003, 2005a, 2005b, 2006; Lane, 2006). Similar analyses on international cross-border holdings have been performed by Coeurdacier and Martin (2007a and 2007b), Berkel (2006 and 2007) and De Santis (2006), just to name a few.

Most of this empirical literature has been inspired by the gravity model proposed in the seminal contributions by Martin and Rey (1999, 2004), Portes and Rey (1999, 2005), Portes, Rey and Oh (2001), showing that cross-border holdings are driven to a large extent by the same determinants that have been pointed out for gross portfolio flows (geographical distance, size of the markets, information costs, common legal origins, liquidity of the financial markets), but also by the intensity of trade links. Contributions that have paid closer attention to financial integration within Europe have found significant 'Europe' and 'euro-area effects' both for equity and debt positions.

The CPIS data have also been analysed in order to evaluate the degree of home and foreign bias in portfolio investment, in the EU (Di Mauro, 2006), the US (Bertaut and Kole, 2004) and Italy (Felettigh and Monti, 2006).

Since the CPIS has been used so intensively for statistical and analytical purposes, it is important to try and evaluate all possible distortions and biases in the data: our focus is on the role of investment in foreign mutual funds. However, trying to understand how the results in the above-mentioned empirical literature might change if our 'corrected' data were used in the

[3] See http://www.imf.org/external/np/sta/pi/cpis.htm.

[4] See Banca d'Italia and Ufficio Italiano dei Cambi (2004).

place of the official CPIS ones is beyond the scope of this paper. We still carry out a simple evaluation of how our correction would impinge on economic analysis by looking at its effects on the instrument and geographical composition of foreign assets, as well as on the divergence between the actual foreign asset allocation of a country and the predictions of the CAPM.

We start with a deeper discussion of how the economic interpretation of the CPIS data is affected by the inclusion of mutual fund shares in equity assets.

2.1 The inclusion of mutual fund shares in equity assets: implications for the CPIS

The main reason why positions in foreign mutual funds may convey distorted signals is that part of the corresponding assets held through their intermediation are debt securities. Money market funds are an effective example: to the investor, a stake of a money market fund is largely equivalent to a basket of money market (debt) instruments, and yet, whenever the fund is a foreign resident, the classification by financial instrument requires the CPIS compiler to record the position as equity investment.

A second distortion concerns the geographical distribution of foreign equity positions. Take, for example, an Italian investor who buys a stake in a Luxembourgian fund that passively replicates the MSCI World Equity Index. The investor is effectively diversifying his or her wealth, whereas the CPIS records the position as being held entirely vis-à-vis Luxembourg (we refer to this situation as the 'geographical veil' induced by foreign mutual funds). The distortion is particularly apparent in the case of Italy: between 2001 and 2005, on average 46 per cent of the total stock of foreign equity was held vis-à-vis Luxembourg, with investments in mutual funds accounting for 95 per cent of this 46 per cent. Raw CPIS data seem to suggest that Italians perform very poorly when it comes to diversifying their foreign assets since they invest nearly half of their foreign portfolio equity in Luxembourg.

Now consider an Italian investor who buys a stake in an Irish fund that passively replicates the Mibtel index: the CPIS records his or her position as holdings of foreign equity. The investor can probably achieve the same risk-return profile by buying, on the Milan stock exchange, a basket of shares that replicates the Mibtel index: this is by no means a foreign investment. This example introduces a third distortion: positions held in round-trip mutual funds are recorded in the CPIS, although for many analytical purposes they should not be counted as foreign assets (they should be purged from the IIP).

A fourth distortion arises when foreign mutual funds invest in assets that do not fall under the balance of payments definition of portfolio investment, like financial derivatives or real estate. In the IIP, direct purchases of foreign derivatives and real estate located abroad are recorded, respectively, as a separate item and as foreign direct investment. Instead, indirect purchases via positions in foreign mutual funds are recorded as equity portfolio investment, both by the IIP and the CPIS. Investments in real estate funds deserve a deeper discussion, since it is reasonable to argue that their scope is closer to equity investment than to direct investment, so that in fact no bias arises here. Due to asymmetries in data availability (see footnote 13 below), we will nonetheless adhere to the balance of payments compilation criteria and exclude positions in foreign real estate funds from portfolio investment.

Whereas the third distortion mentioned above implies that the CPIS overestimates the asset side of the IIP, the fourth one implies that the CPIS overestimates the portfolio investment component of the IIP while underestimating other components (without affecting the overall IIP).

Our reclassification exercise aims at evaluating the magnitude of the distortions we have just discussed by comparing the official CPIS data, to which we now turn for a brief introductory presentation, with our ‘corrected’ data.

3. The CPIS: some evidence on the composition of foreign portfolio assets

In this section we outline in brief some of the key features of the CPIS data for Italy and the other euro-area countries under examination;[5] the next section (where the official data will be compared with our corrected ones) and the Tables section at the end of the paper (Tables T.1 to T.11) complete the presentation.

The 2001-2005 CPIS data for assets and derived liabilities as a percentage of GDP indicate that the growth of cross-border portfolio investment, one of the main driving forces of the financial opening in the main euro-area countries since the early 1990s, has continued during the new century (Figure 1).[6]

Focusing on foreign assets measured as a percentage of GDP, France stands out as the most open country, while Spain emerges as the least open one (Figure 2), despite recording the largest growth rates between 2001 and 2005. Germany and Italy display remarkable similarities

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[5] A more extensive presentation of the 2002 survey data for Italy can be found in Ufficio Italiano dei Cambi (2004).

[6] Total liabilities in official statistics differ slightly from those derived from CPIS data, but they share the same dynamics.

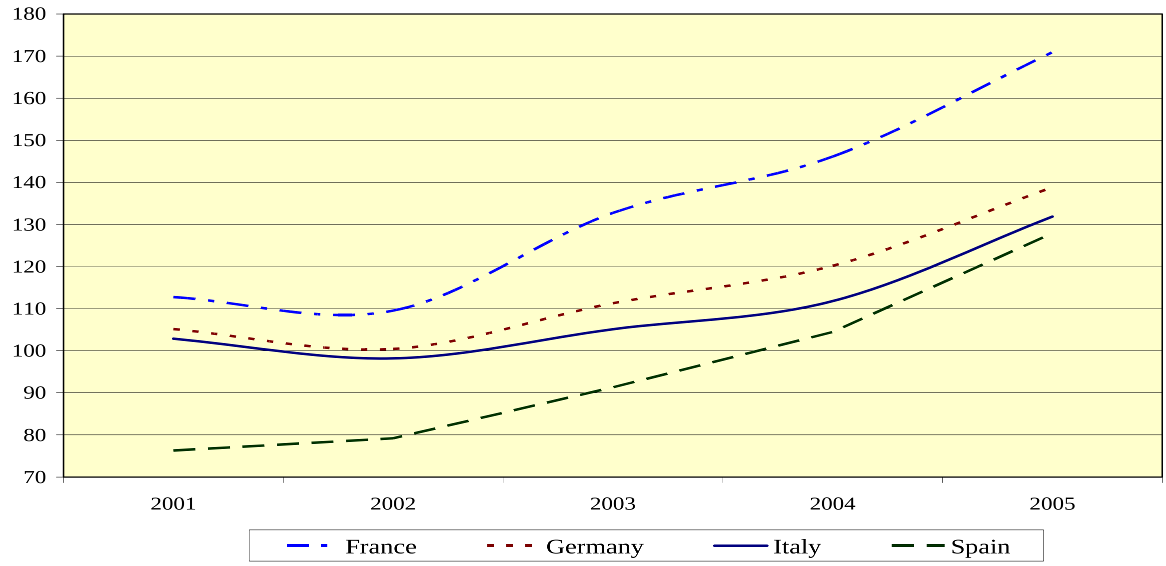
both in the size of their foreign asset positions and in their distribution vis-à-vis the main counterpart countries.

Figure 2 also shows that, for all four countries, positions vis-à-vis other euro-area counterparts are sizeable and between 2001 and 2005 have grown faster than total foreign assets. The share of Luxembourgian and Irish securities in the total foreign assets of France, Spain and, above all, Germany and Italy is disproportionate, relative to the economic size of the two countries, and has increased at impressive rates. The development of the intra-euro-area share has been significantly affected by the growth of positions vis-à-vis Luxembourg and Ireland, especially for Germany and Italy. This is even more evident when focusing on equity assets (Figure 3).

Investment in Luxembourgian and Irish mutual fund shares is the explanation for the abnormal behaviour of the positions vis-à-vis these two countries. Luxembourg and Ireland have a localization advantage in the European mutual fund industry due to their specialization in the sector, combined with a favourable fiscal and regulatory treatment of mutual investment funds.[7]

Figure 1

SUM OF TOTAL FOREIGN ASSETS AND LIABILITIES AS A PERCENTAGE OF GDP: FRANCE, GERMANY, ITALY AND SPAIN



Sources: IMF (CPIS), both for foreign assets and derived liabilities; national statistical institutes for GDP.

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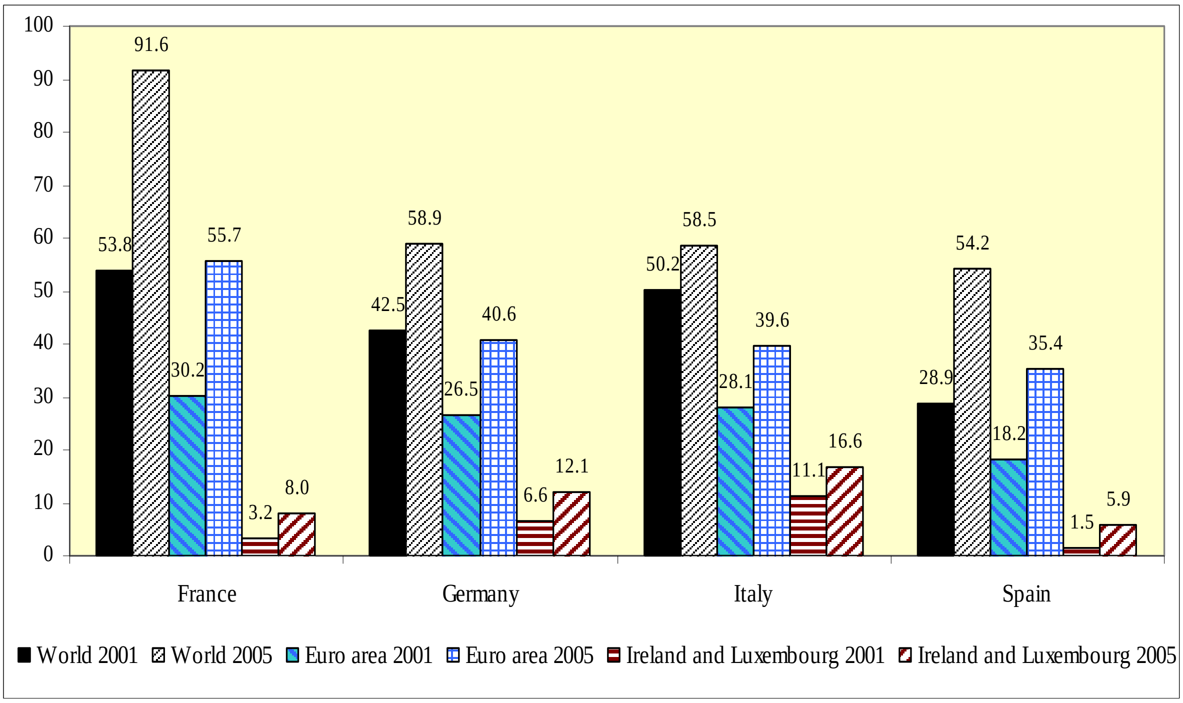
[7] See, for example, CRA International (2006).

Figure 2

FRANCE, GERMANY, ITALY AND SPAIN: TOTAL FOREIGN PORTFOLIO ASSETS, AS A PERCENTAGE OF GDP, BY MAIN COUNTERPART COUNTRIES

(stocks at year-end 2001 and 2005)

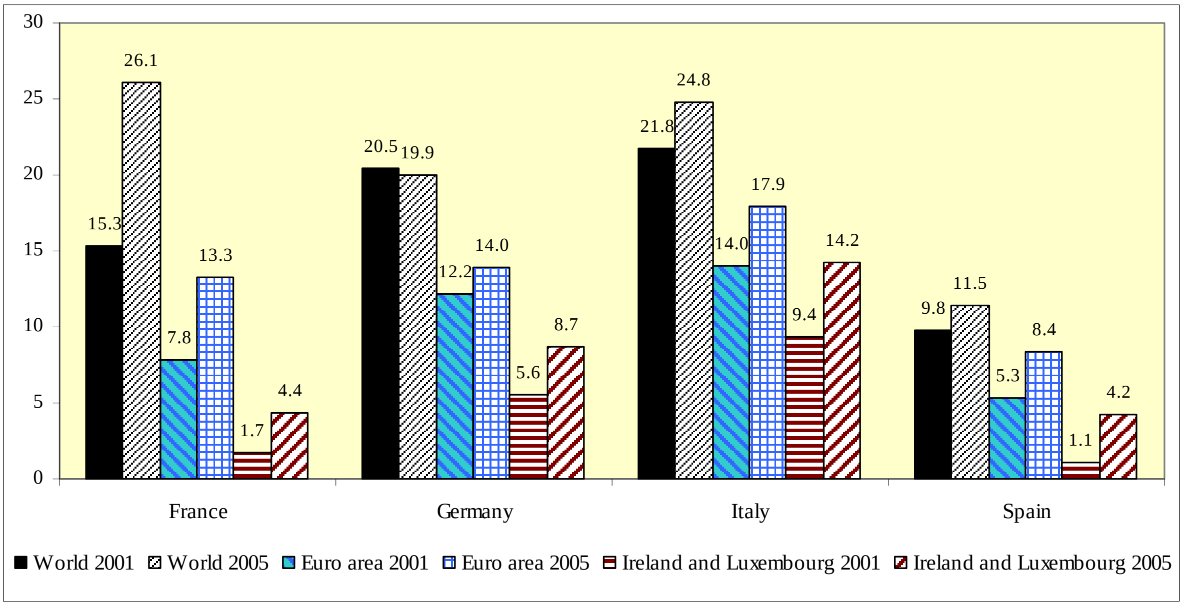


Sources: IMF (CPIS) for foreign assets; national statistical institutes for GDP.

Figure 3

FRANCE, GERMANY, ITALY AND SPAIN: FOREIGN EQUITY ASSETS, AS A PERCENTAGE OF GDP, BY MAIN COUNTERPART COUNTRY

(stocks at year-end 2001 and 2005)



Sources: IMF (CPIS) for foreign assets; national statistical institutes for GDP.

In the case of Italy, the combined weight of Luxembourgian and Irish equity securities in total foreign equity assets has grown from 43.1 per cent in 2001 to 57.4 per cent in 2005 (Table 1 and, for more details, Table T.1). Over the same period, on average, respectively 95.2 and 90.9 per cent of the equity holdings vis-à-vis Luxembourg and Ireland consisted of participations in mutual funds.[8] That is, on average 50.3 per cent of total Italian foreign equity assets consisted of positions in Luxembourgian and Irish mutual funds. The dynamics are similar for Germany and Spain, although the average weight of positions in Luxembourgian and Irish mutual funds is less remarkable. France has the lowest exposure to Luxembourgian and Irish mutual funds, possibly due to the relative strength of its domestic mutual fund industry.

For each of the four countries, the concentration of foreign assets vis-à-vis Ireland, Luxembourg and the euro area contributes to the poor geographical diversification of foreign portfolio holdings: in the 2001-2005 period, more than 80 per cent of the foreign portfolio assets of France, Germany, Italy and Spain consisted of securities issued by only 10 countries. The degree of concentration is even higher for equity securities alone (see Table T.1 and section 4.3 below).

Table 1

COMBINED WEIGHT, AS A PERCENTAGE OF TOTAL FOREIGN EQUITY ASSETS, OF POSITIONS VIS-À-VIS LUXEMBOURG AND IRELAND: FRANCE, GERMANY, ITALY AND SPAIN

	2001	2002	2003	2004	2005	Average 2001-05
France	14.5	18.7	13.9	15.3	16.7	15.8
Germany	27.2	35.7	37.6	41.3	43.6	37.1
Italy	43.1	53.6	55.0	56.6	57.4	53.2
Spain	11.3	21.6	23.2	34.1	36.7	25.4

Source: own elaboration on IMF (CPIS) data.

Similar indications emerge from the analysis of the foreign bias index proposed by Lane and Milesi-Ferretti (2005a; see the Appendix for a formal description). The index signals whether foreign asset allocation in country portfolios is in line with the CAPM predictions or is biased towards over or under-investment. For example, the index points to Italy over-investing in German equity securities if the share of these assets on total foreign equity assets of Italy is

[8] As a term of comparison, the corresponding share for mutual funds holdings vis-à-vis another important financial centre in Europe like the UK is only 1.8 per cent.

bigger than the market capitalization of Germany relative to the market capitalization of all equity markets in the world, Italy excluded.

The index signals overweight[9] in euro-area and European equity securities (Table T.2) for each of the four countries under examination. The index records the highest overweight towards Luxembourg and Ireland (if one excludes off-shore centres such as the Cayman Islands). Assets held vis-à-vis the UK are moderately overweight in the equity portfolios of France, Germany and Spain and underweight in Italy's. US securities are underweight in all four portfolios; the same happens for securities issued by countries belonging to the other main geographical areas.

As regards debt securities, the foreign bias index can be computed for a smaller number of countries and areas, due to limited data availability. Also for this class of instruments the index confirms that the country portfolios of Italy, France, Germany and Spain are overweight in securities issued by the euro area and the other European countries (in particular the UK and Sweden; Table T.3). Debt securities issued by US residents and by the other main non-European countries are underweight, with the exception of securities issued by residents of off-shore centres and, in the case of Italy, Argentina, Mexico and Brazil.

We will come back to the analysis of the CPIS data in order to compare them with the results of our correction exercise, which we now present in greater detail.

4. Cross-border positions in mutual funds and their effects on the country and instrument composition of foreign portfolio assets

4.1 The mutual fund effect and a method for correction

We treat mutual funds as intermediaries that offer investors the possibility of investing in three instruments (equity assets, debt securities and other assets) via a single transaction (the purchase of a mutual fund stake); in order to pierce the 'intermediation veil' we use an estimated portfolio for Luxembourgian and Irish mutual funds, while to remove the 'geographic veil' we use the CPIS data on the geographical distribution of foreign equity assets and debt securities held by Luxembourg and Ireland. The method we apply involves three steps.

[9] Note that overweight is signalled by negative values of the foreign bias indicator.

Step 1: within equity positions held vis-à-vis Luxembourg and Ireland we disentangle the amounts invested in mutual fund shares.

Step 2: amounts invested in mutual funds are distinguished into equity assets, debt securities and other assets,[10] on the basis of the asset allocation by instrument of a representative Luxembourgian and Irish mutual fund. More precisely, the asset allocation we use to correct Italian data is derived from the investment policy of the Luxembourgian and Irish mutual funds in which Italian residents invest. These data were collected on a survey basis by Assogestioni for the 2002-2005 period.[11] The end-of-year asset allocation is rather stable over time: the average composition we estimate for Luxembourg is 66.6 per cent debt and 33.4 per cent equity, for Ireland 52.6 and 47.4 per cent respectively.

Since we have been unable to find comparable data for the other countries under examination, in our international correction exercise (involving France, Germany and Spain as well as Italy, for comparability) we use the average year-end asset allocation by instrument of the Luxembourgian mutual fund industry, as published in the Annual Reports (2004, 2005, 2006) of the Association of the Luxembourg Fund Industry (ALFI), together with data from the Luxembourg Central Bank. The corresponding information for the Irish mutual fund industry is estimated on the basis of confidential sources and CRA International (2006). For the 2003-2005 period, the composition of the average portfolio of the Luxembourgian fund industry is estimated to be 59.1 per cent debt and 40.9 equity; for Ireland we estimate the respective shares to be 63.0 and 37.0 per cent.

Step 3: at this stage, the raw CPIS data on equity holdings vis-à-vis Luxembourg and Ireland have been broken down into four classes: 'directly owned' equity assets[12], equity assets implicit in mutual fund positions, debt instruments implicit in mutual fund positions, other assets implicit in mutual fund positions. We exclude the last assets class from our reclassified positions, for the reasons set out in section 2.1.[13] The equity assets and debt instruments

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[10] The instrument 'other assets' is defined residually. Note that it falls outside the balance of payments definition of portfolio investment.

[11] Assogestioni is the Italian association of wealth managers; its members include many foreign companies that operate in Italy. The data collected by Assogestioni on the portfolio strategies of the mutual funds split positions into equity assets, debt securities and other assets. Assogestioni no longer publishes the data in question; for the 2002-2005 period they can be found in the monthly reports of the association (*Rapporto mensile sui fondi comuni*).

[12] That is, equity assets other than positions in mutual funds.

[13] As anticipated in section 2.1, 'other assets' include real estate investment by foreign mutual funds. Based on the only source that separately identifies this type of investment (ALFI, for year-end 2004 and 2005 only), its relevance is negligible, representing around 0.3 per cent of the net asset value of Luxembourgian mutual funds.

intermediated by mutual funds are then split again: into amounts that Luxembourgian and Irish mutual funds re-invest abroad and amounts that are reinvested at home.[14] In order to pierce the 'geographical veil', the amounts invested abroad are distributed across all countries (other than Luxembourg and Ireland) by using the CPIS data for Luxembourg and Ireland on the geographical distribution of foreign equity assets and of foreign debt instruments.[15] It would have been more appropriate to use the geographic allocation of resources by the mutual fund sector, but unfortunately neither Luxembourg nor Ireland publish these data.[16]

We are confident that our simplifying assumptions do not diverge too far from reality. As for the 'intermediation veil', the choice to use the portfolio of the Luxembourgian and Irish mutual fund industry is clearly dictated by the lack of better data. For Italy we are able to compare the results of the correction based on this assumption with those obtained from data on the portfolio strategies of the mutual funds in which Italians invest. This enables us to evaluate the robustness of our correction method.

As for the 'geographical veil', our assumption that the foreign assets of Luxembourg and Ireland are largely shaped by the behaviour of mutual funds is realistic: consider for instance that the net asset value of all Luxembourgian mutual funds amounted to €1,525.2 billion (source: ALFI) at the end of 2005, which is roughly fifty times the GDP of Luxembourg in 2005.[17]

We now put our correction method into practice, starting with the CPIS data for Italy.

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[14] Due to the lack of specific information and given the small size of the Irish economy, we assume that Irish mutual funds invest all their resources abroad. For Luxembourg we have some evidence indicating that the percentage of intermediated resources that Luxembourgian mutual funds invest at home is about 21 per cent, possibly due to Luxembourgian funds investing in other Luxembourgian funds, or in debt instruments issued by SPEs located in Luxembourg. We use this piece of information only in the international comparison exercise. Notice that such a high percentage mechanically mitigates the effects of our correction exercise: we regard it as a very conservative assumption.

[15] The geographical distribution of Irish and Luxembourgian foreign equity assets and debt instruments, based on the CPIS data, is reported in the Appendix.

[16] Some other countries disclose, within the CPIS, data disaggregated according to the holder of the securities (country tables 3.1 and 3.2, where one can find the geographic distribution of the equity assets and debt instruments, respectively, owned by the resident mutual funds).

[17] As a term of comparison, according to Assogestioni the net asset value of Italian mutual funds at the end of 2005 was €401.7 billion, which is only 3.6 times Italian GDP in 2005.

4.2 *Results for Italy*

Before we present our results, it may be useful to recap the unambiguous qualitative effects that our correction exercise is going to produce (for Italy as well as for the other countries). First of all, the corrected total foreign portfolio assets are going to be smaller, because a portion of the funds invested in mutual funds of Luxembourg and Ireland are channelled back to the reporting country by these intermediaries, while another portion of them is invested in ‘other assets’. Secondly, the asset allocation is going to shift in favour of debt instruments, since we split the positions held through mutual funds according to the described portfolio strategies, whereas these positions are entirely recorded as equity in the CPIS. Finally, since we concentrate on two euro-area countries (Luxembourg and Ireland) and look through the ‘geographical veil’, the euro-area share in foreign assets is going to decrease after the correction (the same obviously applies for the shares of Ireland, Luxembourg, the EU and Europe). Symmetrically, the shares of all other countries are going to increase.

The detailed results of our correction exercise are presented in Tables T.4 to T.11 in the Tables section at the end of the paper. Some further elaborations are presented synthetically in the following pages.

Looking at the Italian CPIS data first, we find that the ‘mutual fund correction’ made on the basis of the information provided by Assogestioni causes a moderate decrease (2.0 per cent) of total foreign portfolio assets, while the effect on the instrument composition of foreign portfolio assets is quite sizeable. After the correction, the debt-over-equity ratio almost doubles: the average ratio for the 2002-2005 period grows from 1.4 (58.2 per cent debt, 41.8 per cent equity) in the official CPIS data, to 2.6 in corrected data (72.1 per cent debt, 27.9 per cent equity). Both in the raw and in the corrected data the debt-over-equity proportion does not change much from year to year, partly due to the relative stability of financial conditions during the observation period (Table 2.A). The allocation strategy shows no clear trend between 2002 and 2005: in the raw data the equity share increases slightly (from 41.5 per cent in 2002 to 42.4 per cent in 2005), while it falls moderately in the corrected ones (from 28.8 to 28.0 per cent).

The dynamics of the total foreign portfolio assets over GDP ratio do not change much in response to the correction: instead of an increase from 43.9 to 58.5 per cent between 2002 and 2005, the corrected data indicate a rise from 43.1 to 57.4 per cent (Table 2.B). Sizeable differences emerge with regard to the asset composition by instrument and counterpart country, both in levels and in the dynamics. For example, in the raw data total foreign equity assets over

GDP grow by 6.6 percentage points (from 18.2 to 24.8 per cent) between 2002 and 2005; in the corrected data the increase, starting from a much lower level, is limited to 3.7 percentage points (from 12.4 to 16.1 per cent).

Table 2

2.A. PERCENTAGE COMPOSITION BETWEEN EQUITY AND DEBT INSTRUMENTS IN TOTAL PORTFOLIO ASSETS: ITALY

	CPIS data				'Mutual fund effect' modified data			
	2002	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Equity securities	41.5	41.8	41.6	42.4	28.8	27.9	27.3	28.0
Debt securities	58.5	58.2	58.4	57.6	71.2	72.3	72.7	72.0
Total portfolio assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

2.B. FOREIGN PORTFOLIO ASSETS AS A PERCENTAGE OF GDP: ITALY

	CPIS data				'Mutual fund effect' modified data			
	2002	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Equity securities	18.2	19.6	20.1	24.8	12.4	12.8	12.9	16.1
Euro area	12.6	13.9	14.4	17.9	4.7	4.6	4.6	5.7
USA	2.1	2.3	1.9	2.2	2.9	3.2	2.8	3.3
UK	1.0	0.9	0.9	1.1	1.3	1.4	1.4	1.7
Debt securities	25.7	27.3	28.2	33.7	30.7	33.2	34.4	41.3
Euro area	14.5	16.3	17.1	21.6	17.2	19.5	20.5	25.6
USA	3.1	3.6	3.4	4.5	4.1	4.5	4.3	5.7
UK	1.4	1.6	1.7	1.6	1.8	2.1	2.2	2.2
Total portfolio assets	43.9	46.9	48.3	58.5	43.1	45.9	47.3	57.4

Sources: IMF (CPIS) for foreign assets; national statistical institutes for GDP. See Section 4.1 for the other sources used by our correction exercise.

Looking at the geographical distribution, while the euro-area share in equity assets grows by 5.3 percentage points in the official CPIS data (from 12.6 to 17.9 per cent of GDP), the increase is worth only 1.0 percentage points (from 4.7 to 5.7 per cent of GDP) for corrected data, and it is entirely concentrated in 2005. It is thus possible, according to the corrected data, that the growth of the intra-area financial integration discussed in the introduction and in Section 2 is overestimated, as far as equity assets are concerned. Outside the euro area, as a result of the correction the weight of the equity assets vis-à-vis the US and the UK increases slightly (Table 2.B). For debt securities a mirror image emerges: the share of foreign debt assets over GDP is higher in corrected data and grows faster; the euro-area share is also higher, but the increase is similar to that shown by official data. The results are similar for debt instruments vis-à-vis the UK and the US.

We now look at the foreign bias indexes for equity investment in order to evaluate whether our 'corrected' data push the foreign asset allocation of Italy closer to the predictions of the CAPM. As predicted, the correction has two main effects: it markedly reduces overinvestment in Luxembourgian and Irish securities (see Table T.6), as well as the overinvestment in all areas containing these two countries, like Europe, the European Union and the euro area. As for all the other individual countries, the correction is significant only in a few European cases. Austria, Finland, France, Germany and Switzerland move from an almost unbiased position to overinvestment. For the Netherlands and Portugal overinvestment increases, while the position vis-à-vis the UK, Spain and the new EU member states remains broadly unbiased. For the US, the moderate underinvestment bias decreases only slightly.

The effects of the 'mutual fund correction' on the value of the foreign bias index for debt securities are only marginal and do not significantly change the picture portrayed by the raw data (see Table T.7): overinvestment in euro-area debt securities continues to be moderately high and within the 1.7-1.9 range, mainly due to overinvestment in securities issued by France, Germany, Greece, Ireland, Luxembourg, the Netherlands and Portugal. The positions vis-à-vis the other main European countries remain broadly unbiased (including that towards the UK), and so do the positions vis-à-vis the main extra-European countries, like the US and Japan (both positions slightly leaning towards underinvestment). Finally, the index continues to signal overinvestment in securities issued by Argentina and the off-shore centres.

4.3 Comparing Italy with France, Germany and Spain

In order to compare the results of the 'mutual fund correction' for Italy with those of France, Germany and Spain, we re-perform the correction exercise for Italy using, in the second stage of the correction method (see Section 4.1), the investment strategy of the Luxembourgian and Irish mutual fund industry. Unless otherwise noted, all comparisons will refer to country averages over the 2003-2005 period.

The results for Italy do not change significantly from those obtained using data from Assogestioni (see Section 4.2), which we interpret as an indication of the robustness of our correction method. Two main differences are worth a mention. Firstly, the decrease in total foreign portfolio assets is bigger (3.1 per cent against 2.0) because in the international comparison exercise the share of 'other investment' in mutual funds' portfolios is bigger. Secondly, euro-area assets as a percentage of GDP are slightly higher than in the previous case (Table 3.B), which assumes the share of funds reinvested at home to be zero (see Footnote 14) both for Ireland and Luxembourg.

After the ‘mutual fund correction’ the instrument composition of total foreign portfolio assets tends to become more alike among the four countries (Table 3.A). We regard this as an encouraging result because it is closer to the theoretical predictions of the CAPM, given the similarities among the four economies under examination. The effect stands out for debt securities: for France and Spain, with a composition heavily skewed towards debt securities already in the raw CPIS data, the share of debt instruments increases mildly, whereas the growth is sizeable for Italy (which has the lowest share of debt securities in the raw CPIS data) and Germany. As a result of the correction, France, Germany and Italy have very similar portfolio allocations (around 26 per cent for equity and 74 per cent for debt instruments), whereas Spain has a much smaller exposure towards equity assets (17.7 per cent).

Analogous conclusions can be drawn when foreign portfolio assets are expressed as a percentage of GDP (Table 3.B). The similarity between Italy’s and Germany’s asset allocations (by instrument and counterpart country), already evident in the official CPIS data, increases. Also the asset allocation of Spain becomes much closer to the Italian and German ones in the modified data, especially for debt securities and for equity securities vis-à-vis the euro area. France continues to stand out for being the most open country.

Table 3

3.A. PERCENTAGE COMPOSITION BY INSTRUMENT OF TOTAL PORTFOLIO ASSETS: FRANCE, GERMANY, ITALY AND SPAIN

	CPIS data				‘Mutual fund effect’ modified data			
	France	Germany	Italy	Spain	France	Germany	Italy	Spain
Equity securities	26.5	34.8	42.0	20.2	24.3	26.5	28.5	17.7
Debt securities	73.5	65.2	58.0	79.8	75.7	73.5	71.5	82.3
Total portfolio assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.B. FOREIGN PORTFOLIO ASSETS AS A PERCENTAGE OF GDP: FRANCE, GERMANY, ITALY AND SPAIN

	CPIS data				‘Mutual fund effect’ modified data			
	France	Germany	Italy	Spain	France	Germany	Italy	Spain
Equity securities	20.9	17.8	21.5	9.6	19.1	13.2	14.1	8.4
Euro area	11.3	12.2	15.4	6.6	8.8	5.9	5.4	4.9
USA	2.8	2.2	2.1	1.0	3.1	2.8	3.0	1.1
UK	2.4	1.3	1.0	1.0	2.5	1.5	1.4	1.1
Debt securities	58.1	33.3	29.7	37.9	59.5	36.6	35.5	38.9
Euro area	37.9	22.6	18.4	23.8	38.8	24.7	22.0	24.5
USA	5.9	2.6	3.8	2.8	6.1	3.0	4.5	2.9
UK	5.3	2.1	1.6	3.4	5.5	2.3	2.1	3.5
Total portfolio assets	79.0	51.1	51.2	47.4	78.6	49.8	49.7	47.2

Sources: IMF (CPIS) for foreign assets; national statistical institutes for GDP. See Section 4.1 for the other sources used by our correction exercise.

Turning to the effects of the ‘mutual fund correction’ on the geographic composition of foreign portfolio assets, all countries record a decrease of the share of intra-euro-area securities on total equity assets (Table T.8): the fall is large in the case of Italy (33.5 percentage points in the 2003-2005 average) and Germany (23.1 percentage points), while it is much smaller for Spain and France (9.7 and 7.8 percentage points, respectively). After the correction, Spain records the highest intra-area share in total foreign equity assets, Italy the lowest. This is a remarkable result, since Italy has the highest intra-area share in the raw CPIS data. In general, Italy is the country for which the correction has the biggest effect: the shares of all countries and areas reported in Table T.8 (Europe, EU, euro area, Ireland and Luxembourg excluded) get multiplied by a factor that ranges from 1.7 to 5.3 (the average is 2.2).

Looking at the concentration of the country portfolios, we focus on foreign equity assets (Table 4). In the official CPIS data, all countries display a strong concentration, with Germany, Italy and Spain investing around 80 per cent of their total foreign equity assets in 6 countries (with 10 countries, the share increases to roughly 90 per cent). The portfolio of France is more diversified: the first six counterpart countries amount to ‘only’ 64.2 per cent of total assets (83.9 with ten countries).

Once again, greater homogeneity is achieved after the correction, since our indices of concentration increase for France, strongly decrease for Germany and Italy, and inch down for Spain. Italy is once again the country where the biggest effect is recorded: the first six counterpart countries now amount to 63.4 per cent of total assets (80.7 with ten countries), establishing Italy as the country that has the most diversified portfolio.

Also the foreign bias index for equity assets signals a significant reduction of the intra-area overweight for all four countries (Table T.9), with Italy now reporting the lowest level of overinvestment. With the exclusion of Europe, the EU, the euro area, Ireland and Luxembourg, the correction has only mild consequences on the indexes: once again Italy tends to be affected more than the other three countries.

For debt securities the ‘mutual fund correction’ has moderate effects on the country composition of foreign assets held by our four euro-area countries. Also in this case, after the correction the Italian intra-area share is the lowest; this time the highest is Germany’s (Table T.10). The foreign bias indexes present a similar picture, which in turn is quite close to the one emerging from the raw CPIS data (Table.T.11).

Table 4

FIRST TEN COUNTERPART COUNTRIES IN FOREIGN EQUITY HOLDINGS OF FRANCE, GERMANY, ITALY AND SPAIN
(Ranking based on the average, over the 2003-05 period,
of the country share in total foreign equity assets)

	CPIS data			
Ranking	**France**	**Germany**	**Italy**	**Spain**
1	USA	Luxembourg	Luxembourg	Luxembourg
2	Germany	USA	USA	France
3	Luxembourg	France	Ireland	UK
4	UK	UK	France	USA
5	Netherlands	Netherlands	UK	Germany
6	Italy	Switzerland	Germany	Netherlands
7	Spain	Italy	Japan	Italy
8	Japan	Spain	Netherlands	Ireland
9	Switzerland	Ireland	Cayman Islands	India
10	Ireland	Japan	Switzerland	Switzerland
Cumulated share over:				
first 6 positions	64.2	77.9	80.0	77.4
first 10 positions	83.9	91.6	91.1	90.2
	'Mutual fund effect' modified data			
Ranking	**France**	**Germany**	**Italy**	**Spain**
1	USA	USA	USA	France
2	Germany	France	France	UK
3	UK	UK	UK	USA
4	Netherlands	Netherlands	Germany	Luxembourg
5	Italy	Switzerland	Luxembourg	Germany
6	Japan	Italy	Japan	Netherlands
7	Spain	Japan	Netherlands	Italy
8	Switzerland	Spain	Switzerland	India
9	Cayman Islands	Luxembourg	Cayman Islands	Switzerland
10	Belgium	Finland	Spain	Japan
Cumulated share over:				
first 6 positions	67.0	69.0	63.4	74.1
first 10 positions	85.6	85.3	80.7	87.5

Source: IMF (CPIS). See Section 4.1 for the other sources used by our correction exercise.

5. Conclusions

We have proposed a reclassification exercise on the CPIS data for the foreign portfolio asset position of France, Germany, Italy and Spain in order to evaluate the bias that arises in the instrument and geographic composition of foreign portfolio assets, due to the presence of sizeable cross-border positions in mutual funds. We have focused on mutual funds located in Luxembourg and Ireland, the countries where Italy and the other euro-area economies under examination hold the largest share of their investments in foreign mutual funds. Our main results can be summarized as follows.

Firstly, after the correction the instrument composition of total foreign portfolio assets tends to become more similar among the four countries examined. This is an encouraging result, showing that the bias introduced by investment in foreign mutual funds is one of the reasons why in the CPIS data the foreign portfolio choices of the four euro-area countries appear to be more heterogeneous than we expected. In particular, the equity share decreases in favour of debt securities. Italy and Germany are affected the most, France the least. In our data for Italy and Germany, the equity share in total foreign portfolio assets is roughly two-thirds of the corresponding share recorded in the official data, while for France the effect is marginal.

Secondly, we look at the geographical composition of foreign portfolio assets. While our correction has little impact on debt securities, sizeable differences emerge for equity assets. Once again, Italy and Germany record the biggest effects, followed by Spain and France. In particular, all four countries record a decrease in the share of intra-euro-area securities on total equity assets, with reductions ranging from 33.5 (for Italy) to 7.8 percentage points (for France). Similar indications emerge from the analysis of the foreign bias indexes.

For Italy we are able to propose an alternative correction method that exploits data on the portfolio strategies of the Luxembourgian and Irish mutual funds in which Italians invest. This is also a robustness check for our previous conclusions. The results are similar to our previous findings. One issue deserves to be highlighted. If one looks at the evolution of the euro-area share in the geographic distribution of equity assets as an indicator of the degree of intra-area financial integration achieved by Italy, the results differ markedly, depending on whether the official CPIS data are used instead of ours. In the official data, the share increases monotonically between 2002 and 2005, from 69.1 to 72.3 per cent; in our data, instead, the share decreases monotonically, from 38.3 to 35.3 per cent.

This is a striking example of how the bias that arises in the instrument and geographic composition of foreign portfolio assets, due to the presence of sizeable cross-border positions in mutual funds, may distort economic analysis. Another example refers to the discrepancies between the geographic composition of the foreign portfolio assets of France, Germany, Italy and Spain and the predictions of the CAPM: we have analysed the issue by looking at the indexes of foreign bias. The international transmission of financial shocks may represent yet another example: if the share of foreign equity assets that the Italians hold vis-à-vis the US is around 10 per cent (as in the CPIS data), Italy is less vulnerable to the direct consequences of financial instability on the US equity market than if the share is more than 21 per cent, as our data suggest.

In conclusion, we are aware that our correction method could be improved upon if more complete data on the asset allocation of Irish and Luxembourgian mutual funds were disclosed, but we do believe that it makes reasonable assumptions in order to proxy for unavailable data, so that the adjustments it brings to the official statistics are realistic. These adjustments are often sizeable, which is the main point of our entire exercise. Also, our international comparison makes it clear that the transparency we advocate is not merely a country-specific issue arising from the peculiarities of the Italian case.

We hope we have provided convincing evidence that amendments can be made in order to consolidate the standing of the CPIS as being *the* most extensive worldwide database on cross-border positions in portfolio investments. In particular, all countries should publish their CPIS data with the breakdown by holder of the securities, so that the geographic and instrument distribution of the assets owned by the resident mutual funds are known (Luxembourg and Ireland do not currently publish these data, as previously noted). More importantly, it would be especially helpful if investment in shares of foreign mutual funds was disentangled from positions in other equity assets. Encouragingly, the draft version of the sixth edition of the Balance of Payments and International Investment Position Manual (IMF, 2008) provides for a supplementary item distinguishing the breakdown of investment in mutual funds within portfolio equity investment. The new manual also indicates, in reference to mutual funds, that “data on the composition of their assets could be useful in economies where investment funds are significant” (IMF, 2008, p. 114).

Tables

Symbols and conventions in the following tables:

-	the phenomenon in question does not occur
….	the phenomenon occurs but the value is not known
..	the value is known but it is nil when approximated to the first decimal digit

Table T.1

COUNTRY DISTRIBUTION OF FOREIGN PORTFOLIO ASSETS: ITALY, FRANCE, GERMANY, SPAIN
(averages over the 2001-2005 period; percentage shares)

	Total portfolio assets				**Equity assets**				**Debt Securities**			
Issuers by area and country:	**Italy**	**Fran-ce**	**Ger-many**	**Spain**	**Italy**	**Fran-ce**	**Ger-many**	**Spain**	**Italy**	**Fran-ce**	**Ger-many**	**Spain**
Europe	**71.7**	**74.4**	**80.9**	**75.7**	**78.3**	**71.3**	**80.9**	**81.1**	**66.8**	**75.4**	**80.9**	**74.3**
of which: Switzerland	1.2	1.3	2.1	0.9	2.5	4.6	4.7	2.2	0.2	0.2	0.4	0.6
of which: EU 25	**69.6**	**72.6**	**77.3**	**74.3**	**75.4**	**66.4**	**75.6**	**78.6**	**65.3**	**74.7**	**78.5**	**73.3**
Denmark	0.2	0.4	1.0	0.4	0.1	0.2	0.2	..	0.3	0.5	1.5	0.5
New Member States (*)	0.2	0.3	1.5	0.1	0.2	0.2	0.1	0.1	0.2	0.3	2.3	0.1
Sweden	0.7	1.1	1.2	0.6	0.4	0.6	0.8	0.4	1.0	1.2	1.4	0.7
United Kingdom	5.4	9.5	7.5	9.3	5.2	11.6	8.8	14.7	5.6	8.8	6.6	7.5
Euro area	**63.0**	**61.3**	**66.2**	**63.9**	**69.6**	**53.8**	**65.7**	**63.4**	**58.2**	**63.9**	**66.7**	**64.4**
Austria	0.8	1.5	4.1	0.6	0.2	0.2	0.6	0.1	1.2	1.9	6.2	0.7
Belgium	1.1	3.8	1.5	2.0	0.3	3.0	0.7	0.9	1.7	4.1	2.0	2.4
Finland	0.6	1.4	1.8	0.7	0.8	1.8	2.4	1.6	0.4	1.2	1.3	0.4
France	9.1	-	9.7	12.3	5.7	-	10.6	13.3	11.5	-	9.0	11.9
Germany	12.0	12.3	-	15.0	4.0	10.7	-	9.3	17.8	12.7	-	16.8
Greece	1.2	1.8	2.0	0.5	0.1	0.2	0.2	0.1	2.0	2.4	3.2	0.6
Ireland	4.1	2.8	3.7	2.2	7.1	3.8	3.0	2.9	1.9	2.5	4.0	1.9
Italy	-	12.4	10.2	13.4	-	6.0	3.8	5.6	-	14.6	14.3	15.6
Luxembourg	22.9	4.1	14.3	5.6	46.0	12.0	34.1	22.4	6.2	1.4	2.6	1.0
Netherlands	8.3	11.8	10.7	10.5	3.6	10.2	6.8	5.4	11.8	12.4	13.0	12.0
Portugal	0.7	1.9	1.4	1.2	0.3	0.3	0.2	1.7	1.1	2.4	2.2	1.0
Spain	2.2	7.6	6.8	-	1.4	5.7	3.4	-	2.7	8.3	8.7	-
North America	**12.3**	**13.6**	**11.3**	**8.8**	**11.7**	**16.4**	**14.1**	**11.4**	**12.8**	**12.6**	**9.5**	**7.9**
of which: USA	12.0	12.6	10.8	8.5	11.4	16.0	14.2	11.3	12.4	11.4	8.5	7.5
Latin America	**2.4**	**0.3**	**0.8**	**0.9**	**0.6**	**0.3**	**0.1**	**1.8**	**3.6**	**0.4**	**1.2**	**0.7**
of which: Argentina	0.9	..	0.1	0.1	0.1	..	..	0.1	1.6	..	0.2	0.1
of which: Brazil	0.7	0.1	0.3	0.6	0.4	0.2	0.1	1.2	1.0	0.1	0.5	0.5
of which: Mexico	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.7	0.1	0.3	0.1
Asia	**2.1**	**3.0**	**2.4**	**1.2**	**4.3**	**5.8**	**3.3**	**4.3**	**0.5**	**2.0**	**1.8**	**0.2**
of which: China	..	0.1	..	0.1	0.1	0.2	0.1	0.4	..	..	..	..
of which: South Korea	0.2	0.2	0.2	..	0.4	0.3	0.3	..	..	0.1	0.1	..
of which: Japan	1.7	2.5	2.0	0.8	3.3	4.8	2.6	2.4	0.4	1.7	1.6	0.2
of which: India	..	..	..	0.3	0.1	0.2	..	1.5	..	..	..	..
of which: Taiwan	0.1	0.1	..	..	0.2	0.2	0.1	..	..	..	..	..
Oceania	**0.5**	**0.8**	**0.5**	**0.5**	**0.5**	**0.3**	**0.3**	**..**	**0.4**	**1.0**	**0.6**	**0.6**
of which: Australia	0.4	0.7	0.4	0.4	0.4	0.3	0.3	..	0.4	0.9	0.5	0.6
Africa	**0.1**	**0.2**	**0.2**	**0.1**	**0.1**	**0.4**	**0.1**	**0.4**	**0.1**	**0.1**	**0.2**	**..**
of which: South Africa	0.1	0.1	0.2	..	0.1	0.1	0.1	0.1	..	..	0.2	..
Off-shore centres	**4.8**	**6.2**	**3.1**	**6.7**	**3.7**	**5.4**	**1.2**	**0.8**	**5.6**	**6.5**	**4.3**	**8.4**
of which: Central America	3.7	5.5	2.0	6.6	3.0	4.6	0.6	0.8	4.2	5.9	2.9	8.3
- Cayman Islands	*2.5*	*3.0*	*1.6*	*6.0*	*1.7*	*2.5*	*0.2*	*0.3*	*3.0*	*3.2*	*2.5*	*7.7*
of which: Europe	0.9	0.4	0.9	0.1	0.3	0.1	0.2	..	1.4	0.5	1.3	0.1
of which: Asia	0.2	0.3	0.2	..	0.4	0.7	0.3	..	0.1	0.1	0.1	..
Intl. organizations	**5.7**	**1.5**	**0.9**	**1.3**	**0.2**	**0.1**	**..**	**..**	**9.7**	**2.0**	**1.5**	**1.8**
Unclassified countries	**0.4**	**..**	**..**	**4.7**	**0.5**	**..**	**..**	**0.1**	**0.4**	**..**	**..**	**6.0**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on IMF (CPIS) data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.2

FOREIGN BIAS INDEXES – EQUITY ASSETS
(averages over the 2001-2005 period; index values)

	Italy	France	Germany	Spain
Issuers by area and country:				
Europe	**-1.9**	**-1.9**	**-2.2**	**-2.1**
of which: Switzerland	-0.1	-1.0	-1.0	0.0
of which: EU 25	**-2.3**	**-2.1**	**-2.4**	**-2.4**
Denmark	0.8	0.5	0.6	0.9
New Member States (*)	0.5	0.6	0.6	0.8
Sweden	0.6	0.4	0.1	0.6
United Kingdom	0.3	-0.5	-0.1	-0.9
Euro area	**-4.2**	**-3.7**	**-4.3**	**-3.8**
Austria	-0.2	0.3	-2.2	0.8
Belgium	0.5	-3.8	-0.1	-0.4
Finland	-0.3	-2.0	-3.0	-1.8
France	-0.3	-	-1.5	-2.2
Germany	-0.2	-2.2	-	-1.8
Greece	0.6	0.6	0.5	0.8
Ireland	-24.8	-12.5	-9.8	-9.5
Italy	-	-1.9	-0.9	-1.8
Luxembourg	-406.9	-104.7	-294.3	-190.0
Netherlands	-1.3	-5.4	-3.3	-2.4
Portugal	-0.7	-0.5	0.1	-8.6
Spain	0.3	-1.6	-0.6	-
North America	**0.8**	**0.7**	**0.7**	**0.8**
of which: USA	0.8	0.7	0.7	0.8
Latin America	**0.7**	**0.9**	**0.9**	**0.1**
of which: Argentina	0.8	1.0	1.0	0.8
of which: Brazil	0.5	0.8	0.9	-0.6
of which: Mexico	0.8	0.8	0.8	0.7
Asia	**0.7**	**0.7**	**0.8**	**0.7**
of which: China	1.0	0.9	1.0	0.8
of which: South Korea	0.6	0.7	0.7	1.0
of which: Japan	0.6	0.5	0.7	0.7
of which: India	0.9	0.8	0.9	-0.6
of which: Taiwan	0.8	0.9	0.9	1.0
Oceania	**0.7**	**0.8**	**0.9**	**1.0**
of which: Australia	0.7	0.8	0.9	1.0
Africa	**0.9**	**0.7**	**0.9**	**0.7**
of which South Africa	0.9	0.8	0.9	0.9
Off-shore centres	**….**	**….**	**….**	**….**
of which: Central America	-50.3	-70.8	-9.7	-13.3
of which: Cayman Islands (**)	*-3156.9*	*-5011.2*	*-397.7*	*-472.6*
of which: Europe	….	….	….	….
of which: Asia	0.8	0.8	0.9	1.0
International organizations	**….**	**….**	**….**	**….**
Unclassified countries	**….**	**….**	**….**	**….**

Sources: own elaborations on IMF (CPIS), World Bank and World Federation of Exchanges data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia. (**) Average over the 2001-2004 period.

Table T.3

FOREIGN BIAS INDEXES – DEBT SECURITIES
(averages over the 2001-2005 period; index values)

	Italy	**France**	**Germany**	**Spain**
Issuers by area and country:				
Europe	**….**	**….**	**….**	**….**
of which: Switzerland	0.6	0.7	0.1	-0.2
of which: EU 25	**-1.4**	**-1.8**	**-2.1**	**-1.5**
Denmark	0.6	0.4	-0.7	0.4
New Member States (*)	0.5	0.4	-4.2	0.7
Sweden	-0.3	-0.6	-0.8	0.1
United Kingdom	-0.3	-0.9	-0.4	-0.7
Euro area	**-1.9**	**-2.2**	**-2.6**	**-1.9**
Austria	-0.7	-1.6	-7.3	0.0
Belgium	-0.6	-2.9	-0.9	-1.4
Finland	-0.3	-2.5	-2.8	-0.2
France	-1.3	-	-0.8	-1.5
Germany	-1.7	-0.9	-	-1.7
Greece	-3.0	-4.2	-6.1	-0.4
Ireland	-2.1	-3.1	-5.7	-2.2
Italy	-	-2.0	-2.0	-2.4
Luxembourg	-16.5	-3.0	-6.1	-2.0
Netherlands	-3.0	-3.2	-3.3	-3.2
Portugal	-2.2	-6.3	-5.8	-2.3
Spain	-0.5	-3.5	-3.6	-
North America	**0.7**	**0.7**	**0.8**	**0.8**
of which: USA	0.7	0.7	0.8	0.8
Latin America	**….**	**….**	**….**	**….**
of which: Argentina	-4.3	0.9	0.5	0.8
of which: Brazil	-0.1	0.8	0.4	0.5
of which: Mexico	-0.3	0.8	0.4	0.9
Asia	**….**	**….**	**….**	**….**
of which: Japan	1.0	0.9	0.9	1.0
Off-shore centres	**-2.1**	**-2.6**	**-1.3**	**-3.7**

Sources: own elaborations on IMF (CPIS) and BIS data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.4

COUNTRY DISTRIBUTION OF PORTFOLIO EQUITY ASSETS: OFFICIAL AND 'CORRECTED' CPIS DATA - ITALY

(percentage shares)

	CPIS shares				'Mutual fund effect' modified shares			
Issuers by area and country:	**2002**	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Europe	**78.8**	**79.2**	**79.4**	**79.9**	**57.4**	**54.5**	**53.5**	**53.5**
of which: Switzerland	3.5	2.8	2.2	1.7	6.2	5.5	4.6	3.9
of which: EU 25	**74.9**	**76.0**	**76.9**	**77.5**	**50.3**	**48.2**	**48.0**	**48.0**
Denmark	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2
New Member States (*)	0.2	0.1	0.2	0.2	0.5	0.4	0.7	0.6
Sweden	0.2	0.4	0.4	0.4	0.7	1.0	1.0	1.0
United Kingdom	5.4	4.7	4.5	4.6	10.6	10.7	10.7	10.8
Euro area	**69.1**	**70.7**	**71.7**	**72.3**	**38.3**	**35.8**	**35.4**	**35.3**
Austria	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.7
Belgium	0.3	0.3	0.5	0.4	1.0	0.9	1.4	1.4
Finland	0.8	0.7	0.5	0.5	1.5	1.3	1.1	1.0
France	4.8	5.5	5.5	5.9	8.8	10.5	10.7	11.5
Germany	4.1	3.6	3.4	3.5	8.1	7.6	7.5	7.9
Greece	0.1	0.1	0.2	0.2	0.1	0.3	0.4	0.4
Ireland	6.6	7.4	7.7	8.1	2.3	1.1	1.3	1.3
Italy	-	-	-	-	-	-	-	-
Luxembourg	47.0	47.7	49.0	49.3	7.0	3.9	3.4	3.2
Netherlands	3.2	3.7	3.1	2.8	5.9	6.7	5.9	5.3
Portugal	0.4	0.4	0.3	0.2	0.6	0.6	0.5	0.4
Spain	1.5	1.3	1.3	1.1	2.8	2.6	2.8	2.4
North America	**11.8**	**11.9**	**9.5**	**9.0**	**23.7**	**25.9**	**22.2**	**20.9**
of which: USA	11.7	11.6	9.3	8.8	23.3	25.4	21.7	20.2
Latin America	**0.5**	**0.5**	**0.5**	**0.4**	**1.0**	**1.4**	**1.4**	**1.1**
of which: Argentina	0.1	..	..	..	0.1	0.1	0.1	..
of which: Brazil	0.3	0.4	0.3	0.3	0.5	0.9	0.9	0.7
of which: Mexico	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.3
Asia	**3.6**	**4.0**	**4.1**	**4.5**	**7.4**	**9.2**	**9.8**	**11.5**
of which: China	..	0.1	0.1	0.1	0.1	0.3	0.3	0.4
of which: South Korea	0.3	0.4	0.3	0.4	0.9	1.0	0.9	1.2
of which: Japan	2.8	3.0	3.1	3.5	5.4	6.3	7.1	8.1
of which: India	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.5
of which: Taiwan	0.1	0.2	0.2	0.2	0.4	0.6	0.5	0.7
Oceania	**0.7**	**0.4**	**0.4**	**0.5**	**1.1**	**0.9**	**0.9**	**0.9**
of which: Australia	0.4	0.4	0.4	0.4	0.8	0.9	0.8	0.9
Africa	**0.1**	**0.1**	**0.1**	**0.2**	**0.3**	**0.3**	**0.4**	**0.5**
of which: South Africa	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4
Off-shore centres	**2.7**	**3.5**	**5.3**	**5.3**	**5.0**	**7.0**	**10.1**	**10.0**
of which: Central America	1.7	2.7	4.6	4.9	3.2	5.2	8.4	8.9
of which: Cayman Islands	*0.7*	*1.5*	*2.7*	*3.2*	*1.5*	*3.0*	*4.9*	*5.7*
of which: Europe	0.6	0.4	0.4	0.1	0.9	0.6	0.6	0.2
of which: Asia	0.4	0.4	0.4	0.3	0.9	1.1	1.1	1.0
International organizations	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.4**
Unclassified countries	**1.7**	**0.2**	**0.5**	**..**	**3.9**	**0.4**	**1.4**	**1.0**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on IMF (CPIS) and Assogestioni data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.5

COUNTRY DISTRIBUTION OF PORTFOLIO DEBT ASSETS: OFFICIAL AND 'CORRECTED' CPIS DATA - ITALY
(percentage shares)

	CPIS shares				**'Mutual fund effect' modified shares**			
Issuers by area and country:	**2002**	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Europe	**65.9**	**68.5**	**69.2**	**71.2**	**66.1**	**68.8**	**69.3**	**70.5**
of which: Switzerland	0.4	0.2	0.1	0.1	0.4	0.2	0.2	0.1
of which: EU 25	**64.1**	**67.2**	**68.2**	**70.1**	**64.3**	**67.4**	**68.0**	**69.3**
Denmark	0.4	0.3	0.3	0.3	0.5	0.5	0.4	0.4
New Member States (*)	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.5
Sweden	1.3	1.1	0.7	0.7	1.6	1.6	1.2	1.0
United Kingdom	5.6	5.8	6.1	4.8	6.0	6.2	6.4	5.3
Euro area	**56.6**	**59.8**	**60.8**	**64.2**	**55.9**	**58.7**	**59.5**	**62.0**
Austria	1.1	1.3	1.3	1.5	1.3	1.4	1.4	1.6
Belgium	1.8	1.8	1.8	1.7	2.2	2.1	2.0	1.9
Finland	0.4	0.4	0.6	0.5	0.5	0.5	0.7	0.5
France	12.1	12.1	12.3	12.1	11.3	11.8	11.9	11.7
Germany	13.3	18.2	19.8	22.7	15.0	18.9	19.8	22.1
Greece	1.4	2.2	2.5	2.9	1.3	2.0	2.4	2.6
Ireland	1.5	2.1	2.4	2.7	1.5	2.0	2.3	2.6
Italy	-	-	-	-	-	-	-	-
Luxembourg	8.7	6.9	5.4	4.4	7.3	5.7	4.4	3.6
Netherlands	13.3	11.0	10.5	11.2	12.4	10.5	9.9	10.4
Portugal	0.8	1.3	1.4	1.1	0.8	1.2	1.3	1.0
Spain	2.3	2.5	2.9	3.5	2.4	2.6	3.3	3.9
North America	**12.5**	**13.5**	**12.3**	**13.6**	**13.9**	**14.2**	**13.1**	**14.5**
of which: USA	12.0	13.1	11.9	13.3	13.2	13.5	12.4	13.8
Latin America	**3.3**	**2.8**	**3.7**	**2.0**	**2.9**	**2.6**	**3.2**	**1.9**
of which: Argentina	1.2	0.9	2.1	0.8	1.0	0.8	1.8	0.7
of which: Brazil	0.9	1.0	0.8	0.6	0.8	1.0	0.7	0.6
of which: Mexico	0.7	0.5	0.5	0.3	0.7	0.5	0.5	0.3
Asia	**0.6**	**0.5**	**0.4**	**0.4**	**0.7**	**0.7**	**1.0**	**1.1**
of which: China	..	..	..	..	..	..	..	..
of which: South Korea	..	..	..	..	..	0.1	0.1	0.1
of which: Japan	0.5	0.4	0.3	0.4	0.6	0.6	0.8	0.9
of which: India	..	..	..	..	..	..	..	..
of which: Taiwan	..	..	..	..	..	..	..	..
Oceania	**0.5**	**0.4**	**0.5**	**0.4**	**0.7**	**0.7**	**0.8**	**0.7**
of which: Australia	0.4	0.4	0.4	0.3	0.6	0.7	0.7	0.6
Africa	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
of which: South Africa	..	..	..	..	..	..	0.1	..
Off-shore centres	**6.6**	**5.6**	**4.0**	**3.5**	**6.3**	**5.5**	**4.1**	**3.5**
of which: Central America	5.0	4.1	2.6	2.0	4.8	4.0	2.7	2.0
of which: Cayman Islands	*3.2*	*3.1*	*2.1*	*1.5*	*3.2*	*3.1*	*2.2*	*1.6*
of which: Europe	1.5	1.5	1.3	1.5	1.4	1.4	1.3	1.3
of which: Asia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
International organizations	**9.8**	**8.2**	**9.2**	**8.8**	**8.5**	**7.0**	**7.7**	**7.4**
Unclassified countries	**0.8**	**0.3**	**0.7**	**..**	**0.8**	**0.3**	**0.7**	**0.2**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on IMF (CPIS) and Assogestioni data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.6

OFFICIAL AND ‘CORRECTED’ EQUITY FOREIGN BIAS INDEXES FOR ITALY
(index values)

	CPIS data				‘Mutual fund effect’ modified data			
Issuers by area and country:	**2002**	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Europe	**-2.0**	**-2.0**	**-1.9**	**-2.0**	**-1.2**	**-1.1**	**-1.0**	**-1.0**
of which: Switzerland	-0.4	-0.2	0.0	0.2	-1.6	-1.4	-1.1	-0.8
of which: EU 25	**-2.3**	**-2.3**	**-2.3**	**-2.4**	**-1.2**	**-1.1**	**-1.0**	**-1.1**
Denmark	0.8	0.8	0.8	0.9	0.4	0.0	0.4	0.6
New Member States (*)	0.4	0.5	0.5	0.7	-0.5	-0.4	-0.5	-0.3
Sweden	0.7	0.6	0.6	0.6	0.1	-0.1	0.0	0.1
United Kingdom	0.3	0.4	0.4	0.4	-0.3	-0.4	-0.4	-0.5
Euro area	**-4.3**	**-4.2**	**-4.2**	**-4.5**	**-1.9**	**-1.6**	**-1.6**	**-1.7**
Austria	-0.6	0.1	0.1	-0.1	-1.6	-0.7	-0.8	-1.2
Belgium	0.4	0.5	0.4	0.4	-0.7	-0.7	-0.9	-1.0
Finland	-0.3	-0.2	-0.1	0.1	-1.5	-1.4	-1.2	-0.8
France	-0.1	-0.3	-0.3	-0.4	-1.1	-1.5	-1.6	-1.8
Germany	-0.4	-0.1	-0.1	-0.2	-1.7	-1.2	-1.3	-1.7
Greece	0.7	0.6	0.4	0.5	0.5	0.2	-0.2	-0.1
Ireland	-24.1	-26.6	-23.9	-28.8	-7.6	-3.0	-3.2	-3.8
Italy	-	-	-	-	-	-	-	-
Luxembourg	-436.0	-406.3	-361.7	-404.9	-64.0	-32.6	-23.9	-25.2
Netherlands	-0.8	-1.4	-1.1	-1.0	-2.4	-3.3	-3.1	-2.8
Portugal	-1.0	-0.9	-0.6	-0.2	-2.2	-2.3	-1.8	-1.3
Spain	0.3	0.4	0.5	0.5	-0.4	-0.2	-0.1	-0.1
North America	**0.8**	**0.8**	**0.8**	**0.8**	**0.5**	**0.5**	**0.5**	**0.5**
of which: USA	0.8	0.7	0.8	0.8	0.5	0.4	0.5	0.5
Latin America	**0.7**	**0.7**	**0.7**	**0.8**	**0.5**	**0.2**	**0.3**	**0.5**
of which: Argentina	0.8	0.7	0.7	0.9	0.7	0.4	0.5	0.8
of which: Brazil	0.5	0.5	0.6	0.8	0.1	-0.2	0.0	0.3
of which: Mexico	0.8	0.8	0.8	0.8	0.4	0.4	0.5	0.5
Asia	**0.8**	**0.8**	**0.8**	**0.8**	**0.5**	**0.5**	**0.4**	**0.4**
of which: China	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8
of which: South Korea	0.7	0.6	0.7	0.7	0.2	0.0	0.1	0.3
of which: Japan	0.7	0.7	0.7	0.7	0.4	0.3	0.3	0.3
of which: India	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.6
of which: Taiwan	0.9	0.8	0.8	0.8	0.6	0.5	0.5	0.4
Oceania	**0.6**	**0.8**	**0.8**	**0.8**	**0.4**	**0.5**	**0.6**	**0.5**
of which: Australia	0.7	0.8	0.8	0.8	0.5	0.5	0.6	0.5
Africa	**0.9**	**0.9**	**0.9**	**0.9**	**0.8**	**0.7**	**0.7**	**0.7**
of which: South Africa	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7
Off-shore centres	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Central America	-25.9	-0.7	-67.0	-135.1	-49.3	-2.3	-123.2	-246.5
of which: Cayman Islands	*-1223.2*	*-4025.5*	*-6786.2*	*….*	*-2426.3*	*-7767.7*	*-12320.0*	*….*
of which: Europe	….	….	….	….	….	….	….	….
of which: Asia	0.9	0.9	0.9	0.9	0.6	0.6	0.7	0.7
International organizations	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
Unclassified countries	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**

Sources: own elaborations on data from the IMF (CPIS), Assogestioni, the World Bank and the World Federation of Exchanges.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.7

OFFICIAL AND ‘CORRECTED’ DEBT FOREIGN BIAS INDEXES FOR ITALY
(index values)

	CPIS data				‘Mutual fund effect’ modified data			
Issuers by area and country:	**2002**	**2003**	**2004**	**2005**	**2002**	**2003**	**2004**	**2005**
Europe	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Switzerland	0.2	0.7	0.7	0.7	0.2	0.6	0.6	0.7
of which: EU 25	-1.5	-1.4	-1.3	-1.5	-1.5	-1.4	-1.3	-1.4
Denmark	0.5	0.7	0.7	0.7	0.4	0.5	0.6	0.5
New Member States (*)	0.7	0.6	0.6	0.5	0.3	0.1	0.0	-0.1
Sweden	-0.7	-0.4	0.1	0.1	-1.1	-0.9	-0.5	-0.3
United Kingdom	-0.4	-0.3	-0.2	0.1	-0.4	-0.4	-0.3	0.0
Euro area	**-2.0**	**-1.8**	**-1.7**	**-2.0**	**-1.9**	**-1.7**	**-1.7**	**-1.9**
Austria	-0.5	-0.6	-0.6	-1.0	-0.8	-0.8	-0.8	-1.2
Belgium	-0.6	-0.6	-0.6	-0.8	-1.0	-0.9	-0.8	-1.0
Finland	-0.3	-0.1	-0.4	-0.5	-0.4	-0.2	-0.7	-0.5
France	-1.6	-1.3	-1.3	-1.5	-1.4	-1.2	-1.2	-1.4
Germany	-1.0	-1.6	-1.8	-2.7	-1.3	-1.7	-1.8	-2.6
Greece	-2.3	-3.6	-3.4	-4.2	-2.1	-3.2	-3.2	-3.7
Ireland	-3.0	-2.6	-2.0	-1.8	-2.9	-2.5	-1.9	-1.7
Italy	-	-	-	-	-	-	-	-
Luxembourg	-26.9	-16.9	-12.3	-8.3	-22.4	-13.8	-9.9	-6.6
Netherlands	-3.6	-2.5	-2.3	-2.7	-3.3	-2.3	-2.1	-2.5
Portugal	-1.6	-2.5	-2.7	-1.9	-1.5	-2.2	-2.5	-1.8
Spain	-0.6	-0.3	-0.3	-0.3	-0.7	-0.4	-0.4	-0.5
North America	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**
of which: USA	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Latin America	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Argentina	-2.9	-2.1	-7.1	-2.5	-2.3	-1.6	-5.7	-2.0
of which: Brazil	-0.3	-0.3	0.1	0.5	-0.1	-0.2	0.2	0.5
of which: Mexico	-0.4	-0.1	-0.1	0.4	-0.3	0.0	0.0	0.4
Asia	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Japan	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9
Off-shore centres	**-2.4**	**-2.1**	**-1.4**	**-1.0**	**-2.3**	**-2.1**	**-1.4**	**-1.1**

Sources: own elaborations on IMF (CPIS), Assogestioni and BIS data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.8

COUNTRY DISTRIBUTION OF PORTFOLIO EQUITY ASSETS: OFFICIAL AND ‘CORRECTED’ CPIS DATA FOR ITALY, FRANCE, GERMANY AND SPAIN

(averages over the 2003-2005 period; percentage values)

	CPIS shares				‘Mutual fund effect’ modified shares			
Issuers by area and country:	**Italy**	**France**	**Ger - many**	**Spain**	**Italy**	**France**	**Ger - many**	**Spain**
Europe	**79.5**	**71.4**	**81.6**	**82.3**	**55.6**	**66.3**	**66.6**	**76.1**
of which: Switzerland	2.2	4.4	4.1	1.9	4.5	5.0	6.3	2.5
of which: EU 25	**76.8**	**66.7**	**76.8**	**79.9**	**49.9**	**60.8**	**59.1**	**72.9**
Denmark	0.1	0.2	0.2	..	0.3	0.2	0.3	0.1
New Member States (*)	0.2	0.2	0.2	0.1	0.5	0.3	0.5	0.1
Sweden	0.4	0.6	0.9	0.4	1.0	0.8	1.5	0.5
United Kingdom	4.6	11.3	7.3	11.3	10.1	13.1	11.7	13.7
Euro area	**71.6**	**54.3**	**68.2**	**68.2**	**38.1**	**46.5**	**45.1**	**58.5**
Austria	0.2	0.2	0.8	0.1	0.4	0.3	1.2	0.1
Belgium	0.4	3.0	0.8	0.7	1.2	3.4	1.6	1.0
Finland	0.6	1.6	1.9	1.3	1.1	1.8	2.7	1.5
France	5.6	-	10.1	14.1	10.6	-	15.0	16.7
Germany	3.5	11.8	-	9.1	7.4	13.3	-	11.0
Greece	0.2	0.2	0.2	0.1	0.4	0.3	0.4	0.1
Ireland	7.7	3.9	3.2	3.7	1.2	0.8	1.1	1.2
Italy	-	6.6	4.0	4.9	-	7.4	6.0	5.9
Luxembourg	48.7	11.4	37.6	27.6	6.9	1.8	3.1	13.1
Netherlands	3.2	9.4	6.0	5.1	5.8	10.5	8.7	6.1
Portugal	0.3	0.3	0.1	1.5	0.5	0.4	0.2	1.7
Spain	1.2	5.8	3.5	-	2.5	6.5	5.1	-
North America	**10.1**	**14.1**	**12.6**	**10.4**	**22.0**	**16.7**	**21.2**	**13.8**
of which: USA	9.9	13.6	12.7	10.3	21.4	16.1	21.2	13.5
Latin America	**0.5**	**0.3**	**0.1**	**1.7**	**1.3**	**0.4**	**0.5**	**2.1**
of which: Argentina	..	..	..	..	0.1	..	..	..
of which: Brazil	0.3	0.2	0.1	1.5	0.8	0.3	0.3	1.7
of which: Mexico	0.1	0.1	..	0.1	0.3	0.1	0.1	0.2
Asia	**4.2**	**6.9**	**3.9**	**4.2**	**9.9**	**8.2**	**7.6**	**5.8**
of which: China	0.1	0.2	0.1	0.4	0.3	0.3	0.2	0.5
of which: South Korea	0.4	0.4	0.3	..	1.0	0.5	0.7	0.1
of which: Japan	3.2	5.7	3.1	1.5	6.9	6.6	5.5	2.3
of which: India	0.1	0.2	0.1	2.3	0.4	0.3	0.3	2.7
of which: Taiwan	0.2	0.2	0.1	..	0.6	0.3	0.3	0.1
Oceania	**0.4**	**0.3**	**0.3**	**..**	**0.9**	**0.4**	**0.6**	**0.1**
of which: Australia	0.4	0.3	0.3	..	0.9	0.4	0.6	0.1
Africa	**0.1**	**0.3**	**0.1**	**0.4**	**0.4**	**0.4**	**0.3**	**0.5**
of which: South Africa	0.1	0.1	0.1	..	0.3	0.2	0.2	0.1
Off-shore centres	**4.7**	**6.5**	**1.4**	**0.9**	**8.9**	**7.4**	**3.1**	**1.5**
of which: Central America	4.1	5.6	0.7	0.8	7.4	6.3	1.8	1.3
of which: Cayman Islands	*2.5*	*3.3*	*0.3*	*0.4*	*4.4*	*3.7*	*0.8*	*0.7*
of which: Europe	0.3	0.2	0.3	..	0.5	0.2	0.5	..
of which: Asia	0.4	0.8	0.4	..	1.0	1.0	0.8	0.2
International organizations	**0.2**	**0.1**	**..**	**..**	**0.3**	**0.1**	**..**	**..**
Unclassified countries	**0.2**	**..**	**..**	**..**	**0.7**	**0.1**	**0.1**	**0.1**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on data from the IMF (CPIS), ALFI and the Central Bank of Luxembourg.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

OFFICIAL AND 'CORRECTED' EQUITY FOREIGN BIAS INDEXES FOR ITALY, FRANCE, GERMANY AND SPAIN
(averages over the 2003-2005 period; index values)

	CPIS data				'Mutual fund effect' modified data			
Issuers by area and country:	**Italy**	**France**	**Ger - many**	**Spain**	**Italy**	**France**	**Ger - many**	**Spain**
Europe	**-2.0**	**-1.8**	**-2.1**	**-2.1**	**-1.1**	**-1.6**	**-1.6**	**-1.9**
of which: Switzerland	0.0	-0.9	-0.8	0.1	-1.0	-1.2	-1.8	-0.1
of which: EU 25	**-2.3**	**-2.1**	**-2.5**	**-2.5**	**-1.2**	**-1.9**	**-1.7**	**-2.2**
Denmark	0.8	0.5	0.6	0.9	0.4	0.4	0.2	0.8
New Member States (*)	0.6	0.4	0.6	0.9	-0.3	0.3	-0.1	0.6
Sweden	0.6	0.4	0.1	0.6	0.1	0.3	-0.4	0.5
United Kingdom	0.4	-0.5	0.0	-0.5	-0.3	-0.7	-0.5	-0.8
Euro area	**-4.3**	**-3.7**	**-4.5**	**-4.2**	**-1.8**	**-3.0**	**-2.6**	**-3.4**
Austria	0.0	0.1	-2.5	0.7	-0.9	0.0	-4.0	0.5
Belgium	0.4	-3.6	-0.2	-0.1	-0.8	-4.2	-1.3	-0.6
Finland	-0.1	-2.0	-2.5	-1.4	-1.1	-2.4	-4.0	-1.9
France	-0.3	-	-1.4	-2.3	-1.5	-	-2.5	-3.0
Germany	-0.1	-2.7	-	-1.9	-1.4	-3.1	-	-2.5
Greece	0.5	0.3	0.3	0.8	0.0	0.2	0.0	0.7
Ireland	-26.4	-12.5	-10.2	-12.1	-3.3	-2.0	-3.0	-3.1
Italy	-	-2.2	-1.0	-1.5	-	-2.7	-2.0	-2.0
Luxembourg	-390.9	-89.1	-298.3	-219.4	-54.4	-13.5	-23.1	-103.6
Netherlands	-1.2	-5.3	-3.0	-2.5	-2.9	-6.0	-4.9	-3.1
Portugal	-0.6	-0.7	0.2	-7.5	-1.7	-1.0	-0.3	-8.8
Spain	0.5	-1.4	-0.5	-	-0.1	-1.7	-1.1	-
North America	**0.8**	**0.7**	**0.7**	**0.8**	**0.5**	**0.6**	**0.5**	**0.7**
of which: USA	0.8	0.7	0.7	0.8	0.5	0.6	0.5	0.7
Latin America	**0.7**	**0.9**	**1.0**	**0.1**	**0.4**	**0.8**	**0.8**	**-0.1**
of which: Argentina	0.8	1.0	1.0	0.9	0.6	0.9	0.9	0.9
of which: Brazil	0.6	0.8	0.9	-0.8	0.1	0.7	0.7	-1.1
of which: Mexico	0.8	0.8	0.9	0.8	0.5	0.8	0.7	0.7
Asia	**0.8**	**0.6**	**0.8**	**0.8**	**0.4**	**0.6**	**0.6**	**0.7**
of which: China	0.9	0.9	1.0	0.8	0.8	0.9	0.9	0.8
of which: South Korea	0.7	0.7	0.7	1.0	0.2	0.6	0.4	0.9
of which: Japan	0.7	0.4	0.7	0.8	0.3	0.4	0.5	0.8
of which: India	0.9	0.8	1.0	-1.2	0.7	0.7	0.8	-1.6
of which: Taiwan	0.8	0.8	0.9	1.0	0.5	0.8	0.7	0.9
Oceania	**0.8**	**0.8**	**0.8**	**1.0**	**0.6**	**0.8**	**0.7**	**1.0**
of which: Australia	0.8	0.9	0.8	1.0	0.6	0.8	0.7	1.0
Africa	**0.9**	**0.8**	**0.9**	**0.7**	**0.7**	**0.7**	**0.8**	**0.6**
of which: South Africa	0.9	0.9	0.9	1.0	0.7	0.8	0.8	0.9
Off-shore centres	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Central America	-67.6	-78.8	-10.2	-14.5	-121.3	-89.9	-28.0	-23.2
of which: Cayman Islands (**)	*-5405.8*	*-8214.0*	*-552.9*	*-738.8*	*….*	*-9231.6*	*-1793.2*	*-1237.5*
of which: Europe	….	….	….	….	….	….	….	….
of which: Asia	0.9	0.7	0.9	1.0	0.7	0.7	0.7	0.9
International organizations	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
Unclassified countries	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**

Sources: own elaborations on data from the IMF (CPIS), ALFI, the Central Bank of Luxembourg, the World Federation of Exchanges and the World Bank.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia. (**) Average over the 2003-2004 period.

COUNTRY DISTRIBUTION OF PORTFOLIO DEBT ASSETS: OFFICIAL AND 'CORRECTED' CPIS DATA FOR ITALY, FRANCE, GERMANY AND SPAIN
(averages over the 2003-2005 period; percentage values)

	CPIS shares				**'Mutual fund effect' modified shares**			
Issuers by area and country:	**Italy**	**France**	**Ger-many**	**Spain**	**Italy**	**France**	**Ger-many**	**Spain**
Europe	**69.7**	**77.5**	**81.4**	**73.8**	**70.6**	**77.4**	**80.9**	**73.9**
of which: Switzerland	0.1	0.1	0.5	0.2	0.2	0.1	0.5	0.2
of which: EU 25	**68.5**	**76.8**	**79.1**	**72.9**	**69.4**	**76.6**	**80.1**	**73.0**
Denmark	0.3	0.6	1.4	0.4	0.4	0.6	1.3	0.4
New Member States (*)	0.2	0.4	2.4	0.2	0.4	0.4	2.3	0.2
Sweden	0.8	1.2	1.3	0.6	1.1	1.2	1.4	0.6
United Kingdom	5.6	9.2	6.3	8.9	5.8	9.2	6.3	8.8
Euro area	**61.6**	**65.4**	**67.7**	**62.9**	**61.8**	**65.3**	**67.3**	**62.9**
Austria	1.4	2.0	5.8	0.8	1.4	1.9	5.4	0.8
Belgium	1.8	4.0	1.7	2.2	1.8	3.9	1.7	2.2
Finland	0.5	1.1	1.4	0.4	0.5	1.1	1.3	0.4
France	12.2	-	10.0	13.2	11.4	-	9.9	13.0
Germany	20.2	12.0	-	14.6	19.3	12.1	-	14.6
Greece	2.5	2.6	3.2	0.7	2.3	2.6	3.0	0.7
Ireland	2.4	3.2	5.0	2.5	2.2	3.1	4.7	2.5
Italy	-	15.1	13.2	15.2	-	15.0	12.8	15.0
Luxembourg	5.5	1.4	2.7	1.1	8.6	1.9	5.0	1.7
Netherlands	10.9	12.3	12.6	11.3	10.0	12.2	11.9	11.1
Portugal	1.2	2.5	2.0	0.9	1.1	2.4	1.9	0.9
Spain	3.0	9.2	10.2	-	3.1	9.0	9.6	-
North America	**13.1**	**11.1**	**8.8**	**7.9**	**13.3**	**11.2**	**9.3**	**8.0**
of which: USA	12.8	10.2	7.8	7.5	12.8	10.3	8.2	7.6
Latin America	**2.8**	**0.2**	**1.1**	**0.7**	**2.5**	**0.3**	**1.1**	**0.7**
of which: Argentina	1.3	..	0.1	..	1.1	..	0.1	..
of which: Brazil	0.8	0.1	0.5	0.6	0.7	0.1	0.5	0.6
of which: Mexico	0.4	0.1	0.3	..	0.4	0.1	0.3	..
Asia	**0.4**	**2.1**	**1.9**	**0.1**	**0.7**	**2.1**	**2.0**	**0.2**
of which: China	..	..	..	..	..	..	..	..
of which: South Korea	..	0.1	0.1	..	0.1	0.1	0.1	..
of which: Japan	0.3	1.8	1.7	0.1	0.6	1.8	1.7	0.2
of which: India	..	..	..	..	..	..	..	..
of which: Taiwan	..	..	..	..	..	..	..	..
Oceania	**0.4**	**1.1**	**0.6**	**0.9**	**0.6**	**1.1**	**0.7**	**0.9**
of which: Australia	0.4	1.0	0.6	0.8	0.5	1.1	0.7	0.8
Africa	**0.1**	**0.1**	**0.2**	**..**	**0.1**	**0.1**	**0.2**	**..**
of which: South Africa	..	..	0.2	..	..	..	0.2	..
Off-shore centres	**4.4**	**6.3**	**4.6**	**7.3**	**4.2**	**6.2**	**4.5**	**7.2**
of which: Central America	2.9	5.5	2.5	7.2	2.8	5.4	2.5	7.1
of which: Cayman Islands	*2.2*	*2.8*	*2.2*	*6.5*	*2.1*	*2.8*	*2.2*	*6.4*
of which: Europe	1.4	0.6	2.0	0.1	1.3	0.6	1.9	0.1
of which: Asia	0.1	0.2	0.1	..	0.1	0.2	0.1	..
International organizations	**8.8**	**1.6**	**1.4**	**1.3**	**7.5**	**1.6**	**1.3**	**1.3**
Unclassified countries	**0.3**	**..**	**..**	**8.0**	**0.5**	**0.1**	**0.1**	**7.8**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on data from the IMF (CPIS), ALFI and the Central Bank of Luxembourg.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table T.11

OFFICIAL AND 'CORRECTED' DEBT FOREIGN BIAS INDEXES FOR ITALY, FRANCE, GERMANY AND SPAIN
(averages over the 2003-2005 period; index values)

	CPIS data				**'Mutual fund effect' modified data**			
Issuers by area and country:	**Italy**	**France**	**Ger - many**	**Spain**	**Italy**	**France**	**Ger - many**	**Spain**
Europe	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Switzerland	0.7	0.7	-0.1	0.5	0.7	0.7	..	0.5
of which: EU 25	**-1.4**	**-1.7**	**-1.9**	**-1.4**	**-1.4**	**-1.7**	**-1.9**	**-1.4**
Denmark	0.7	0.4	-0.5	0.5	0.6	0.4	-0.4	0.5
New Member States (*)	0.6	0.3	-3.8	0.7	0.3	0.2	-3.6	0.6
Sweden	..	-0.5	-0.6	0.2	-0.3	-0.5	-0.8	0.2
United Kingdom	-0.2	-0.9	-0.3	-0.9	-0.2	-0.9	-0.3	-0.9
Euro area	**-1.8**	**-2.0**	**-2.3**	**-1.6**	**-1.9**	**-2.0**	**-2.3**	**-1.6**
Austria	-0.8	-1.5	-6.4	0.0	-0.8	-1.5	-5.9	0.0
Belgium	-0.7	-2.8	-0.5	-1.2	-0.7	-2.8	-0.6	-1.2
Finland	-0.3	-1.9	-2.7	-0.1	-0.4	-1.9	-2.6	-0.1
France	-1.3	-	-0.9	-1.6	-1.2	-	-0.9	-1.6
Germany	-2.0	-0.8	-	-1.2	-1.9	-0.8	-	-1.2
Greece	-3.7	-3.9	-4.9	-0.4	-3.3	-3.8	-4.5	-0.4
Ireland	-2.1	-3.1	-5.3	-2.3	-1.9	-3.0	-4.9	-2.3
Italy	-	-2.0	-1.6	-2.1	-	-2.0	-1.5	-2.1
Luxembourg	-12.5	-2.4	-5.3	-1.7	-19.8	-3.6	-10.8	-3.1
Netherlands	-2.5	-2.9	-2.9	-2.7	-2.2	-2.9	-2.7	-2.7
Portugal	-2.4	-5.8	-4.3	-1.5	-2.1	-5.6	-4.0	-1.5
Spain	-0.3	-3.1	-3.4	-	-0.4	-3.0	-3.2	-
North America	**0.7**	**0.7**	**0.8**	**0.8**	**0.7**	**0.7**	**0.8**	**0.8**
of which: USA	0.7	0.8	0.8	0.8	0.7	0.8	0.8	0.8
Latin America	**….**	**….**	**….**	**….**	**….**	**….**	**….**	**….**
of which: Argentina	1.0	0.9	0.9	1.0	-3.1	0.9	0.7	0.9
of which: Brazil	**….**	**….**	**….**	**….**	0.2	0.9	0.5	0.3
of which: Mexico	-3.9	0.9	0.7	0.9	0.2	0.9	0.4	0.9
Asia	0.1	0.9	0.4	0.3	**….**	**….**	**….**	**….**
of which: Japan	0.1	0.9	0.4	0.9	1.0	0.9	0.9	1.0
Off-shore centres	**-1.5**	**-2.6**	**-1.6**	**-3.3**	-1.4	-2.5	-1.5	-3.3

Sources: own elaborations on data from the IMF (CPIS), ALFI, the Central Bank of Luxembourg and the BIS.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Appendix

A.1 The foreign bias index: definition and data issues

The ‘foreign bias index’ of country *i* vis-à-vis country *p*, relative to financial instrument *j*, is defined as

$$FB_{ijp} = 1 - (f_{ijp} / m_{ijp}),$$

where:

f_{ijp} = actual partner share = stock of securities *j* issued by country *p*, held by country *i* as a share of the total stock of foreign securities *j* held by country *i*;

m_{ijp} = optimal partner share = total stock of securities *j* issued by country *p* as a share of the total stock of securities *j* issued by the world, net of those issued by country *i*.

The index signals absence of *foreign bias* vis-à-vis country *p* when $FB_{ijp} = 0$, that is to say when country *i* holds a share of securities *j* issued by *p* that is comparable with their weight in the world capital market. There is *overweight* (*underweight*) of securities *j* issued by *p* when $FB_{ijp} < 0$ ($FB_{ijp} > 0$), that is when country *i* holds a share of securities *j* issued by *p* that is greater (lower) than their total weight in the world capital market.

From an empirical point of view, we distinguish between equity and debt securities (index *j*) and derive the actual partner share (f_{ijp}) from the CPIS data reported by country *i* (France, Germany, Italy and Spain) vis-à-vis the counterpart country *p* (the 239 CPIS counterpart countries). The optimal partner share (m_{ijp}) for equity assets is computed using data from the World Bank (2006) and the World Federation of Exchanges to obtain year-end series of market capitalization of national stock exchanges (for the countries *p* for which data are available); the national capitalization data are then aggregated to produce a series for worldwide market capitalization. For debt assets, we derive the optimal partner share (m_{ijp}) from BIS data concerning the stock of outstanding debt securities issued by country *p* both on the domestic and the international markets; as for equities, the worldwide aggregate is obtained by ‘summing over’ countries. The ‘corrected’ foreign bias indexes use the ‘corrected’ data (rather than the official CPIS ones) to compute the actual partner shares (f_{ijp}).

A.2 Data for the correction of the 'geographical veil'

The third step of our correction method (see Section 4.1) implies assessing the geographical distribution of the equity assets and of the debt instruments implicit in mutual funds positions vis-à-vis Luxembourg and Ireland. To do this, we use the CPIS data for Luxembourg and Ireland on the geographical distribution of foreign equity assets and debt instruments (Tables A.1 and A.2 below).

Table A.1

COUNTRY DISTRIBUTION OF FOREIGN PORTFOLIO EQUITY ASSETS FOR LUXEMBOURG AND IRELAND

(percentage shares)

	Luxembourg					Ireland				
Issuers by area and country:	**2001**	**2002**	**2003**	**2004**	**2005**	**2001**	**2002**	**2003**	**2004**	**2005**
Europe	**55.0**	**53.5**	**51.0**	**52.1**	**51.8**	**46.8**	**48.4**	**53.3**	**51.9**	**50.3**
of which: Switzerland	4.4	4.9	4.8	4.4	4.0	3.1	2.9	3.0	2.5	3.3
of which: EU 25	**49.6**	**47.3**	**44.8**	**45.9**	**45.0**	**43.3**	**45.2**	**49.9**	**49.3**	**46.6**
Denmark	0.5	0.4	1.1	0.4	0.4	0.2	0.2	0.2	..	..
New Member States (*)	0.7	0.8	0.8	1.4	1.5	0.2	0.3	0.3	..	..
Sweden	1.7	1.4	1.4	1.5	1.3	0.8	0.7	0.8	0.8	1.2
United Kingdom	9.6	9.7	9.7	10.0	9.7	23.6	23.2	22.2	20.8	19.5
Euro area	**37.0**	**35.0**	**31.8**	**32.6**	**32.1**	**18.5**	**20.8**	**26.4**	**27.6**	**25.9**
Austria	0.1	0.1	0.2	0.4	0.6	..	0.1	0.1	..	..
Belgium	1.8	2.3	2.5	2.7	2.8	0.3	0.3	0.3	0.4	0.5
Finland	1.9	1.5	1.1	1.0	1.0	0.8	0.9	0.8	..	..
France	8.5	7.6	7.5	7.6	7.8	5.1	4.4	6.2	6.6	6.2
Germany	10.8	9.2	7.7	7.9	8.4	4.6	2.6	4.8	4.6	4.8
Greece	0.1	0.1	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.4
Ireland	1.5	2.2	2.2	2.6	2.1	-	-	-	-	-
Italy	4.5	4.4	4.0	3.9	3.4	2.1	2.6	3.8	3.6	4.0
Luxembourg	-	-	-	-	-	..	5.4	4.4	5.8	4.7
Netherlands	5.2	4.9	3.8	3.6	3.3	3.7	2.9	3.8	3.9	2.8
Portugal	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.4
Spain	2.3	2.4	2.3	2.4	2.2	1.5	1.5	2.0	2.3	2.1
North America	**27.4**	**25.0**	**26.6**	**23.5**	**20.7**	**34.4**	**31.8**	**31.6**	**30.3**	**26.8**
of which: USA	26.8	24.6	25.7	22.6	19.7	34.5	31.8	31.6	30.1	25.9
Latin America	**1.8**	**1.1**	**2.3**	**2.2**	**1.9**	**0.4**	**0.3**	**0.5**	**0.3**	**0.3**
of which: Argentina	0.1	..	0.1	..	..	..	..	..	..	..
of which: Brazil	0.6	0.4	1.5	1.4	1.1	0.2	0.1	0.3	0.3	0.3
of which: Mexico	0.7	0.5	0.5	0.5	0.6	0.2	0.2	0.2	..	..
Asia	**9.6**	**9.2**	**11.9**	**13.0**	**15.9**	**6.5**	**6.0**	**7.9**	**7.1**	**8.5**
of which: China	0.2	0.3	0.7	0.6	0.7	0.2	0.1	0.2	0.2	0.8
of which: South Korea	0.9	1.6	1.7	1.7	2.1	0.8	0.8	1.0	..	..
of which: Japan	6.5	5.1	6.4	7.4	8.8	4.7	4.3	5.4	6.9	7.8
of which: India	0.4	0.4	0.8	1.0	1.5	0.2	0.1	0.2	..	..
of which: Taiwan	0.8	0.9	1.1	1.1	1.3	0.4	0.3	0.5	..	..
Oceania	**0.6**	**0.6**	**0.8**	**0.9**	**1.0**	**1.3**	**1.3**	**1.3**	**..**	**..**
of which: Australia	0.6	0.5	0.8	0.8	0.9	1.3	1.3	1.3	..	..
Africa	**0.6**	**0.4**	**0.7**	**0.8**	**0.9**	**0.2**	**0.2**	**0.2**	**..**	**..**
of which: South Africa	0.3	0.4	0.6	0.6	0.7	0.2	0.2	0.2	..	..
Off-shore centres	**4.8**	**4.8**	**6.6**	**7.5**	**7.6**	**2.0**	**2.9**	**3.5**	**..**	**..**
of which: Central America	2.7	3.0	4.5	5.2	5.5	0.3	1.4	1.5	..	..
of which: Cayman Islands	*1.1*	*1.7*	*2.6*	*2.9*	*3.2*	..	*0.6*	*0.7*	..	..
of which: Europe	0.1	0.2	0.2	0.3	0.2	..	..	..	..	..
of which: Asia	1.9	1.6	1.9	1.9	1.9	1.7	1.5	2.0	..	..
International organizations	**0.2**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**
Unclassified countries	**..**	**5.5**	**..**	**..**	**0.2**	**8.5**	**9.0**	**1.6**	**10.5**	**14.0**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on IMF (CPIS) data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

Table A.2

COUNTRY DISTRIBUTION OF FOREIGN PORTFOLIO DEBT ASSETS FOR LUXEMBOURG AND IRELAND

(percentage shares)

	Luxembourg					Ireland				
Issuers by area and country:	**2001**	**2002**	**2003**	**2004**	**2005**	**2001**	**2002**	**2003**	**2004**	**2005**
Europe	**68.6**	**71.8**	**74.1**	**73.8**	**71.7**	**50.9**	**54.7**	**63.5**	**61.5**	**59.4**
of which: Switzerland	0.5	0.5	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.2
of which: European Union 25	**67.0**	**70.1**	**72.2**	**71.6**	**69.9**	**50.4**	**54.1**	**63.0**	**61.4**	**59.0**
Denmark	1.2	1.0	1.1	1.0	1.1	0.4	0.5	0.7	..	..
New Member States (*)	0.6	0.9	1.3	1.9	1.9	0.2	0.2	0.3	..	..
Sweden	2.7	2.9	3.4	3.3	2.4	1.0	1.4	1.2	1.1	1.1
United Kingdom	5.9	5.8	6.2	5.3	5.5	17.6	19.0	19.3	19.2	20.1
Euro area	**56.6**	**59.5**	**60.2**	**60.2**	**58.9**	**31.2**	**32.9**	**41.6**	**41.1**	**37.7**
Austria	2.2	2.3	2.1	2.1	2.1	1.0	1.1	1.0	..	..
Belgium	4.5	4.2	3.1	3.1	2.6	1.0	1.4	1.1	1.1	1.0
Finland	0.6	0.6	0.6	1.1	0.6	0.9	0.7	0.5	..	..
France	6.4	7.5	9.8	9.3	9.5	2.8	3.4	7.5	7.3	5.2
Germany	23.1	23.1	20.7	18.4	18.4	9.1	8.4	11.7	10.0	8.7
Greece	0.7	0.9	1.0	1.7	1.3	0.9	0.8	0.8	1.0	1.3
Ireland	1.4	1.3	1.7	1.7	2.1	-	-	-	-	-
Italy	6.5	8.7	10.4	10.8	9.4	7.3	7.8	9.8	9.9	10.7
Luxembourg	-	-	-	-	-	0.6	0.7	1.0	0.7	1.0
Netherlands	7.5	7.8	7.5	6.6	6.6	3.0	3.1	3.7	5.3	3.5
Portugal	0.5	0.5	0.7	0.8	0.8	0.8	0.9	0.6	1.0	1.2
Spain	3.3	2.6	2.6	4.6	5.5	3.8	4.6	3.8	4.7	5.1
North America	**20.2**	**18.0**	**14.6**	**13.8**	**15.9**	**34.8**	**31.1**	**25.8**	**26.3**	**25.0**
of which: USA	18.4	16.4	12.6	11.9	14.0	33.2	31.1	25.8	24.4	23.2
Latin America	**1.0**	**0.7**	**1.2**	**1.1**	**1.4**	**0.2**	**0.2**	**0.3**	**0.1**	**0.1**
of which: Argentina	0.2	..	..	0.1	0.2	..	..	..	..	..
of which: Brazil	0.4	0.2	0.6	0.4	0.4	..	..	0.1	0.1	0.1
of which: Mexico	0.2	0.2	0.2	0.3	0.3	0.1	0.1	0.1	..	..
Asia	**1.7**	**1.5**	**1.8**	**3.5**	**4.1**	**1.5**	**1.2**	**1.2**	**1.6**	**1.7**
of which: China	..	..	..	..	..	..	..	..	..	0.1
of which: South Korea	0.1	0.1	0.2	0.3	0.3	0.1	0.1	0.1	..	..
of which: Japan	1.3	1.2	1.3	2.8	3.3	1.4	1.1	1.1	1.6	1.7
of which: India	..	..	..	..	..	..	..	..	..	..
of which: Taiwan	..	..	..	..	..	..	..	..	..	..
Oceania	**1.7**	**1.8**	**2.0**	**2.2**	**2.1**	**0.4**	**1.1**	**1.4**	**...**	**..**
of which: Australia	1.3	1.5	1.9	1.9	2.0	0.4	0.9	1.3	..	..
Africa	**0.1**	**0.1**	**0.1**	**0.2**	**0.1**	**..**	**0.1**	**0.2**	**..**	**..**
of which: South Africa	..	..	..	0.1	0.1	..	0.1	0.1	..	..
Off-shore centres	**4.5**	**4.3**	**4.8**	**4.3**	**3.7**	**1.7**	**2.3**	**2.1**	**..**	**..**
of which: Central America	3.9	3.6	3.4	3.0	2.4	1.6	1.9	1.6	..	..
of which: Cayman Islands	*3.3*	*3.1*	*2.8*	*2.5*	*2.0*	*1.5*	*1.7*	*1.4*	..	..
of which: Europe	0.4	0.6	1.1	1.0	0.8	0.1	0.2	0.4	..	..
of which: Asia	0.2	0.1	0.3	0.3	0.5	..	0.2	0.2	..	..
International organizations	**2.1**	**1.8**	**1.3**	**1.2**	**0.9**	**0.2**	**0.6**	**0.5**	**0.4**	**0.5**
Unclassified countries	**0.1**	**..**	**..**	**..**	**..**	**10.3**	**8.7**	**4.9**	**10.0**	**13.3**
World	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Sources: own elaborations on IMF (CPIS) data.

Notes: (*) Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovak Republic, Slovenia.

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