

# Task Force on Portfolio Investment Income

## Supplementary document 5: treatment of income on collective investment institutions

### Abstract

The purpose of this paper is primarily to revisit the conclusions and recommendations of the ECB's *European Union Balance of Payments /International Investment Position Statistical Methods* as it applies to the treatment of the income (and expenses) of Collective Investment Institutions. The recommended treatment was motivated primarily to prevent the distortion of GNP as stated in Paragraph 19 “ *the approach proposed by the Sub-group appears to be in overall agreement with the spirit of ESA 1995 and the GNP Committee's interpretation of ESA 1979 (Commission decision 12 February 1997 No. C(97) 345 final). The treatment in the EMU balance of payments will therefore be consistent with the way GNP will be measured in Europe and will prevent a distortion of the Current Account Balance and GNP. This was a major concern of the Sub-group from the outset*”.

The paper will review the recommended treatment through worked examples and highlight the source of any problems that may exist. This will be followed by some new ideas on refining the existing treatment and will conclude with recommendations for consideration, initially, by the Task Force.

### Background

1. In line with the approach by sub-group 1 (SG1) in the report “Recording Income on an Accruals Basis for Collective Investment Institutions (CIIs) etc.” we consider collective institutions to comprise “*incorporated (investment companies or investment trusts) and unincorporated undertakings (mutual funds or unit trusts) that invest the funds, collected from investors by means of issuing shares/units (other than equity), in financial assets (mainly marketable securities and bank deposits) and real estate*”.

2. In the SG1 paper when discussing the recording of the investment income of CIIs on an accruals basis, the first point to be addressed was the distinction between the income that the CII earns on its investments (asset side) and the income of the investor holding units of the fund (liability side of the CII).

3. With reference to the *asset side*, SG1 was of the opinion that this income did not require special investigation as it is covered by the guidance provided by the IMF Manual

(paragraphs 121 and 282, regarding the time of recording for investment income). According to these paragraphs, investment income from assets of the CII in the form of equity has to be recorded when payable and interest earned by the CII has to be recorded on an accruals basis.

4. In contrast to the asset side, the appropriate treatment of investment income on the liability side was less clear-cut, given the fact that CII can have different distribution policies (full distribution of the income in the form of dividends; full capitalisation of the income; or a mixed policy which combines distribution and capitalisation). Accordingly, SG1 focussed on the recording of the income of the investors in the CII. In particular, the following questions were considered:

- What is the time of recording of income when the CII distributes all or part of the income earned on its assets?
- What is the appropriate treatment in the case of capitalisation?
- Should capitalised income be treated as the income of the investor in the CII and, if so, what is the time of recording of this income flow?
- Should capitalised income be regarded as a holding gain?

5. SG1 proposed a *broader approach* at the liability side of the CII, under which *all* income was covered, regardless of the type of assets in which the CII invests or the distribution policy of the CII.

6. The recommended approach is that the income flow from the CII to the investor in the CII is recorded on an accruals basis when it corresponds to interest earned by the CII and is recorded, in principle, once the dividend is paid to the CII, in the case where the CII has invested in equity. Application of this method means that **all income is assigned to the investors, regardless if it is distributed or not**. This is a reflection of the fact that the investor in the CII can claim, at any time, the income that the CII earned on its assets. Income that is not distributed is considered as being reinvested in the CII and, consequently, capitalised income has a counterpart entry in the Financial Account.

7. According to these recommendations, the time of recording of investment income on the liability side of the CII will completely coincide with the time of recording on the asset side.

8. The SG1 focussed mainly on the treatment for the country where the CII were resident and in which non-residents invest. However, this simplification was introduced only for illustrative purposes and as stated in the SG1 report *“it must be clear that a completely symmetric treatment is proposed for residents investing in non-resident CII. The latter case is only mentioned explicitly when the direction of the investment in the CII affects the estimation method.”*

9. The SG1 report goes on to say that concerning the asset allocation of non-resident CIIs and the corresponding rate of return, “*Member States are encouraged to exchange information.*” The Sub-group recommends that national compilers should, at least, try to make a distinction between the following broad categories of assets in which the CIIs invest (bonds, money market instruments and equities). In addition, the accuracy of the estimation method will be improved significantly if an additional breakdown is made using the currency in which the CII has made its investment (for investments in bonds and in money market instruments) and using the country in which the CII has invested (for investment in equity).”

10. We can see, therefore, that the full symmetric treatment for the recording of income on an accruals basis for CIIs has been proposed by SG1, which, following approval by the STC, became the approved method of compiling this data in the Euro and EU areas.

## **Possible difficulties with Current Treatment**

11. We will distinguish between resident CIIs or CIIs in the reporting economy and non-resident CIIs or CIIs abroad.

### ***CIIs in the reporting economy***

12. The treatment proposed for resident CIIs in which non-residents invest is perhaps the more straightforward. Once the resident BOP/IIP compiler has data covering the stocks of assets owned by the resident CII it can then either estimate the income earned on an accruals basis or collect this data directly through a survey.

13. Similarly once the compiler knows the country of the non-resident investor into the resident CII it can estimate how much of the accrued income needs to be attributed outwards to the non-resident investor country by way of an income debit. (Note: The capitalised element of this income is considered to be reinvested and is included in the BOP under Financial Account, Portfolio Investment, Equity Securities, Liabilities )

14. Estimation errors are most likely to occur in the following situations:

- Up to date stocks are not available on the Asset side
- Up to date stocks are not available on the Liability side
- The geographical breakdown of the liabilities is not available

### ***CIIs abroad***

15. The SG1 recommendations on the treatment of investment into non-resident CIIs by the residents of the compiling country are clear i.e. **a completely symmetric treatment is proposed for residents investing in non-resident CIIs. ...** However, it is possible that there are difficulties in estimating the income from these investments by the compiler in the investor country.

16. Estimation errors are most likely to occur in the following situations:

- The up to date stock information on these assets (value of units in the non- resident CII) is not available
- The aggregate asset allocation of these CIIs abroad is not available.
- Country/currency attribution of these assets is also not available.

## Example of Correct Treatment

17. The most satisfactory method of examining these difficulties is through a worked example where the implications of following certain approaches can be shown and their impact on the Euro Area BOP examined.

18. First, we will consider a worked example of correct reporting by the compiler for the following:

- Countries where the CII is resident
- Non-resident investors into this CII
- Country where the non-resident assets of the CII are issued

19. In this example the CII is resident in Country B Country A is the country of the Non-resident investor into the CII and Country C is the issuer of the non-resident assets of the CII. The CII has no other assets and there are no resident investors in Country B into the CII. *We do not consider the service charges of the CII as these will mirror the treatment of income. In other words whatever fees are incurred by the CII and recorded as debits will be passed on to the investor.*

20. The BOP account for Period 1 for Country B is as follows:

### Reporting by country of resident CII – Country B

	Credits	Debits	Net
	€m'S	€m'S	€m'S
<b>Current Account</b>			
<i>Portfolio Investment Income</i>			
Income on Equity	105	318	-213
Income on Bonds	108		108
Income on MMI	105		105
<b>Balance on current a/c</b>	<b>0</b>		
	Assets	Liabilities	Net
	€m'S	€m'S	€m'S
<b>Financial Account</b>			
<i>Portfolio Investment</i>			
Equity	0	200	200
<i>Other Investment</i>	-200		-200
<b>Balance on Financial Account</b>	<b>0</b>		
<i>Errors and omissions</i>	<b>0</b>		

21. In the Current Account for Country B the income received on the non-resident assets in country C is €318 (credit). The debit income €318 corresponds to the same income attributed to Country A, the sole investor into the CII, in line with the approved treatment as set out above. **All of this income earned is also paid in the period.**

22. During period 1 the CII makes a dividend payment to the unit holders in Country A of €118 (recorded under other investment). Accordingly, the posting of €200 under Equity liabilities is the capitalised element of total earnings of the CII.

23. The postings in the Financial Account are explained as follows:

- €-200 represents the receipt of income on the assets of –318 which is offset by the dividend payment of 118
- €200 is the income capitalised by CII (not distributed)

24. If we now consider the BOP account for Country A –investor into CII in Country B.

#### **Reporting by country of non-resident CII investments – Country A**

	Credits	Debits	Net
	€m'S	€m'S	€m'S
<b>Current Account</b>			
<i>Portfolio Investment Income</i>			
Income on Equity	318	0	318
Income on Bonds	0		0
Income on MMI	0		0
<b>Balance on current a/c</b>			<b>318</b>

	Assets	Liabilities	Net
	€m'S	€m'S	€m'S
<b>Financial Account</b>			
Portfolio Investment			
Equity	-200	0	-200
Other Investment	-118	0	-118
<b>Balance on Financial Account</b>			<b>-318</b>

<b>Errors and omissions</b>	<b>0</b>
-----------------------------	----------

- The income credit of €318 reflects the income earned by the CII on its investments.
- The Financial account statement shows the following:
- -€200 relates to the undistributed element of the earnings of the CII and therefore are an increase in Equity assets of Country A
- -€118 is the payment of the dividend by the CII in country A

25. Finally we will consider the BOP account for the country C which issued the non-resident assets of the CII

**Reporting by country of assets- Country C**

	Credits	Debits	Net
<b>Current Account</b>	€m'S	€m'S	€m'S
<i>Portfolio Investment Income</i>			
Income on Equity		105	-105
Income on Bonds		108	-108
Income on MMI		105	-105
<b>Balance on Current a/c</b>			<b>-318</b>

	Assets	Liabilities	Net
<b>Financial Account</b>	€m'S	€m'S	€m'S
Portfolio Investment			
Equity	0	0	0
Other Investment	318	0	318

<b>Balance on Financial Account</b>	<b>318</b>
-------------------------------------	------------

<i>Errors and omissions</i>	0
-----------------------------	---

26. As outlined above the full income payable on the liabilities to the CII are paid in the reporting period i.e. €318 is the accrued income payable to country B and is also in fact paid. There is therefore a deficit on the Current account which is balanced in the Financial account by the decrease in Other Investment assets.

27. If all countries A,B&C are members of the Euro area the consolidated BOP statement for transactions with non-residents of the Area should be zero in respect of these transactions as they are all resident- to- resident transactions. The statement is set out below:

**Calculation of Euro Area BOP for AB&C in respect of these transactions**

	Credits	Debits	Net
<b>Current Account</b>	€m'S	€m'S	€m'S
<i>Portfolio Investment Income</i>			
Income on Equity	423	423	0
Income on Bonds	108	108	0
Income on MMI	105	105	0
<b>Balance on Current a/c</b>			<b>0</b>

	Assets	Liabilities	Net
<b>Financial Account</b>	€m'S	€m'S	€m'S
<i>Portfolio Investment</i>			
Equity	-200	200	0

<i>Other Investment</i>			
	0	0	0

<b><i>Balance on Financial Account</i></b>	<b>0</b>		
--	----------	--	--

<i>Errors and omissions</i>	0		
-----------------------------	---	--	--

28. *This statement should only be shown on a net basis, the gross flows are included for illustrative purposes only.*

### **Example of Incorrect Treatment**

29. Having considered how the correct reporting should be made, we now explore the consequences of possible asymmetries or misreporting in this worked example.

30. The main areas for possible errors in the recording of accrued income are the following:

#### **Country C - Country of non-resident issuer of assets held by CII.**

31. The main difficulty that could arise here is if the compiler in Country C did not identify the correct element of accrued income payable by the resident issuer of the securities to the non-resident CII investor. This type of error, as it is of a more general nature, is not specifically relevant to this analysis and is not unique to the treatment of CIIs. Accordingly this issue will not be given further consideration here.

#### **Country B – Country of the resident CII,**

32. The main areas for potential problems in recording accrued income are that the compiler does not apply the correct treatment where income earned on the assets of the CII should be attributed to the non-resident investor into the CII in country A. Our understanding is that this treatment, which is in line with the STC approved proposals of SG1 is being correctly applied in countries where the stock of CIIs with non-resident investors is most significant in the Euro Area.

#### **Country A - Country of non-resident investor in the CII**

33. This is the main area of difficulty. The compiler in country A must know the following:

- The value of the stock of CII assets held in the country B
- The breakdown of the assets in order to estimate the income i.e. the appropriate return on each asset category and also ideally the country and currency of the investments.
- The value of any dividend payments

34. At present there is an obvious asymmetry in this area and we need to consider the implications for the Euro Area Balance of Payments.

35. If the compiler in country A only records the dividends receivable from the CII in country B, the BOP statement for Country A would be as follows:

**Reporting by country of non-resident CII investor – Country A**

	Credits	Debits	Net
	€m's	€m'S	€m'S
<b>Current Account</b>			
<i>Portfolio Investment Income</i>			
Income on Equity	118	0	118
Income on Bonds	0		0
Income on MMI	0		0
<b>Balance on current a/c</b>			<b>118</b>

	Assets	Liabilities	Net
	€m'S	€m'S	€m'S
<b>Financial Account</b>			
<i>Portfolio Investment</i>			
Equity	0	0	0
Other Investment	-118	0	-118
<b>Balance on Financial Account</b>			<b>-118</b>

<b>Errors and omissions</b>	<b>0</b>
-----------------------------	----------

36. If we then leave the original BOP statements for country B and C unchanged and consolidate them with the revised BOP statement for Country A to recalculate the Euro area BOP we get the following result:

**Calculation of Euro Area BOP for AB&C in respect of these transactions**

	Credits	Debits	Net
	€m'S	€m'S	€m'S
<b>Current Account</b>			
<i>Portfolio Investment Income</i>			
Income on Equity	223	423	-200
Income on Bonds	108	108	0
Income on MMI	105	105	0
<b>Balance on Current a/c</b>			<b>-200</b>

	Assets	Liabilities	Net
	€m'S	€m'S	€m's
<b>Financial Account</b>			
<i>Portfolio Investment</i>			
Equity	0	200	200
Other Investment	-118	118	0
<b>Balance on Financial Account</b>			<b>200</b>



37. This results in a Balance of Payments deficit for the Euro area of €220. In the context of this sector where capitalising of all or a large element of income earned by CIEs is common this is a serious error. In other words the greater the difference between the dividend payable by the CII to unit holders and the income earned on the assets of the CII the greater the asymmetry.

## **Incorporation of Actual Data**

38. We now consider the implications of this asymmetry for the Euro/EU area by reviewing the available data on CIEs currently available.

### **EU DATA ON CII INVESTMENT In €ms at End 2000**

Country	Resident investment into CIIs abroad	Non-resident investment into resident CIIs	Total resident CIIs
GB	2,540	2,063	424,286
FR	23,400	15,400	845,800
DE	130,493	20,125	821,211
AT	10,000	8,000	92,000
FI	10,000	1,160	14,235
PT	2,221	421	21,550
IE	18,953	203,000	208,000
LU	20,000	844,000	875,000
IT	86,097	1,915	449,931
Total	303,704	1,096,084	3,752,013

Note: this data is not available from other EU countries not detailed above.

39. It is clear from the data available that in general there is a relatively low level of investment into EU/Euro resident CIIs. The obvious exceptions are Ireland and Luxembourg. The analysis below measures the degree of foreign participation in Resident CIIs.

### **Participation by Non –Resident Investors in Resident CIIs**

Country	Non-resident investment into resident CIIs	Total resident CIIs	% participation of non-residents.
GB	2,063	424,286	0%
FR	15,400	845,800	2%
DE	20,125	821,211	2%
AT	8,000	92,000	9%
FI	1,160	14,235	8%
PT	421	21,550	2%
IE	203,000	208,000	98%
LU	844,000	875,000	96%
IT	1,915	449,931	0%
Total	1,096,084	3,752,013	29%

40. From the table above, we can see that in overall terms there is a significant level of non-resident investment in resident CII of 29% this is almost entirely due to the nature of the CII industry in both Ireland and Luxembourg. If we exclude these countries from the participation calculation we get a result of 2% participation.

41. It follows therefore that when considering the case of CII in the reporting economy the major players are Luxembourg and Ireland. *In Appendix 1 we can see that the recommended treatment is being followed in Luxembourg and it is also the case that Ireland is following the recommended treatment.*

42. We will now consider the case of resident investment into CII abroad

#### **Resident Investment into CII abroad as a percentage of Total EU/EURO Area**

Country	Resident investment into CII abroad	%of EU/EURO Area
GB	2,540	1%
FR	23,400	8%
DE	130,493	43%
AT	10,000	3%
FI	10,000	3%
PT	2,221	1%
IE	18,953	6%
LU	20,000	7%
IT	86,097	28%
Total	303,704	100%

43. The level of investment into CII abroad of 303bn is considerably less than the level of non-resident investment into resident CII of €1,096bn. This suggests that a large element of the investment into the CII in Ireland and Luxembourg comes from outside the Euro/EU areas.

44. To the extent that this investment into CII abroad is into CII in other Euro Area countries it is essential that the symmetric treatment of recording proposed in the SG1 document is followed. In other words, all the income earned on assets of the CII abroad, as they relate to resident investors, are recorded as credits in the resident BOP. Moreover, if the country where the CII is resident is in the Euro area and follows the recommended treatment and if the country of the investor into this CII (also Euro area resident) only includes as income the distributions (dividends) from this non-resident CII, this will create asymmetries in the Euro Area BOP.

45. From our discussions at the first Task Force meeting it is clear that some countries have difficulties in applying the correct treatment for recording accrued income on resident investment into non-resident CII. If we assume that all of the investment in the above table of €303bn are into other Euro Area CII, and these CII do not pay dividends, the annual asymmetry in the Euro area would be approximately €9bn (€303bn @3% income)). The Euro Area had a Balance of Payments surplus for 2000 of €1.4bn.

46. Accordingly, we now investigate an estimation method for income earned by non-resident CIIs with resident investors for the Euro Area.

## **Estimation Method**

47. How can we estimate the Income on CII investment abroad? we require, as already outlined above, the following :

- The value of the stock of CII assets held abroad
- The breakdown of the assets of the foreign CII in order to estimate the income i.e. the appropriate return on each asset category and also ideally the country and currency of the investments.
- The value of any dividend payments by the non-resident CII to residents.

## **Value of Shares/Units in CIIs Abroad**

48. This can be obtained by using an aggregate or security by security information on stocks. The compilation of this data is a part of IIP and CPIS compilation. It seems reasonable to suppose that once all of the countries meet, at a minimum, the *acceptable* data requirements for Portfolio Investment as set out in the TF-PICS document that this position data will be available.

## **Breakdown of Assets Held by the CIIs**

49. There are a number of data sources here for the breakdown of asset categories:

- Survey of Investors into the non-resident CIIs
- Money Market Fund information available from Money&Banking statistics compiled in the Euro Area member states
- Security by security information will give details of the fund investment strategy e.g. Deutsche US Bond fund
- Data exchange with the counterpart country where the CII is resident
- Quarterly Portfolio Investment survey by the Economist magazine which gives a breakdown for each asset category by country /currency.

## **How to estimate a rate of return for CIIs abroad.**

50. First we need to estimate the position or stock of investment into CIIs abroad. Secondly we arrive at a breakdown between Equity, Bonds&Notes and Money Market Instruments. We then need to apply a rate of return to these asset positions in order to calculate the accrued income. A detailed approach is outlined in Section 1 of the Bank of Finland document & spreadsheet calculation in Appendix 6. Here a precise estimation of positions and related income is detailed. However we have also a simpler approach and this is set out in the following paragraphs.

51. For equity we can reasonably apply a flat yield of 2%. Reference to the daily information detailed in the Financial Times under *FTSE Actuaries Share Indices - European Series* shows that this is a reasonable yield to apply to equity (see Appendix 2 for further details).

52. For Bonds & Notes and MMI we need information on the currency that the Bonds or MMIs are denominated. As far as MMIs are concerned we know from the paper “Steady State Approach on the Holders of MMF Shares/Units” presented at the May 2002 WGBP&ER that the level of non-resident investment into Euro Area Money Market Funds is approximately 100m and of this almost 70m comes from outside the Euro Area. It also appears that Ireland and Luxembourg are the most important countries for Money Market Funds with non-resident investors. It would seem possible to arrive at a reasonable estimate of the stock of resident investment into non-resident MMFs. The balance of total investment would then be in Bond and equity funds. In the absence of any further firm information we could use the ratios given in the Economist Quarterly Portfolio Poll (see appendix 3& appendix 4) for investment into Bonds and Equity and Cash. In this way we could then arrive at a composite rate of return.

53. In Appendix 5 we have detailed an approach to estimating the income on CIIs abroad which could be used in the absence of any information on Asset Allocation of a CII abroad. It can be seen that using the Economist Portfolio Poll data, a composite yield or rate of return of 3% can be applied to the stock of CII abroad for the final quarter of 2000. It is assumed that the country of the CII is known or at least the MUMs/NON MUMs breakdown of the stock is known. As the IIP must be compiled on a step 2 basis from 2001 onwards it is assumed that this breakdown for CIIs will be possible. In addition it should be noted that some estimation for fees payable by the investor need to be factored in to this calculation. In general an acceptable estimate of fees payable is 1% of the Net Asset Value of the CII.

54. Clearly an asymmetry will still exist if the compiler in the reporting economy is using firm data while the compiling country with the investment into a CIIs abroad is using estimates in relation to the same income. In general it will clearly improve the quality of the Euro Area accrued income statistics if one agreed rate of return for CII investment. This rate of return could apply to each asset class or simply to the entire investment.

55. There is the broader issue that needs to be examined in relation to extending this treatment to countries outside of EMU/EU as otherwise in the Global Balance of Payments there will still be asymmetries. This issue is under consideration at the IMF.

## **Recommendations**

56. In the light of the analysis outlined above we will now make some recommendations aimed at improving the recording of income on an accruals basis as it relates to investments in

CIIIs abroad. (We consider that the recording of income on an accruals basis in respect of CIIIs in the reporting economy to broadly follow the recommended treatment).

- It is recommended that all Member States identify the value of investments in CIIIs abroad. This data is available to some extent from Financial Accounts and Money and Banking Statistics and also from IIP data.
- In addition to estimating the stock it is recommended that Member States obtain or estimate the geographical analysis of this stock data and the asset allocation strategy of the CIIIs abroad.
- Any estimation procedure should involve the use of the procedures outlined in the attached Bank of Finland paper or some benchmark such as the Economist Portfolio Poll data as outlined in this paper.
- An optimal element of the estimation procedure is that an agreed rate of return for either overall CII investment in the Euro Area or for each class of investment by CIIIs i.e. Bond Funds, Equity Funds and Money Market Funds is agreed and set centrally and made available in the ECB Financial Markets Database (FMDB). In this context the following could be considered :
  - (i) the 3 month EIBOR rate could be applied to MMFs,
  - (ii) a 2% rate of return could be applied to equity funds
  - (iii) An appropriate Euro bond benchmark yield could be applied for Bond Funds

## Appendix 1: Collective Investments Institutions In Luxembourg

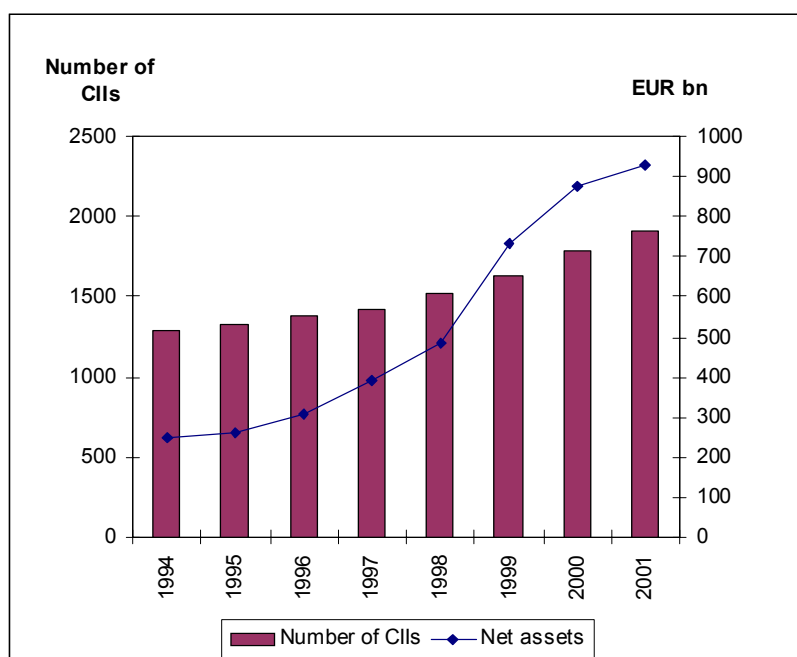
### Introduction

57. This note aims at giving an overview of the collective investment institution characteristics as regards the estimation of income, and presents methods used for Bop income estimation, and possible improvements. From the balance of payment viewpoint, Luxembourg could be seen as a transit country for investment income, and as a provider of financial services. Therefore, The distinction between income and financial services is crucial.

### The impact of implementation / non-implementation of recommended treatment on the income earned.

### Overview of Luxembourg Collective Investment Institutions (CIIs) industry.

58. End of 2001, the number of active CIIs was 1908, representing 6740 separate compartments. Since 1994, the total assets held by CIIs is growing continuously as follows:



### Implementation / non implementation of recommended treatment

59. The BCL is in charge of the estimation of investment income since the 1st of January 2002. Therefore, rough estimations have been carried out in order to compare two methods of recording the debit side of resident CIIs income. We assume the estimation method is the same for the credit side in both cases.

60. The first method is based on the distributed earnings in cash or free shares declared by CIIs and the second one considers that all resident CIIs incomes are attributed to the shareholders.

61. From September 2001 to March 2002 (7 months), the estimations give about EUR 2,5 bn of distributed earning and about EUR 9 to 10 bn of income attributed to non-resident shareholders.

62. There is a big difference in the figures obtained. But the second method need to be supplemented by other data firstly, on the fees paid by the investors to the resident CIIs (FISIM<sup>1</sup>) that could be very roughly evaluated to EUR 6 to 7 bn and secondly, on the fees paid by resident CIIs for taxes and financial services abroad.

63. The offsetting entry in the financial account is also difficult to deal with since fees paid by investors could be included in the purchase price and even included in each transactions made by the managers on CIIs' assets.

64. The fees paid by the holders, that have to be indirectly measured, should be taken into account for the estimation of the reinvested earnings.

## **Feeder and Master funds**

### ***Growth of fund of funds in Luxembourg***

65. The net assets of resident fund of funds increase from 1,8% of the total net assets of resident CIIs end of 1998 to 6,8% at the end of 2001. However in Luxembourg, the funds of funds encompass the following three categories according to investment policy:

1. CIIs investing in other CIIs in order to diversify the risk.
2. Master fund investing at the most in 3 Feeder funds.
3. Funds of hedge funds

66. Remark funds of "fund of funds" are not allowed in Luxembourg.

67. As far as master funds are concerned, the total asset is about 9 EUR bn of which 72% are invested in resident funds and 27% in non-resident funds.

68. This information is collected for prudential purpose on the asset side. On the liability side, no information is available on feeder funds held by non-resident master funds.

## **Treatment of capitalising funds**

69. Generally, a compartment is commercialised with several alternatives. The basic ones are the choice between capitalisation and distribution. However, other differences could occur according to the kind of investors. For instance privileged clients may obtain a better income. Furthermore, other services provided by the CIIs may have an impact on the distributed

---

<sup>1</sup> Financial intermediation services indirectly measured

income such as the currency used that is related to the country of trading. Therefore, the amounts distributed or distribution rates depend on the kind of shares, and that is the same for reinvested income.

70. Since it is not possible to distinguish pure capitalising funds/compartments from pure distributing funds/compartments, a single method should be applied for the income. For the offsetting entry in the financial account, the estimation could be based on CIIs accounts using a method like for direct investment. Nevertheless, the geographical breakdown according to the holder of capitalising funds is unlikely not the same as for distribution mainly because of taxes.

71. For Luxembourg balance of payments, the scheme of registration could roughly approximate by the following example that is based on fictive figures:

	CIIs accounts		BOP		Geographical breakdown		
	Credit	Debit	Credit	Debit	Criteria	LU	RoW
Income on assets	10 000		9 000		Issuer	10,0%	90,0%
Income distributed		2 000		2 000	Holder	0,0%	100,0%
<i>Income non-distributed</i>				7 760	Holder	3,0%	97,0%
Financial services from holders	5 000		4 880		Holder	2,4%	97,6%
Financial services paid		4 000		2 400	Provider	40,0%	60,0%
Taxes		1 000		600		40,0%	60,0%
Total	15 000	7 000	13 880	12 760			
<i>Reinvested earning</i>				7760			

### **Income of CIIs in the reporting and income on investments into CIIs abroad.**

72. Luxembourg solution to avoid asymmetry is to apply similar methods for the estimation of income. Income of resident CIIs is estimated using monthly stocks and quarterly and yearly information on breakdown by instruments and countries of issuers. The yield rates are applied to the monthly stocks. Where instruments are CIIs a global yield is used (average weighting rate without distinction of instrument and countries). The same rate is applied on the stocks of non-resident CIIs for estimating income on investments into CIIs abroad.

73. Since this amount of income is relatively small for Luxembourg, no estimation is made on the FISIM paid and no offsetting entry is made in the financial account. However, FISIM could be easily estimated according to resident CIIs information that could provide an average rate. The problem of the estimation of reinvested earnings could also be solved with resident CIIs information but the accuracy of such estimates is difficult to appreciate.

### **Impact on the euro area**

74. The non-implementation of recommended treatment that is recording only distributed earnings has clearly a large impact on the asymmetry of the income item. Nevertheless,



Financial services and more precisely the FISIM should counterbalance part of this asymmetry. The gap of reinvesting earnings that are not considered as income remains in the current account flows.

75. The effect on the net intra-asymmetry depends on the stocks held by each country and the way income is registered.

76. The same asymmetry occurs at EU/EMU level. Flows with the rest of the world are undervalued. Furthermore, and it is difficult to put an interpretation on the net without knowing the national stocks of non-resident CIIs held by EU/EMU members and the national method of recording in the balance of payments.

## Appendix 2 - Example of data source for income on Equity (dividend yield)

FTSE Actuaries Share Indices		European series				
Produced in conjunction with the Faculty and Institute of Actuaries						
May 03	Euro Index	Day's %	change points	Yield gross %	xd adj ytd	Total retrn (Euro) €
FTSE Eurotop 300	1211.29	-0.82	-9.96	2.43	11.92	1334.51
FTSE E300 Eurobloc	1266.69	-1.22	-15.63	2.36	9.18	1373.74
FTSE E300 Ex-Eurobloc	1156.46	-0.44	-5.10	2.50	14.13	1291.34
FTSE E300 Ex-UK	1266.21	-0.96	-12.22	2.27	10.15	1368.13
FTSE Eurotop 100	2706.48	-0.86	-23.58	2.41	26.66	1034.48
FTSE Euro 100	1036.03	-1.29	-13.53	2.37	7.47	1116.61
FTSE EuroMid	1365.21	-0.71	-9.74	2.41	14.45	1545.62
FTSE EuroMid Eurobloc	1283.20	-0.27	-3.51	2.27	8.02	1423.43
FTSE EuroMid Ex-UK	1293.99	-0.42	-5.40	2.09	14.68	1425.98
<b>FTSE Eurotop 300 Industry Sectors</b>						
<b>RESOURCES</b>	1369.52	+1.26	+17.09	2.83	9.03	1553.56
Mining	1806.05	+1.51	+26.91	3.01	30.71	2071.35
Oil & Gas	1288.85	+1.24	+15.79	2.81	7.23	1428.01
<b>BASIC INDUSTRIES</b>	1320.60	-0.22	-2.87	2.59	19.35	1493.43
Chemicals	959.62	-0.76	-7.39	2.73	16.62	1088.18
Construction & Bld Matls	1269.14	+0.28	+3.58	2.35	8.11	1381.46
Forestry & Paper	1657.96	+0.43	+7.06	3.16	52.83	2022.98
<b>GENERAL INDUSTRIALS</b>	1202.62	-1.93	-23.64	2.46	14.06	1317.28
Aerospace & Defence	674.65	-0.88	-5.99	2.46	5.86	742.42
Diversified Industrials	937.80	-0.25	-2.35	2.78	11.15	1036.90
Electronic & Elect Equip	1358.30	-3.46	-48.72	2.08	13.87	1440.15
Engineering & Machinery	919.56	-1.09	-10.11	3.13	18.15	1034.32
<b>CYCLICAL CONS GOODS</b>	1262.12	-0.61	-7.80	1.93	12.66	1404.19
Automobiles & Parts	830.75	-0.65	-5.42	2.13	10.67	918.87
Household Goods & Texts	1941.97	-0.54	-10.46	1.45	6.89	2062.56
<b>NON-CYC CONS GOODS</b>	1480.11	-0.36	-5.30	1.75	14.74	1614.02
Beverages	1330.23	+1.54	+20.17	2.41	12.88	1487.79
Food Producers & Processrs	1201.28	-0.25	-3.07	1.91	11.16	1297.85
Health	1459.40	-1.19	-17.53	1.13	7.75	1550.90
Personal Care & Hse Prods	1661.46	-0.51	-8.45	1.14	4.12	1734.15
Pharma's & Biotech	1231.92	-0.83	-10.36	1.52	12.33	1304.41
Tobacco	2718.48	+2.01	+53.48	3.42	65.27	3247.98
<b>CYCLICAL SERVICES</b>	989.96	-1.66	-16.74	2.31	6.02	1085.51
General Retailers	904.38	-0.47	-4.27	2.48	4.01	990.66
Leisure Entertmt & Hotels	971.74	+0.03	+0.26	3.47	5.74	1068.21
Media & Photography	972.03	-2.88	-28.83	2.29	6.99	1032.38
Support Services	851.45	-1.65	-14.30	1.54	6.34	916.54
Transport	663.49	-0.85	-5.69	2.47	0.00	734.39
<b>NON-CYCLICAL SERV</b>	757.28	-4.54	-36.04	1.90	3.71	810.78
Food & Drug Retailers	1089.01	-0.69	-7.62	2.22	9.70	1175.70
Telecommunication Servs	662.06	-5.68	-39.83	1.80	2.43	696.00
<b>UTILITIES</b>	1329.85	-0.49	-6.54	4.04	9.68	1571.72
Electricity	934.80	-0.59	-5.50	4.39	7.88	1082.43
Gas Distribution	1497.12	+0.10	+1.46	2.44	7.27	1754.58
Water	743.53	-1.08	-8.10	4.80	0.00	933.38
<b>FINANCIALS</b>	1366.42	+0.18	+2.52	2.91	17.86	1523.10
Banks	1054.21	+0.54	+5.61	3.05	15.40	1173.43
Insurance	885.96	-0.83	-7.41	2.22	4.15	945.64
Life Assurance	789.06	+0.02	+0.16	3.63	17.29	870.96
Investment Companies	1244.44	-0.40	-5.05	2.32	15.88	1357.74
Real Estate	874.14	+0.30	+2.64	3.38	0.00	1001.34
Speciality & Other Fin	1000.98	-2.83	-29.10	1.59	7.10	1073.30
<b>INFORMATION TECH</b>	740.65	-6.44	-51.01	1.27	6.27	762.66
Information Tech Hardware	837.83	-7.56	-68.50	1.50	8.66	865.42
Software & Computer Serv	466.19	-2.45	-11.70	0.49	0.98	475.03

Further information is available on <http://www.ftse.com>. © FTSE International Limited 2002. All rights reserved. 'FTSE', 'FT-SE' and 'Footsie' are trade marks of the London Stock Exchange and The Financial Times and are used by FTSE International under license. 'Eurotop' is a registered trade mark of the Amsterdam Stock Exchange. FTSE Eurotop indices are compiled by FTSE International.

### FTSE GOLD MINES INDEX

	% chg		Mkt Cap \$bn	% of Gold Mines	Gross div yld %	Total return	52 week	
	May 3	since 31/12/01					High	Low
<b>Gold Mines Index (18)</b>	<b>1296.86</b>	<b>+54.64</b>	<b>46.80</b>	<b>100.00</b>	<b>0.93</b>	<b>1393.64</b>	<b>1296.86</b>	<b>745.72</b>
<b>Regional Indices</b>								
Australasia (4)	1552.7	+35.93	2.86	6.10	1.26	1710.66	1586.52	812.58
Africa (5)	2074.38	+117.3	12.10	25.86	1.54	2423.28	2090.33	809.04
Americas (9)	1061.06	+40.11	31.84	68.04	0.66	1096.78	1061.06	690.96

Copyright, FTSE International Limited 2002. All rights reserved. For further information please contact FTSE Client Services on +44 (0) 20 7448 1810. Figures in brackets show number of companies. Basis US Dollars. Base Values: 1000.00 31/12/92. † Partial.

## APPENDIX 3 - Example of Economist Quarterly Portfolio Poll - Q2 2001

### Portfolio poll

We have changed the format of our quarterly portfolio poll, so the table lacks comparative figures for the euro area and the rest of Europe. Otherwise this poll is similar to the most recent exercises—and so is the gloomy state of the world economy. With the spectre of world recession looming, investment managers remain prudent. Credit Suisse and Lehman have considerably reduced their holdings of equities; only Commerzbank greatly raised its equity allocation. There are few economic signals that inspire confidence, and growth is stalling around the globe. Despite this, our fund managers' view of American shares was surprisingly upbeat; all except Credit Suisse raised their holdings this quarter. However, all our managers cut their preferred holdings of euro-zone bonds.

2nd quarter 2001	Holdings by instrument, %										Equity holdings by area, %										Bond holdings by currency, %									
	Equities		Bonds		Cash		United States		Other Americas		Britain		Euro area		Other Europe		Japan		Other Asia		Dollar		Yen		Sterling		Euro-zone		Others	
Robeco Group	53	47	0	▲	57	▲	2	10	15	4	4	9	3	▼	36	▲	19	▲	11	▲	31	▼	3	▲						
Julius Baer PB	54	41	5 <sup>†</sup>	▲	65	▲	0	4	14	5	8	4	▼	78		0	0	0	11	▼	11	▲								
Commerz Int. CM	59	▲	41	▼	0	57	▲	2	11	▲	2	11	▲	2	31	▼	24	▼	8	▲	28	▼	9	▲						
Credit Suisse PB	34	▼	46	▲	20 <sup>†</sup>	▲	47	▼	0	11	▲	25	3	14	0	▼	89	▲	0	0	11	▼	0							
Lehman Brothers	60	▼	35	▲	5	49	▲	0	9	19	5	13	5	5	49	▼	22	▲	3	▼	24	▼	2							
Standard Life	62	▲	38	▼	0	55	▲	1	11	17	4	10	2	2	26	▼	30	▲	5	▲	39	▼	0							
Daiwa	54	▼	40	6	▲	48	▲	2	▲	9	2	15	3	3	42	▲	16	▼	5	31	▼	6								
Average	54	▼	41	5	▲	54	▲	1	9	18	4	11	3	3	50	▲	16	▲	5	▲	25	▼	4	▲						
Neutral*					53	▲	2	▼	10	17	5	11	2	2	26	▼	28	▲	5	35	▼	6								

\* Morgan Stanley Capital International (developed) world equity index; Salomon Brothers world government-bond index † Of which 3% invested in non-traditional funds ‡ Of which 11% invested in alternative investments



## Appendix 4 Example of Economist Portfolio Poll - Q4 2000

	Fourth quarter 2000													▼▲ A change of 5% points or more on last quarter				▼▲ A change of less than 5% points on last quarter			
	Holdings by instrument, %				Equity holdings by area, %									Bond holdings by currency, %							
	Equities	Bonds	Cash	United States	Americas	Britain	Germany	France	Europe	Japan	Asia	Other	Dollar	Yen	Sterling	Euro-zone	Others				
Robeco Group	50	50	0	53	3	10▲	4	6▲	14▲	7▼	3▼	33▲	15▼	5▲	45▲	2▼					
Julius Baer PB	54	39	7 <sup>†</sup>	60	0	4▲	5	3	11▼	12	5	77▼	0	0	15▲	8▲					
Commerz Int. CM	53▲	47▼	0	49▲	0	7▲	6	4	20	12▼	2▼	30	28▲	3▼	37▲	2▼					
Credit Suisse PB	43	45	12 <sup>†</sup>	51▲	0	9▲	7	5	9▼	14▲	5	88	0	0	12	0					
Lehman Brothers	60▲	35▼	5	45▼	2▲	10▲	11▲	10▲	11▼	9▼	2	40▲	12	6▲	37▼	5▲					
Standard Life	60	40	0	52▼	1	11▲	5	6	13▲	10▼	2▲	28▼	25▼	4▼	42▲	1▼					
Daiwa	50▼	45▲	5	39▼	2▲	9▲	7▼	9	16▲	14▼	4	35▲	18▼	6▲	37▼	4▼					
Average	53	43	4	50▼	1	9▲	6	6▲	13▼	11▼	3	47▲	14▼	3	32▲	3▼					
Neutral*				51▼	2▼	10▲	4	6▲	14▲	11▼	2▼	26▼	26▼	5▼	36▲	7					

\*Morgan Stanley Capital International (developed) world equity index; Salomon Brothers world government-bond index

<sup>†</sup>Of which 3% invested in non-traditional funds

<sup>‡</sup>Of which 7% invested in alternative investments

## Appendix 5: Method of Estimating Income of CIIs when no Asset Allocation information is available

### Information from Economist Quarterly Portfolio Poll - January 13 2001

Country/currency

%Equity	DE	FR	US	JP	Other	Weighted yield
<i>proportion</i>	5	5	5	5	5	
<i>yield</i>	2%	2%	2%	2%	2%	2%

%Bonds	US\$	JPY	GBP	Euro	Others	Weighted yield
<i>Weighting</i>	0.26	0.26	0.05	0.36	0.07	1
<i>yield</i>	4.8%	0.4%	5.2%	4.3%	4.5%	
	0.01235	0.000962	0.002615	0.015624	0.00315	3.5%

	Euro	Weighted yield
Cash	5%	5%

Overall yield based on 53% equity, 43% Bonds and 4% Cash

Proportions	Asset type
53%	Equity
43%	Bonds
4%	Cash

<b>Total yield</b>	<b>3%</b>
--------------------	-----------

<b>Fees Payable</b>	<b>1%</b>
---------------------	-----------

A flat yield of 1% of Net Asset Value of the CII should be applied.

<b>Net yield on CII Investment</b>	<b>2%</b>
------------------------------------	-----------

## **Appendix 6: How to estimate a rate of return for CIIs abroad<sup>2</sup>**

77. This paper describes estimation methods for CII investment income for Balance of Payments purposes. The paper is divided into three sections: income on resident CIIs' investments, income on resident end-investors investments in non-resident CIIs, and income on non-resident end-investors investment in resident CIIs'. Non-resident investment income on resident CIIs' was set as a main task to the follow-up group in TFPII.

78. CII investment income in BoP can be divided into two different categories. First one is the share of the profits that the CII pays out to the investors. Second one is the income that the CII earns on its investments: dividend and coupon payments. In the BoP, asset side CII income consists of both of previously mentioned parts whereas liability side CII income includes only the first type of income. It was necessary to include all parts of the CII income in the practise to maintain picture of the problem as a whole. Generally, when speaking of income on CIIs it includes also valuation changes, which from the BoP perspective should be reported separately.

### **Credits: income on resident end-investors investment in non-resident CIIs**

79. In Finland, stock of non-resident CII investment is compounded with the equity stock in the survey data. Hence, it was necessary to break down the stock between equity securities and CII units. The stock was divided by investor sector, and each sector data was divided geographically and by instrument. Basis for the breakdown within each sector was the information from the biggest reporter. Assumption was made that all investments in non-resident CIIs' are made in equity funds (as a result of information from reporters with biggest figures).

80. Income as percentage from the stock was calculated from the existing portfolio investment asset survey data, which contains income and stock broken down to instruments and geographical areas. For each instrument (equity securities, bonds and notes, and money market instruments) and geographical area (extra/intra euro area) income as percentage was individually determined. Income on non-resident CII investment was then calculated utilizing estimated stock and income percentage.

81. The reason for not using market indexes as an approximate for return was that index income includes valuation and exchange rate changes which both are reported separately in the BoP.

---

<sup>2</sup> Contribution by Finland

82. Stock was not divided into growth and income units due to the recommendation made by EMI<sup>3</sup>. Furthermore, on the basis of the information from reporting institutions all units are assumed to be growth units.

### **Credits: income on resident CIIs' investment in securities issued by non-residents**

83. Estimate was based on the CII census survey stock data that is collected quarterly by Statistics Finland. The data includes resident CIIs' investment abroad broken down geographically and by instrument. Data is also divided by the type of the resident CII (into money market funds and other CIIs).

84. Income was estimated as in the previous subsection according to the survey data, and by using existing time series. Income was calculated separately for money market funds and other CIIs' weighted by instruments.

### **Debits: income on non-resident investors investment in resident CIIs**

85. Estimation was based on the stock data from Statistics Finland. Data includes geographical breakdown. Data is also divided into money market funds and other CIIs.

86. Income was estimated in two ways. In the first method, share of profits paid by the biggest investment fund company to its income units was used as an approximate for the income. Total share of profits was proportioned to the stock. This was made separately for the money market funds and other CIIs. Income was then calculated by using estimated income percentage and stock of non-resident investors' investment in resident CIIs.

87. The second method is based on the BoP portfolio investment liabilities survey data. The return reported in the survey data by instrument was used as an approximate for the income. Calculated income as a percentage was then applied to the stock of non-resident investors' investment in resident CIIs.

88. Stock was not divided into growth and income units due to the recommendation made by EMI<sup>1</sup>. In Finland, according to the biggest brokers all foreign investments are made in growth units.

89. Generally, in Finland the recent development in the mutual fund market and tax incentives have led the share of income units to decrease. Most of the new funds are offering only growth units.

---

<sup>3</sup> European Monetary Institute, BOP Financial Flows and Stock Task Force, Final report by sub-group 1: Recording of income on an accruals basis for collective investments institutions, money market instruments and other Bonds. 25 November 1997.





### Income on non-resident investment in resident Clls', m eur

NA1=whole world, NU4=extra euro area, MA1=euro area  
 Stock=value of the foreigners' fund holdings  
 NA=not available

#### Method 1

Year	Money market funds			Other Clls								
	Income NA1	Income NU4	Stock NA1	Income % NA1	Income % NU4	Stock NA1	Income % NA1	Income % NU4				
2000	2529	NA	179497	NA	1.41%	NA	21491	NA				
2001	6858	6345	326125	301717	2.10%	2.10%	21268	18843	961529	851878	2.19%	2.21%

#### Method 2 Stock as in method 1

Year	Money market funds		Other Clls	
	Income NA1	Income % NA1	Income NA1	Income % NA1
2000	9540	5.31%	7012	0.71%
2001	16756	5.14%	12549	1.31%

#### Difference between method 1 and method 2

Year	Money market funds		Other Clls	
	Income NA1	Income NA1	Income NA1	Income NA1
2000	-7010		14479	
2001	-9898		8720	

## Resident CILs' investment income, m eur

NA1=whole world, NU4=extra euro area, MA1=euro area

	Money market funds						Other CILs									
	Income NA1		Income NA1		Stock, NA1		Income NA1		Income NA1		Stock NA1					
	Quarterly	Yearly	Quarterly	Yearly	NA1	NA1	Income% NA1	Income% NU4	Income NA1	Income NU4	Income% NA1	Income NU4				
2000001	1.09	4.30	18.58		341		0.32%	0.00	0.75	4.07	17.57	104.25	4.734	0.09%	1.92	1.87
2000002	1.43				428		0.33%	0.17	1.13	5.43			5,397	0.10%	2.57	2.73
2000003	1.78				426		0.42%	0.32	1.29	8.08			6,136	0.13%	4.17	3.77
2000004	1.74	5.65			430		0.41%	0.19	1.25	14.44	37.47		6,186	0.23%	7.73	6.48
2000005	1.86				431		0.43%	0.15	1.68	11.10			6,210	0.18%	4.87	6.25
2000006	2.05				571		0.36%	1.68	0.62	11.93			6,759	0.18%	6.08	5.77
2000007	1.29	3.87			578		0.22%	0.93	0.52	7.28	27.85		6,838	0.11%	3.16	4.10
2000008	1.62				599		0.27%	1.17	0.64	11.52			7,195	0.16%	6.06	5.17
2000009	0.96				612		0.16%	0.63	0.43	9.04			7,975	0.11%	3.79	5.28
2000010	1.14	4.75			614		0.19%	0.69	0.49	7.12	21.37		8,001	0.09%	3.02	3.91
2000011	1.48				585		0.25%	1.48	0.50	6.62			7,683	0.09%	2.77	3.86
2000012	2.13				614		0.35%	1.37	0.94	7.62			7,584	0.10%	1.68	5.91
2001001	2.46	7.64	57.41		647		0.38%	1.42	1.29	10.00	31.56	164.91	7,983	0.13%	2.44	7.26
2001002	2.26				609		0.37%	1.37	1.14	9.98			7,466	0.13%	2.30	7.54
2001003	2.93				724		0.40%	1.31	1.62	11.58			7,462	0.16%	4.08	7.01
2001004	3.34	10.25			780		0.43%	1.72	1.71	18.80	54.96		8,037	0.23%	9.66	8.84
2001005	3.42				798		0.43%	2.48	1.55	21.35			8,223	0.26%	8.16	13.74
2001006	3.50				963		0.36%	2.03	1.75	14.80			7,941	0.19%	3.97	10.92
2001007	4.94	15.95			1,046		0.47%	2.41	2.63	11.88	37.54		7,833	0.15%	2.98	8.77
2001008	4.97				1,172		0.42%	2.42	2.69	11.75			7,621	0.15%	3.45	8.12
2001009	6.04				1,561		0.39%	3.06	3.18	13.92			7,167	0.19%	4.86	8.80
2001010	8.13	23.57			1,701		0.48%	3.77	4.57	13.59	40.85		7,699	0.18%	4.68	8.62
2001011	7.28				1,770		0.41%	3.68	3.88	14.45			8,130	0.18%	4.68	9.37
2001012	8.15	18.59			1,530		0.53%	3.76	4.43	12.81			7,921	0.16%	3.89	8.97
2002001	5.95				1,748		0.34%	3.09	3.34	10.90	32.83		7,996	0.14%	3.36	7.07
2002002	6.74				1,854		0.36%	2.83	3.93	10.47			8,029	0.13%	3.01	7.38
2002003	5.90				1,864		0.32%	2.61	3.49	11,46046			8,399	0.14%	4.357721	6.872587

## Resident investors' non-resident CII investment income, m eur

NA1=whole world, NU4=extra euro area, MA1=euro area

	Income %		Income %		Income %				
	NA1	NA1	NU4	NU4	MA1	MA1			
1999	1.10	1339	0.08%	1.06	1244	0.09%	0.04	95	0.04%
2000	1.30	2143	0.06%	1.21	1991	0.06%	0.09	152	0.06%
2001	1.74	2267	0.08%	1.53	2106	0.07%	0.22	161	0.14%