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COMMISSION STAFF WORKING DOCUMENT

presenting an economic evaluation of the effects of Council Directive 2003/48/EC on the basis of the available data

Accompanying document to the

REPORT FROM THE COMMISSION TO THE COUNCIL

in accordance with Article 18 of Council Directive 2003/48/EC on taxation of savings income in the form of interest payments

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1 Scope, methodology and constraints

This annex provides quantitative approaches to evaluate the functioning of Council Directive 2003/48/EC on taxation of savings income in the form of interest payments (the "Directive") for the first report pursuant to Article 18 of the Directive. It analyses the evolution of certain proceeds from investments that are covered by the Directive or that contain elements falling within its scope. In addition, the analysis looks at the effects of the implementation of the Directive on some investment patterns.

However, the analysis suffers from many shortcomings linked to definitions in the legal provisions of the Directive, to severe data limitations and to technical issues, all of which make the analysis more difficult. The issues linked to the legal provisions include the facts that the beneficial owner may use intermediate structures not covered by the Directive or that the country of the paying agent may be different from the country where the funds are located.

Data limitations create a major difficulty for evaluating the effectiveness of the Directive. Important information such as the amount of foreign and domestic interest income reported by individuals to their Tax Administration in their personal income tax returns, or the number of beneficiaries who had tax withheld to be compared to those who opted to disclose information in Member States that apply a withholding tax, have not been provided in many cases by Member States. Typically, Member States only report the levels of withholding taxes collected or the information exchanged since mid-2005. Longer time series, including the period prior to the introduction of the Directive would have made it possible to better assess its effects. Those long series are only available for items that cover a scope larger than that of the Directive (e.g. total interest payments received) or more specific items such as bank deposits (with the drawback that, while the Directive only covers interest payments to individuals, the data do not allow a distinction to be made between individual and corporate recipients). Taken together this leads to the problem that there is no ideal benchmark available that exactly covers the items falling within the scope of the Directive. The data analysis presented here will therefore take a more descriptive approach and explain the results given the available data. Because of this incomplete reporting, the Commission is not in a position to be more precise in its analysis.

Finally, the analysis is also constrained by the difficulty of separating many concomitant effects. The Directive is aimed at enabling Member States to tax their resident individuals on interest income received in another Member State. To the extent that the income covered by the Directive previously escaped taxation, there is likely to be an effect on the vehicles that fall within its scope: investors might decrease their savings because of a lower net-of-tax interest rate; investors might reallocate their savings in the same vehicle but in another country (e.g. one not subject to the Directive); investors might reallocate their savings towards other investment vehicles as the relative net-of-tax return has changed; and/or investors might evade taxation.

These different data limitations must be borne in mind when interpreting the results of the analysis. The remainder of this section is organised as follows: the next sub-section looks at the evolution of interest payments in general. The third sub-section looks at the evolution of bank deposits. Next, the data collected from the Member States on exchange of information and withholding taxes is analysed. The next two sub-sections look at UCITS and at the cost borne by paying agents for adapting their system and applying the measures. The sub-section on costs is based on the only significant result of a broader consultation of representative Trade Associations on the quantitative impact of the Directive that the Commission Services had launched within the framework of the Expert group set up in 2007. For more details consult

http://ec.europa.eu/taxation_customs/taxation/personal_tax/savings_tax/savings_directive_review/index_en.htm.

Finally, the last section offers a statistical analysis of the impact of the introduction of the Directive on savings and on bank deposits.

2 Descriptive sectoral accounts data

A first step in the analysis is to use Eurostat's sectoral accounts data to follow the evolution of interest payments vis-à-vis other types of savings income and the evolution of household recipients vis-à-vis financial and non-financial corporate recipients. Two caveats shall be made. First, missing data do not allow the calculation of summary time-series for years before 2000 and for seven Member States. Secondly, it should be noted that the Eurostat figures include many interest payments that do not fall under the scope of the Directive. One noticeable example is domestic interest payments. However, those figures may give some indications about the relative importance of interest income in comparison to other types of savings income and about the general evolution of income from savings. The figures for interest and dividends are reported in Table (1). No detailed statistics are provided by Eurostat on the composition of the remaining part of the savings income generated by other types of financial instruments.

Table (1): Summary figures for various types of income from savings and recipients

			(3)	(4)
		(2)	Share of interest	Share of dividend
	(1)	Savings income to	income in total	income in total
year	Gross savings to GDP	GDP	savings income	savings income
2000	20.4%	35.5%	60.6%	29.9%
2001	20.1%	35.7%	60.2%	31.9%
2002	19.8%	31.6%	58.1%	33.3%
2003	19.6%	29.8%	55.4%	35.7%
2004	20.2%	30.4%	53.2%	36.4%
2005	19.8%	32.4%	53.0%	37.0%
2006	20.2%	35.4%	55.7%	35.1%
	(5)	(6)	(7)	(8)
	Share of interest	Share of dividend	Share of interest	Share of dividend
	income of Households	income of Households	income in	income in
	in total interest	in total dividend	Households' total	Households' total
	income	income	savings income	savings income
2000	20.0%	52.8%	33.9%	42.6%
2001	19.6%	51.1%	33.4%	44.0%
2002	19.4%	51.2%	30.8%	45.1%
2003	19.7%	51.8%	28.9%	46.7%
2004	19.4%	51.3%	28.0%	48.2%
2005	18.1%	49.7%	27.0%	48.9%
2006	16.9%	48.8%	28.2%	47.8%

GDP-weighted averages for 20 EU Member States (series incomplete or not available for BG, CY, HU, LU, MT, RO, SE). Data for EL (2005 and 2006) are set as in 2004. Data for IE (2000 and 2001) are set as for 2002. Data for PL, PT and LV (2006) are set as for 2005. Source: Eurostat sectoral data.

First, columns (1) and (2) of Table (1) show that gross savings¹ have been relatively stable in percentage of GDP, while the amount of income from savings² in percentage of GDP has followed a U-curve between 2000 and 2006. A noticeable element from columns (3) and (4) is the steady decrease of the share of interest income in total income from savings between 2000 and 2005, matched by an increase in the share of dividends. This situation might be explained by relatively low interest rates, causing interest-bearing instruments to be less attractive.

Second, columns (5) and (6) show that the share of household recipients in both total interest payments received and total dividends received is relatively stable between 2000 and 2004 and drops in 2005 and 2006. A more detailed analysis shows that this drop is due to an increase in payments received by financial corporations. Figure (1) illustrates this for interest payments.

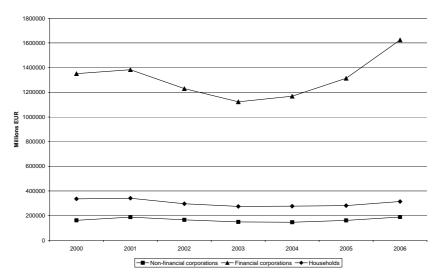


Figure (1): Total interest payments received

20 EU Member States (series incomplete or not available for BG, CY, HU, LU, MT, RO, SE). Data for GR (2005 and 2006) are set as in 2004. Data for IE (2000 and 2001) are set as for 2002. Data for PL, PT and LV (2006) are set as for 2005. Source: Eurostat sectoral data.

Finally, columns (7) and (8) display the share of interest and of dividends in households' total income from savings. The figures show that there has been a gradual shift from interest toward dividend revenue between 2000 and 2004³. Nevertheless a significant share of savings income is still made of interest income. This evolution is shown in figure (2).

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Category B8G of the sectoral accounts. A finer distinction between savings from households and from corporations is not feasible because of poor data availability

Category d4 of the sectoral accounts. This category represents 'property income', which is arguably larger than savings income and includes interest (d41), distributed income of corporations (d42), reinvested earnings on direct foreign investment (d43), property income attributed to insurance policy holders (d44), and rents (d45).

The remaining categories are property income attributed to insurance policy holders (d44) and rents (d45). Both are stable at respectively about 23% and 1% of the total revenues from savings. The category reinvested earnings (d43) is zero for households recipients.

Figure (2): Composition of income from savings for households

GDP-weighted averages for 20 EU Member States (series incomplete or not available for BG, CY, HU, LU, MT, RO, SE). Data for GR (2005 and 2006) are set as in 2004. Data for IE (2000 and 2001) are set as for 2002. Data for PL, PT and LV (2006) are set as for 2005. Source: Eurostat sectoral data.

In conclusion, the introduction of the Directive does not appear to have led to major changes in the composition of savings incomes.

3 Evolution of international deposits (BIS data)

3.1 The BIS bilateral data on international deposits

This section investigates the possible effect of the Directive on international depositing. To this end, <u>bilateral</u> data from the Bank for International Settlements (BIS) on deposits from foreign bank and foreign non-bank depositors are used. Non-Bank depositors are all depositors which are either individuals or companies excluding banks. Deposits held by this group are called "non-bank deposits" in the following analysis. If the depositor is a bank the name of the deposit is accordingly "bank deposits". The quarterly data cover the period Q1-2000 to Q4-2007. The data concern deposits in all currencies and are expressed in (million of) USD. To measure the effects it is also necessary to take into account the agreements concluded with five European third countries on equivalent measures to the Directive and with ten dependent and associated territories of the EU Member States on the same measures.

As a first step, data for BIS reporting countries referring to payments made cross-border to depositors in a EU Member State has been selected. It should be noted that not all EU Member States report to the BIS and that, therefore, the coverage is incomplete.

Next, the data for the BIS reporting countries where the deposits are located have been divided into three categories:

- (a) EU Member States and third countries or jurisdictions that apply a withholding tax to interest paid to individuals who are residents of a Member State. This category includes Austria (AT), Belgium (BE), Luxemburg (LU), as well as Guernsey (GG), Jersey (JE), Isle of Man (IM) and Switzerland (CH).
- (b) EU Member States that exchange information under the Directive. This category includes: Germany (DE), Spain (ES), Finland (FI), France (FR), Ireland (IE), Italy (IT), the Netherlands (NL), Portugal (PT), Sweden (SE) and the United Kingdom (UK).

(c) Finally, other jurisdictions that do not apply the Directive. This category includes: Australia (AU), Canada (CA), India (IN), Japan (JP), Turkey (TR), Taiwan (TW) and the United States (US).

Because of substantial gaps in the information for the whole period, the observations for Bermuda, Brazil, Chile, Denmark, Greece, Mexico and Panama, have not been taken into account in the summary statistics, as they would distort the picture across years. Finally, Singapore (SG) and Macao (MO) have not agreed to disclose their bilateral data for the purpose of this study.

3.2 Data limitations

There are several problems inherent in the data. *Firstly*, two statistical breaks in reporting have a large impact on the totals. This is especially the case for the 1st quarter of 2003 and for the 2nd quarter of 2006 for which large structural breaks appear for deposits by UK residents in the US. This break increases the share of non-bank deposits in the US substantially which in turn leads to a strong increase in the share of third countries which do not apply the Directive. *Secondly*, all currencies are expressed in USD. Exchange rates with the USD have been volatile throughout the period and this may affect some data. *Thirdly*, non-bank deposit data include both individual depositors (subject to the Directive) and corporate depositors (not subject to the Directive). There is no information on the exact split between the two types of depositor. One indication is that, as reported in a previous section, the total amount of interest income received by households in the total amount of interest income received by all private recipients was 16.9% in 2006. This share may vary across countries and years and there is no proper way to deal with this problem in the context of this analysis.

3.3 Analysis

At the end of 2007, external non-bank deposits amounted to USD 627.6 billion for the countries applying a withholding tax (category (a) above); to USD 1,203.8 billion for Member States applying information exchange (category (b) above); and to USD 538.415 billion for third countries (category (c) above).

First, the quarterly growth rate of non-bank deposits for all three categories has been computed and is illustrated in *figure* (3). Because of the structural breaks, data for Q1-2003 and Q2-2006 for third countries (category (c)) are not included⁴. A visual analysis of *figure* (3) does not allow detection of a common pattern for the growth of non-bank deposits in the countries covered by the savings taxation measures (categories (a) and (b)) compared to the third countries (category (c)).⁵ A difference between third countries (category (c)) and countries that applied the Directive (categories (a) and (b)) is that the volatility of growth rates is much larger for the former until 2004. After that point in time the development is similar. This holds also for the years after the introduction of the Directive.

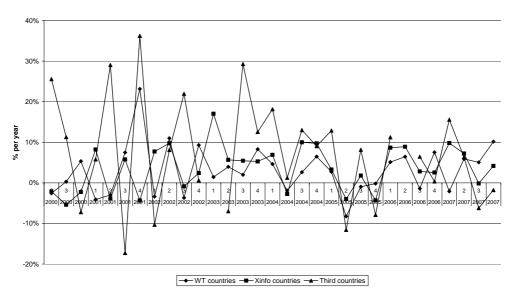
Controlling for the exchange rate does not change the conclusions.

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There are two major statistical breaks in the first quarter of 2003 and the second quarter of 2006. Those statistical breaks inflate the share of third countries at the expense of other categories.

Figure (3): Quarterly growth of non-bank deposits

Growth rate of external non-bank deposits vis-à-vis directive countries in USD



Source: BIS and own calculations

Next, for each category ((a), (b) and (c) above) of BIS reporting countries, the evolution of the share in the total external non-bank deposits made by residents in countries in category (a) and (b) has been studied. ⁶ Notwithstanding the two structural breaks mentioned above⁷, figure (4) shows that the share of deposits in banks in BIS reporting countries that apply the withholding tax (category (a)) has decreased from 35.0% to 29.3% between mid-2003 and mid-2005 but has been stable after the introduction of the directive. This was mainly to the benefit of third countries (category (c)). The respective shares of each category of BIS reporting countries have been relatively constant since mid-2005. The same pattern emerges if the deposits are converted from US-Dollars to Euro. This is done in order to control for possible distortions due to the reporting in US-Dollars only and the volatility of Dollar-Euro exchange rate. The only major difference in this case is that the share of third countries is larger. However, the general trend does not change.

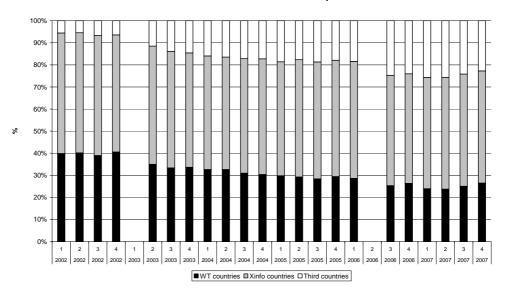
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i.e. the 13 EU Member States that report to the BIS.

Therefore, the shares from the fourth quarter of 2002 cannot be directly compared with the shares of the second quarter of 2003, and the shares of the first and third quarters of 2003 cannot be directly compared either.

Figure (4): Share of BIS reporting countries by category in non-bank deposits

Share of bank countries in non-bank deposits

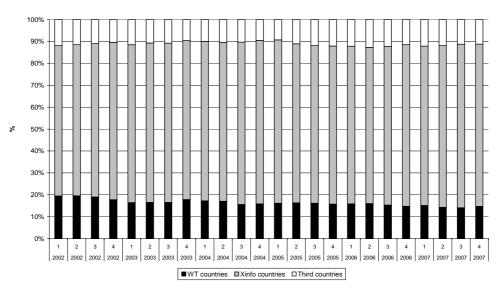


Source: BIS and own calculations

Finally, we can compare the previous data with the share of external deposits from bank depositors. This is done in figure (5). We see that the lion's share (about 70%) is for countries that apply information exchange and that the shares are stable over time. The large share of countries exchanging information (category (b)) reflects the fact that countries that host large financial sectors (such as the UK and Germany) belong to this group. As regards the share of non-bank deposits two observations can be made. First, from a static point-of-view the share of external non-bank deposits in countries applying the withholding tax and in third countries (categories (a) and (c)) is about 35% of total external deposits, while this proportion is 20% in countries applying exchange of information (category (b)). Secondly, from a dynamic point of view, while the share of deposits made by external banks has not changed, there has been a slight decrease in the share of non-bank deposits in countries exchanging information (category (b)). These two elements could suggest that non-bank depositors have a preference for countries maintaining some form of bank secrecy.

Figure (5): Share of BIS reporting countries in bank deposits

Share of bank countries in bank deposits



Source: BIS and own calculations

In conclusion, for deposits of non-bank depositors, there has been an observable shift from countries within the scope of the Directive towards third countries. However, this development took place before the Directive came into force.

4 Evolution of information exchange and withholding taxes using data from Member States and from other jurisdictions covered by the savings agreements

4.1 Description of the data

The EU Member States and other jurisdictions covered by the savings taxation measures deliver data on the tax revenue received from or paid to other countries (if the withholding tax is applied) and on the information shared (number of individuals, country of residence, total income subject to exchange etc.). This data is available for the second half of 2005 and for 2006. UK is in a special position because its tax year ends on 6 April, so its data refers to the period between 1 July 2005 and 5 April 2006. The data only contains the revenue covered by (and reported under) the Directive. Hence, the data does not give information about the evolution of non-covered items or on the structure of savings after the implementation of the directive. The reason is that the data provided by the tax authorities of the participating countries lists only savings income that has indeed been disclosed or taxed while all types of tax evasion or other reactions to taxation cannot be observed.

The data contains information on:

- The amount of withholding tax collected by countries applying such a tax, split by country of recipient of the tax payment (but no information about the number of beneficial owners concerned).
- The amount of interest payments and sales proceeds sent (bilateral data), if possible
 with a breakdown between interest payments and sales proceeds, as well as a
 breakdown between beneficial owners and residual entities.

- The amount of interest payments or sales proceeds by type (debt claims, interest accrued or capitalised coming from sales of debt claims or undertakings, interest from undertakings, annualised interest).
- The number of beneficial owners on a bilateral basis, the number of residual entities on a bilateral basis, the number of paying agents, and the number of records exchanged between countries.

4.2 Data Limitations

Before discussing the figures below it has to be noted that the data provided by Member States and other jurisdictions covered by the savings taxation measures contain a critical number of missing values. This leads to the problem that the data must be interpreted with caution since missing values significantly reduce the number of observations for certain jurisdictions. The missing value problem is especially critical for the data on information exchange discussed in section 4.3. This leads to the problem that a separation of different items covered by the Directive is not possible. For example the data does not permit a solid statement on the role of paying agents vs. residual entities on receipt.

Furthermore, there is a total lack of information on beneficial owners in Austria and Belgium. The same is true for most third countries. An exception is Luxemburg which at least reports the number of beneficial owners who opted for voluntary disclosure. While some countries reported on most items that fall under the scope of the Directive and the respective agreements there are many countries where no values are reported or where the figures for the second half of 2005 and the year 2006 differ so strongly that different reporting methods must have been applied. This can also be illustrated by the differences in reported values between countries. If all countries had used the same definitions and exchange rates, the numbers reported by the sending country should be equal to the numbers reported by the country that received the information or the tax revenue. This is however not the case for each bilateral position. In the second semester of 2005 the total discrepancies between sent and received values amounted to 0.9 million Euro. In 2006 this value was still above 0.5 million Euro. Taken together, these problems reduce the quality and the reliability of the data. The following descriptive explanations have to be read in the light of this. Furthermore, only the revenue effects can be observed since there is no, or only a very weak, link to the investment decisions that led to this outcome.

4.3 Descriptive data analysis

The main aim of the Directive is to enable Member States to tax interest income received by their resident individuals from other Member States through an exchange of information. During a transitional period some of the Member States levy a withholding tax instead of exchanging information. The revenue from this tax is shared with the Member State of residence of the beneficial owner of the interest income.

The agreements with the third countries and the other jurisdictions build on either of these two methods but in most cases they are unilateral in the sense that information is given to Member States (Anguilla and Cayman Islands) or the withholding tax levied shared with Member States (Andorra, Liechtenstein, Monaco, San Marino, Switzerland, and Turks & Caicos Islands). Only Montserrat and Aruba (which apply reporting) and Jersey, Guernsey, Isle of Man, British Virgin Islands and the Netherlands Antilles (which

levy a withholding tax) in their turn receive, from Member States, information or a share of the withholding tax levied.

Accordingly, countries can be divided into two groups: Firstly, countries that provide information, secondly, countries that levy a withholding tax and share the revenue with the country where the beneficial owner resides. In the following section available data on interest payments and sales proceeds reported or the amount of withholding tax shared is briefly described.

4.3.1 Countries operating information exchange system

The first group of countries is exchanging information as provided in Articles 8 and 9 of the Directive or under the respective Agreement. *Table (2)* shows the countries that apply an information exchange regime and the sum of reported interest payments and sales proceeds according to Article 9 of the Directive or under the respective Agreement. As expected, the largest economies hosting a large part of economic activities and financial centres report the highest values. The UK reported EUR 9.1 b for interest payments made from 1 July 2005 to 5 April 2006 (end tax year). In 2006, Germany sent information on interest payments amounting to almost 1.4 b Euro to other participating countries. A similar value can be found in France (1.5 b Euro). Data on information sent in 2006 is not available for Cyprus, Spain, Hungary, Italy, Sweden, Anguilla and Montserrat.

Table (2): Interest payments and sales proceeds reported by countries using information exchange*

EU Member States	2 nd half 2005	2006
Cyprus	n.a.	n.a.
Czech Republic	n.a.	17.81
Germany	660.73	1392.06
Denmark	n.a.	1.16
Estonia	n.a.	4.40
Spain	n.a.	n.a.
Finland	n.a.	7.19
France	568.14	1512.54
Greece	6.85	23.11
Hungary	n.a.	n.a.
Ireland	258.87	770.72
Italy	n.a.	n.a.
Lithuania	n.a.	0.09
Latvia	0.18	0.65
Malta	1.02	2.10
Netherlands	n.a.	795.69
Poland	0.07	0.61
Portugal	n.a.	0.56
Sweden	n.a.	n.a.
Slovenia	n.a.	1.35
Slovakia	1.87	4.76
United Kingdom	9132.49	n.a.
Dependent and Associated Territories		
Anguilla	n.a.	n.a.
Aruba	0.01	0.09
Cayman Islands	8.81	18.02
Montserrat	n.a.	n.a.

^{*}Amount of interest payments and sales proceeds under Art. 9 subject to exchange of information/ voluntary disclosure, (Beneficial owners and residual entities)

Table (3) shows the average payment reported in Table (2) divided by the number of beneficial owners that have been reported. All values are in Euro. Again there are many countries missing, nevertheless, the values give a first indication of the average size of payments. The largest payments per beneficial owner can be found in Germany and France.⁸

Table (3): Reported average payments per beneficial owner

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EU Member States	2 nd half 2005	2006
Austria	n.a.	n.a.
Belgium	n.a.	n.a.
Cyprus	n.a.	n.a.
Czech Republic	n.a.	174
Germany	3,232	6,559
Denmark	n.a.	n.a.
Estonia	n.a.	761
Spain	n.a.	n.a.
Finland	n.a.	595
France	4,706	6,375
Greece	341	827
Hungary	n.a.	n.a.
Ireland	3,495	5,677
Italy	n.a.	n.a.
Lithuania	n.a.	123
Latvia	102	102
Malta	117	226
Netherlands	n.a.	n.a.
Poland	5	44
Portugal	n.a.	204
Sweden	n.a.	n.a.
Slovenia	n.a.	191
Slovakia	179	392
United Kingdom	n.a.	n.a.
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in Euro

Information on reported payments per beneficial owner is also available for Luxemburg. Unlike Austria and Belgium, Luxembourg delivers information if beneficial owners opt for voluntary disclosure as described in Article 13 of the Directive in order not to be subject to a withholding tax. The average payment in 2006 is 10,373 Euro according to this source.

Table (4): Tax revenue shared by countries with withholding tax regime				
EU Member States	2 nd half 2005	2006		
Austria	9.48	44.32		
Belgium	7.51	25.92		
Luxembourg	35.90	124.59		
Third Countries				
Andorra	3.50	12.77		
Liechtenstein	1.94	7.08		
Monaco	3.75	11.70		
San Marino	1.13	7.47		
Switzerland	77.23	255.92		
Dependent and Associated Territories	;			
British Virgin Islands	0.00	n.a.		
Turks and Caicos	0.01	0.02		
Guernsey	4.93	16.83		
Jersey	13.26	32.15		
Isle of Man	13.26	20.35		
Netherlands Antilles	n.a.	n.a.		

in million Euro

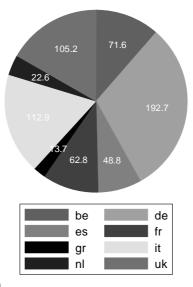
Table (4) displays available information, for the countries levying a withholding tax, about the amount of revenue shared with the Member States. The major part of revenue from the withholding tax in the second half of 2005 and in 2006 was raised in Switzerland and Luxembourg. For both those periods, Switzerland accounted for more than 45% of the total amounts reported as regards withholding tax shared; Luxembourg's share was 22%. Austria and Belgium accounted for 7.4% and 4.6%, respectively, while Jersey, the Isle of Man and Guernsey contributed 6.2%, 4.6%, and 3.0%. All other countries have very low shares. There is no information from the Netherlands Antilles about the amount of withholding tax shared. For the British Virgin Islands information is missing for the second half of 2005.

Figure (6) shows the distribution of revenue from the withholding tax levied in the second half of 2005 and in 2006. The graph only takes into account countries which received more than EUR 10 million in both years together. Unsurprisingly, the largest countries in the EU received the largest shares. Germany (de) received EUR 192.7 million in 2005 and 2006, Italy (it) EUR 112.9 million followed by France (fr) and the United Kingdom (uk). A notable exception is Belgium (be) which received more than EUR 71 million. This is due to the close ties between Belgium and Luxemburg. The revenue received from Luxemburg accounts for 74% of the Belgian part of the revenue.

Figure (6): Withholding tax collection

Received Withholding Tax Revenue

2005 and 2006 in m Euro



Source: European Commission

In conclusion, the data on information exchange from EU Member States and other jurisdictions show that reported interest payments increased significantly between the second half of 2005 and 2006. Unsurprisingly, the largest payments can be found in the largest economies. The quality of data reporting by Member States to the Commission needs to be improved.

The data on withholding tax countries shows that Switzerland and Luxemburg are the main sources of withholding tax revenue while Germany, Italy and the UK receive the largest share of tax revenue.

5 UCITS data

Interest payments distributed by Undertakings for Collective Investment in transferable securities (UCITS) are generally included in the scope of the Directive. If the UCITS invests only marginally in debt claims (less than 15%), it will fall outside the scope provided that the Member State where the UCITS is established has exercised the option of excluding such UCITS. Non-UCITS with legal personality do not fall under the scope of the Directive at all. Non-UCITS lacking legal personality can opt to be treated as UCITS, and in such case they would fall within the scope. This varying treatment of UCITS and Non-UCITS under the Directive makes them particularly important to study.

Table (5) shows the evolution of UCITS and non-UCITS as well as some of their respective subcategories for 2002 to 2007. The interesting feature is that the share of UCITS and non-UCITS in the total has remained constant at 78% and 22% respectively. The only noticeable evolution is a gradual decrease of the share of UCITS investing in bonds from 29% to 19.5% between 2002 and 2007, mostly to the benefit of those investing in equity. This shift has however occurred throughout the period and a possible impact of the Directive is therefore questionable.

Table (5): Evolution of UCITS and non-UCITS

Billion EUR	31/12/2002	31/12/2003	31/12/2004	31/12/2005	31/12/2006	31/12/2007
Total UCITS	3,289	3,705	4,189	5,170	5,974	6,203
Among which						
Equity	971	1,163	1,345	1,822	2,222	2,227
Balanced	433	470	517	636	800	856
Bond	955	1,034	1,045	1,190	1,251	1,208
Money Market	615	668	798	842	841	911
Other	77	84	139	217	277	355
Ireland*	239	286	344	463	583	645
Total Non-UCITS	953	1,054	1,156	1,396	1,600	1,723
Among which						
German Spezialfunds	480	518	543	618	670	691
Closed-ended British	74	82	86	99	105	83
Investment Trusts						
Open-ended French	48	57	57	67	85	85
employees saving						
Luxembourg "other" funds	n.a.	n.a.	28	66	93	102
Property funds	118	136	150	167	188	199

Source: EFAMA Quarterly Statistical Releases. * Ireland gives no breakdown. Figures are in Billion of Euros.

In conclusion, data do not display a different pattern for UCITS and Non-UCITS instruments. The only noticeable evolution is a gradual decrease of the share of UCITS investing in bonds between 2002 and 2007, mostly to the benefit of those investing in equity.

6 Information on costs

The consultation with Trade Associations represented in the Expert group on the quantitative aspects of the Directive led to very little data (the results of this consultation are available at:

http://ec.europa.eu/taxation_customs/taxation/personal_tax/savings_tax/savings_directive_review/index_en.htm).

The European Banking Federation shared the results of a survey indicating that, based on reports from 40 paying agents in 6 countries, the average cost of introducing the application of the Directive are EUR 2 million per business unit and the recurring costs are EUR 100,000 per business unit.

7 Technical analysis

This section seeks to estimate the possible effect of the introduction of the Directive on variables such as the level of interest received by households and on the share of interest in the total property income of households. Again, many caveats need to be made. First, the category of interest covered by the data is larger than that covered by the Directive and it is not known which percentage of the data actually concerns payments subject to the Directive. Secondly, changes in explanatory variables will influence different types of interest payments in different ways. For example, domestic inflation will have a different impact on domestic-source interest received than on foreign-source interest. Thirdly, data on interest received by individuals are only available for some EU countries and for 1995-2006. This means that the effects can only been seen for the last year or two. Fourthly, the effects of introduction of the Directive can only be captured by introducing a binary explanatory variable that takes the value one in the country-year

pairs for which the Directive is in force. Because there are only one or two years for which this variable applies and because the geographical coverage of this variable does not vary, the variable may also simply act as a fixed effect for a group of countries during the last year of observations, picking up some unobserved effects that are common to EU Member States during this year.

Table (6) shows the results of the regressions for the effect of the Directive on interest received by households⁹. Regressions (1) to (3), show that the estimated effect of the introduction of the Directive is heavily dependent on the specification of the model. In particular, simply changing the proxy for the size of the country from the level of population to the level of GDP turns the effect of the Directive on the level of interest received by households from a positive and significant effect into a negative but non-significant one. It also turns out that the results are very sensitive to the inclusion of some controls. For example, omitting inflation in the regressions washes out the significance of the Directive variable in all regressions. This, combined with the wrong sign for some controls place doubts on the statistical significance of the result that introducing the Directive decreased the share of interest in the property income of households.

Before explaining in detail the single regressions, it should be stated that the econometric analysis does not detect any major effect of the Directive on the dependent variables explained above. The share of interest received by households in the total interest received by individual and corporate recipients has decreased but this is mainly due to an increase in financial corporations' receipts. Equally, the share of interest in total property income received by households has declined in favour of dividends but this phenomenon started already in 2000. A regression analysis of the effect of the Directive on the level and the share of interest received by households shows some negative effects but those are not statistically robust.

Regressions (1) to (3) use the logarithm of the amount of interest received as dependent variable, while regressions (4) to (6) use the share of interest in the total property income received by households instead. The regressions include some control variables. The size of the country is supposed to have a positive effect on the amount of interest received by its households. This size is proxied by the logarithm of the population in regression (1) and (4). As an alternative, the logarithm of nominal GDP is used in the other four regressions. Next, inflation is expected to have an ambiguous effect on the amount of interest received by individuals. On the one hand, inflation increases the amount of any payment over time. On the other hand, interest payments are usually fixed and therefore investors may decide to shift to other investment vehicles. GDP growth is expected to have a negative effect on interest received because investors may prefer to choose investment vehicles which will include better returns such as stocks. Finally, the interest rate on deposits is used as a proxy for the interest rate. It is expected to have a positive effect on the level of interest received. Its effect on the share of interest is more ambiguous because the return on other investment types may follow the same pattern. Finally, all regressions include year dummies to control for unobserved year-specific effects that are common to all countries in the sample and all regressions except (3) and (6) include country dummies to control for unobserved country-specific that are common for all years.

category "d4s14_s15 received" of the Sectoral Accounts

Table (6): Effect of the Directive on Interest received by Households

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Log interest	Log interest	Log interest	Share	Share	Share
				interest	interest	interest
Directive	.347	160	095	253	220	113
	(2.67)**	(.99)	(.45)	(3.98)**	(3.96)**	(1.33)
Log population	-13.459			1.104		
	(5.96)**			(1.10)		
Inflation	005	009	015	003	002	003
	(0.85)	(1.52)	(1.82)	(1.59)	(1.18)	(0.84)
Deposit interest	.046	.048	.040	002	002	.008
rate	(4.97)**	(5.60)**	(4.19)**	(1.29)	(1.07)	(2.61)**
Real GDP growth	023	030	020	014	015	014
	(0.85)	(1.43)	(0.84)	(2.21)*	(2.30)*	(1.68)
Log nominal GDP		2.019	1.323		033	003
		(7.37)**	(37.25)**		(0.30)	(0.23)
Constant	194.249	-18.804	-8.025	-19.689	.920	.550
	(6.07)**	(4.62)**	(15.33)**	(1.08)	(0.94)	(2.61)*
Time dummies	Y	Y	Y	Y	Y	Y
Country dummies	Y	Y	N	Y	Y	N
Observations	188	188	188	177	177	177
R-squared	0.99	0.99	0.95	0.90	0.89	0.20

Source. Eurostat, Sectoral Accounts. Robust t-statistics in parentheses. * significant at 5%; ** significant at 1%. The significance level indicates the level of Type-I or "false positive", that is the percentage chance that the coefficient is shown as different from zero, while it is in reality zero.

In conclusion, regression analysis does not show a statistically significant and robust effect of the Savings Directive on the level and the share of interest in the total property income received by households.

Data	Description	Source
External loans and debt	Bilateral external loans and debts of the banking sector in 40 BIS members	BIS (restricted basis)
Inbound and outbound interest and dividends	For the EU-27, the amount of inbound and outbound interest and dividend payments for individuals and corporations	Eurostat Sectoral Account Statistics
Amount of withholding tax, split by country of residence of the beneficial owners	For all Member States, Dependent and Associated Territories and Third Countries having opted for the withholding tax mechanism, total amount of tax revenue shared from the withholding tax, split by MS of residence of the beneficial owners	Member States
Amount of withholding tax levied under article 11(5) of the Directive, split by country or Territory of establishment of residual entities	This item concerns Austria, Belgium and Luxemburg as well as the following Dependent and Associated Territories: Guernsey, Jersey, Isle of Man, Turks and Caicos, British Virgin Islands and the Netherlands Antilles.	Member States
Amount of interest payments and	For all Member States,	Member States

Data	Description	Source
sales proceeds subject to exchange of information / voluntary disclosure, split by country of residence of the beneficial owners including residual entities	Dependent and Associated Territories and Third Countries, amount of interest payments and sales proceeds, split by country of residence of the beneficial owner and establishment of the residual entities	
Amount of interest payments subject to exchange of information / voluntary disclosure under Art. 9, split by country of residence of the beneficial owner	For all Member States, Dependent and Associated Territories and Third Countries, amount of interest payments (excluding sales proceeds) split by country of residence of the beneficial owner - Art. 9	Member States
Amount of sale proceeds subject to exchange of information / voluntary disclosure under Art. 9, split by country of residence of the beneficial owners	For all Member States, Dependent and Associated Territories and Third Countries, amount of sales proceeds (excluding interest payments), split by country of residence of the beneficial owner - Art. 9	Member States
Amount of interest payments subject to exchange of information / voluntary disclosure, split by country of establishment of residual entities - Art. 4.2	For all Member States, Dependent and Associated Territories and Third Countries, amount of interest payments (excluding sales proceeds), split by country of establishment of residual entities - Art. 4.2	Member States
Amount of sales proceeds subject to exchange of information / voluntary disclosure under Art. 4.2, split by country of establishment of residual entities	For all Member States, Dependent and Associated Territories and Third Countries, amount of sales proceeds (excluding interest payments), split by country of establishment of residual entities - Art. 4.2	Member States
Amount of interest or sales proceeds subject to exchange of information / voluntary disclosure, split by the categories of Art. 8.2 of Directive 2003/48/EC	For MS exchanging information, amount of interest payments or sales proceeds subject to exchange of information split by the categories of art. 8.2 of Directive 2003/48/EC	Member States
UCITS	Level of UCITS and non-UCITS	EFAMA
Deposit rate	Deposit interest rates for EU and BIS countries	IMF International Financial Statistics
Nominal GDP	Nominal GDP	Ameco
Real GDP growth	Real GDP growth	Eurostat
Population	Number of inhabitants	Eurostat, CIA Factbook, NationMaster.com
Inflation	Deflator of GDP	Computed from nominal and real GDP growth