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What do external statistics tell us about undeclared assets held abroad and tax evasion?

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*“The Bank of Italy’s Analysis of Household Finances”
Rome, 3-4 December 2015*



Research goals

- **Analyze the role of tax havens** with reference to both tax avoidance and tax evasion on the basis of asymmetries, anomalies or geographical breakdowns in balance of payments and other statistics on cross-border positions
- **Estimate undeclared financial assets** held abroad by means of different statistical sources (i.e. Coordinated Investment Portfolio Survey, International Investment Positions, BIS Locational Statistics)
- **Calculate an order of magnitude of capital income and personal income tax evasion** linked to undeclared assets
- **Review recent policy initiatives** to fight international tax evasion



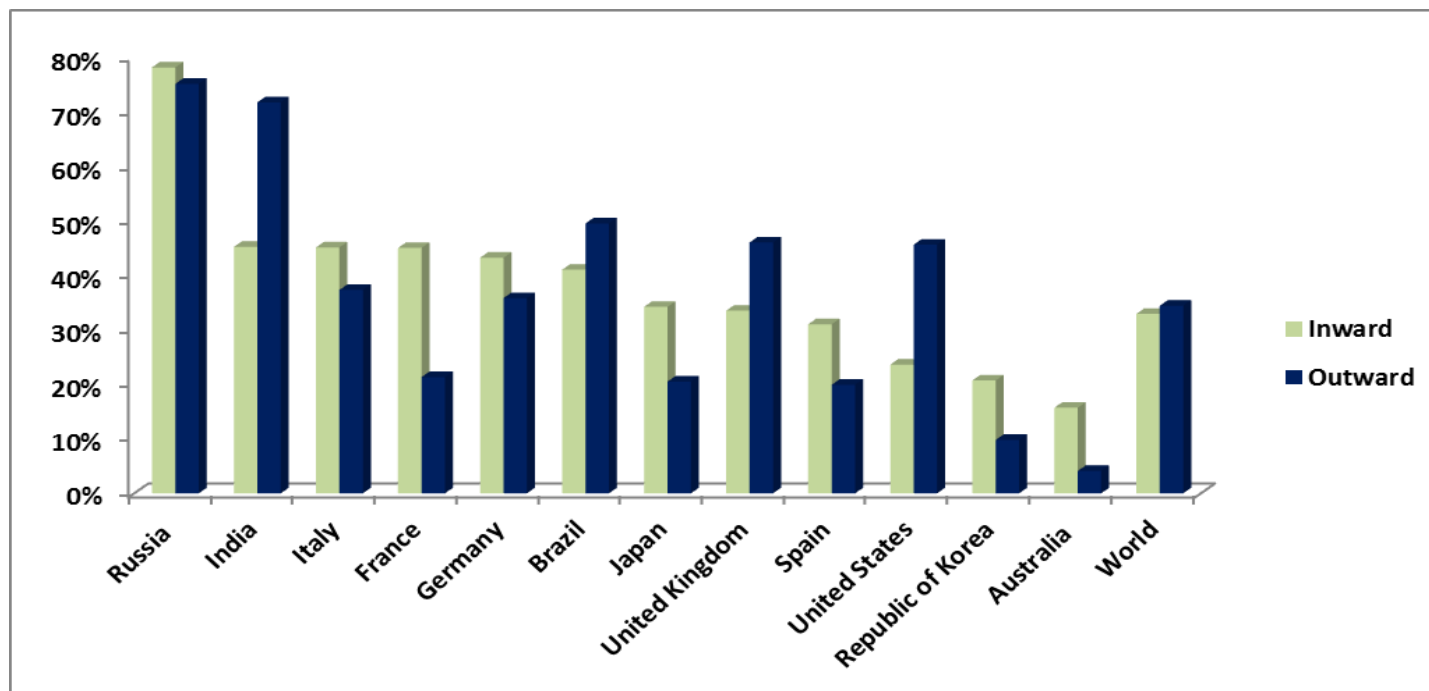
Channels for the transfer of capital to tax havens

- Tax haven definition may vary depending on the type of “tax cheating” (i.e. tax evasion vs. tax avoidance)
- Most offshore financial centers (OFCs) have “tax haven” characteristics
- OFCs host a relevant share of undeclared financial assets held abroad by individuals (either directly or through interposed entities)
- Most common channels used to transfer financial capital in OFCs:
 - ✓ Cash transfers
 - ✓ Misinvoicing of services and goods
 - ✓ Transfer of funds or direct payments to offshore entities or bank accounts
 - ✓ MNEs profits accumulated and distributed offshore



FDI statistics: signals of the accumulation of capital in tax havens

Percentage shares of FDIs vis-à-vis tax havens broken down by reporting country
(average data 2009-2013)

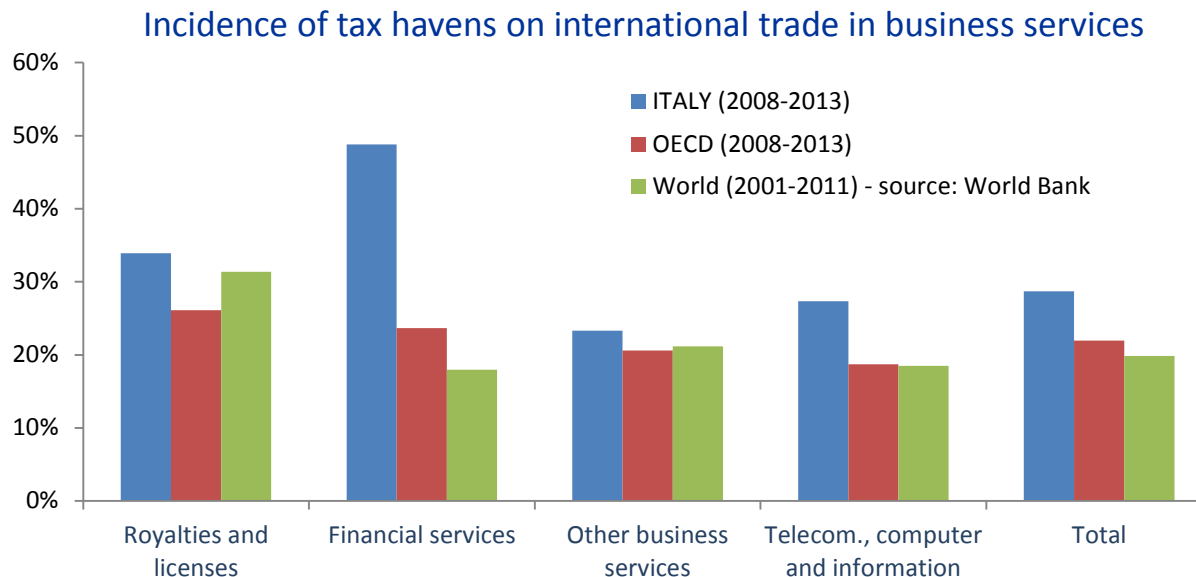


Data source: CDIS



The role of tax havens in international service trade

The incidence of tax havens is (too) high in the international trade in business services (the geographical breakdown is based on the country of the contractual counterparty)



Similarly to Hebout and Johannesen (2015), the application of a gravity model to international trade in services (OECD data) confirms the role of tax havens



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Are national and global discrepancies in external statistics linked to underreporting of foreign assets?

- For euro area countries the net international investment position (IIP) is **significantly worse** than the cumulated balances of current and capital account. Furthermore global balance of payments statistics show discrepancies in the direction of **negative errors and omissions** (generally associated with underestimation of investments abroad)

*“One coincidence is just a coincidence. Two coincidences are a clue.
Three coincidences are a proof”
(Agata Christie)*



Underreporting of portfolio assets: an estimate based on mirror statistics

- Main source: **Coordinated Portfolio Investment Survey (CPIS)** data on asset stocks (breakdown by issuing and investor country)
- CPIS assets are matched with the corresponding portfolio liabilities from IIP statistics and integrated with other statistical source (e.g. the «Extended Wealth of Nations» database) to fill the main gaps (China, several OFCs, oil countries sovereign funds, etc.)
- The final result is a persistent **global discrepancy (liabilities>assets)** amounting to nearly \$5 trillion in 2013 (6.6% of world GDP)
- Following Pellegrini-Tosti (2011), we assume that such discrepancy is entirely due to **underreporting of assets**
- A similar methodology is used by Zucman (2015), who obtains slightly higher results (unreported assets of \$6.2 trillion at end-2013)



Estimate of undisclosed assets held abroad: cross-border deposits of non-banks

- Individuals frequently open bank deposits in tax havens, either directly or in the name of interposed entities
 - ➔ BIS statistics record cross-border **deposits of non-banks held in OFCs**
- Individuals may also use interposed entities located in tax havens to open deposits in non-OFC countries
 - ➔ BIS statistics record cross-border **deposits of non-banks held by residents of OFCs in non-OFCs**
- Looking at the sectorial breakdown of bank deposits (sources: Bank of England, ECB, Swiss National Bank, Banque Centrale du Luxembourg), **we assume that individuals hold between 1/3 and 2/3 of these deposits** (i.e. between \$1.1 and \$2.3 trillion at end 2013)



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Undisclosed assets held abroad: Portfolio assets plus cross-border deposits

Share of cross-border deposits of individuals (billions of US dollars)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Deposits held in offshore countries	1,155	1,307	1,493	1,585	1,642	2,003	2,545	2,554	2,375	2,373	2,084	2,011	1,972
Deposits held by residents of offshore countries in non-OFCs	666	759	999	1,176	1,193	1,513	1,896	1,743	1,625	1,523	1,580	1,831	1,885
Total	1,820	2,066	2,492	2,762	2,835	3,517	4,441	4,298	4,000	3,896	3,664	3,842	3,857
Estimation of deposits held by individuals													
Minimum=total*(1/3)	513	593	716	801	813	1,007	1,270	1,258	1,177	1,159	1,078	1,127	1,154
Minimum=total*(2/3)	1,027	1,186	1,431	1,602	1,626	2,015	2,540	2,516	2,353	2,318	2,155	2,254	2,308
Portfolio global discrepancies	2,074	2,236	2,362	2,853	3,089	3,413	4,558	3,697	3,643	3,163	4,122	4,862	4,909
Total unreported assets (Min.)	2,587	2,829	3,078	3,654	3,903	4,421	5,828	4,955	4,819	4,322	5,199	5,989	6,063
Total unreported assets (Max)	3,100	3,422	3,794	4,455	4,716	5,428	7,098	6,213	5,996	5,481	6,277	7,116	7,217

Data source: Calculations on BIS data (Banking Locational Statistics)



Estimating international tax evasion: Methodology and underlying hypotheses (1)

- Undeclared assets held abroad by individuals give rise to:
 - a) Capital income tax evasion on the annual return (2001-2013)
 - Interest rates and dividends (1%-5%): IMF and ECB data for deposits; estimates based on BOP statistics for portfolio income and assets
 - Tax rates: average top capital income tax rates for OECD and non-OECD countries; statutory rates for Italy
 - b) Personal income tax evasion on the capital held abroad (stocks of unreported assets at end-2013)
 - Tax rates: average top PIT rates for OECD and non-OECD countries; top statutory rate for Italy



International tax evasion on capital income

- At global level, the annual amount of capital income tax evasion ranges, on average over the period 2001-2013, between \$19 and \$38 billion
- Compared to the \$127 billion obtained by Zucman for 2013, even our highest value for the same year (\$44 billion) is much lower, in spite of a similar amount of unreported financial assets (between \$6.1 and 7.2 trillion in our case; \$7.6 trillion for Zucman)
- The difference between the two estimates is mostly due to the use of **quite different rates of return**: Zucman uses a single rate of return equal to 8 per cent, whereas we use lower rates, between 1.6 and 3.3 per cent



International tax evasion on personal income

Globally, personal income tax evasion on the stock of undeclared capital at end-2013 has been estimated between \$2.0 and \$2.6 trillion; the average value is about \$2.3 trillion and represents about 3 per cent of world GDP

<i>Personal income tax evasion (billions of US dollars)</i>	Min	Max	Average
Equity securities	1,024	1,190	1,107
Debt securities	661	691	676
Cross-border deposits	275	750	486
Total	1,960	2,632	2,270
<i>Total in % of world GDP</i>	<i>2.6%</i>	<i>3.5%</i>	<i>3.0%</i>
OECD countries	1,749	2,282	1,993
(percentage of GDP)	3.7%	4.8%	4.2%
Non-OECD countries	210	350	277
(percentage of GDP)	0.8%	1.3%	1.0%
Italy (bn €)	49.4	99.2	71.5

Average top PIT rates: 43.3% (OECD); 26.1 % (non-OECD); 48.6% (Italy)



Terms of comparison

Annual capital income tax evasion estimated at global level between \$19 and \$38 bn. Of these, between \$8 and \$16 bn. can be attributed to EU countries on the basis of GDP and financial wealth

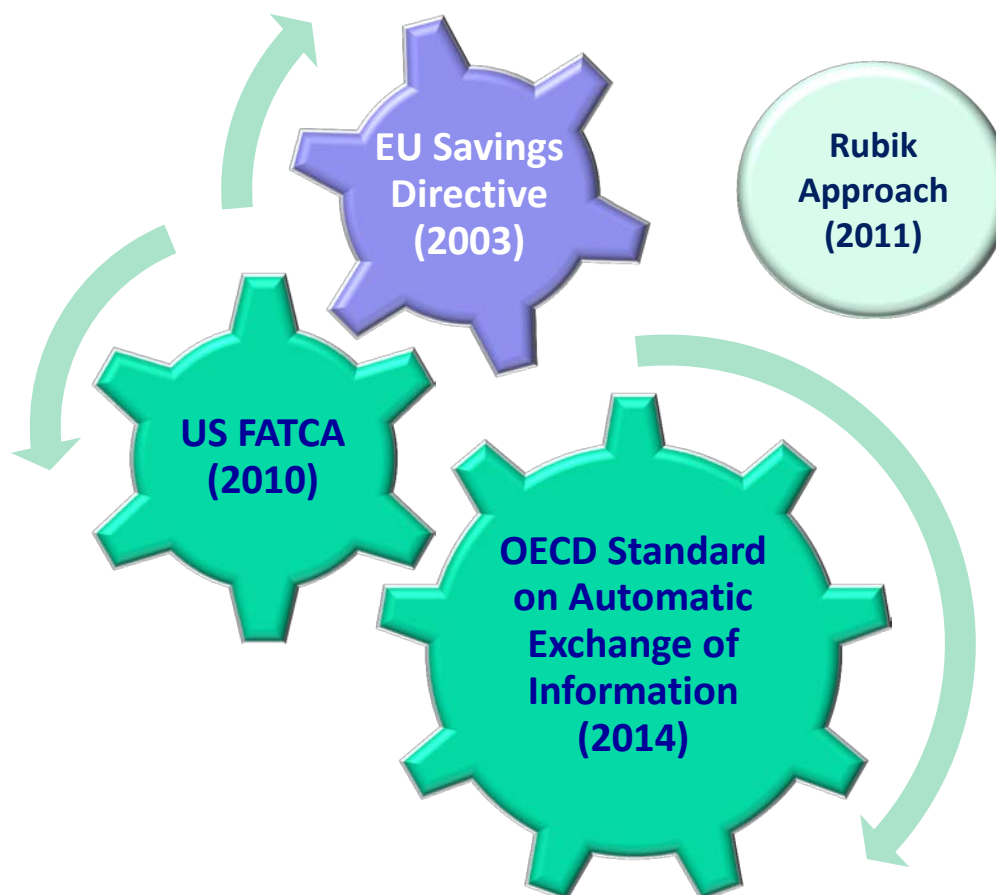
- Since 2005, the EU Savings Directive withholding tax allowed EU member states to recover, on average, tax revenues for €560 mln. (\$ 593) annually

Personal income tax evasion for OECD countries estimated between 3.7% and 4.8% of OECD GDP

- Tax revenues recovered through offshore voluntary disclosure schemes in some OECD countries range between 0.04% and 0.12% of the same countries' GDP
- Exception: Italy (2009-10) ➔ 0.35% of GDP



Policy initiatives to curb international tax evasion





Policy initiatives to curb international tax evasion

- **EU Savings Directive:** avoided because of limited geographical/objective scope (only interest income earned by individuals and EU entities)
- **US FATCA/OECD Standard on Automatic Exchange of Information:**
- Comprehensive automatic information exchange on financial income and «look-through approach» based on AML rules in the case of entities,

BUT...

- Loopholes linked to thresholds (in the case of FATCA), certain types of entities still escaping or not allowing «look-through»
- Risks stemming from: non-uniform/partial implementation (countries outside the net could benefit from opting out); non-reciprocity or actual design of the agreements (esp. for FATCA)



Conclusions

- Inconsistencies in international financial and FDI statistics show a widespread and growing use of tax havens and offshore financial centers, confirmed by empirical evidence
- The analysis of global discrepancies in portfolio statistics and of cross-border deposits in OFCs leads to estimate unreported offshore financial assets between \$6.1 and \$7.2 trillion (i.e. 8.1%-9.7% of world GDP) globally. The related tax evasion, conservatively estimated with reference to capital and personal income is up to 3% of world GDP
- Recent policy initiatives to curb international tax evasion open new possibilities to recover lost tax revenues, but there is still room for international investors to cheat their tax authorities



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Thank you

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