University of Windsor

Department of Economics Working Paper Series
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Windsor, Ontario, Canada N9B 3P4
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Working paper 16 - 08

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November 7, 2016

Abstract

The Automatic Exchange of Information (AEoI) is a tax standard that governs how tax authorities of participating countries exchange information related to taxpayers' foreign investments. We quantify the mismatch between costs and benefits of information exchange agreements and investigate the impact of foreign investment taxation and costs associated with information reporting requirements on the welfare of compliant countries. This paper shows that AEoI-abiding economies would entail substantial welfare losses. For any combination of interest rate, foreign earnings taxation and compliance cost, the welfare costs of AEoI are larger for the source (small open) economy than the revenue is for the residence country. Without commitment and enforcement, countries might be tempted to deviate from such agreements and share information only partially. The paper's result provides a rationale for sharing of AEoI infrastructure costs among jurisdictions.

Keywords: cross-border tax evasion, information exchange, international standards of transparency.

JEL Classification: F21, H26, H87.

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1 Introduction

The Automatic Exchange of Information (AEoI) is a tax standard that governs how tax authorities of participating countries exchange information related to taxpayers' foreign bank accounts with one another. AEoI involves the systematic and automatic transmission of large amounts of information (such as investment income) from the tax administration where the account is held to the tax administration where the taxpayer is resident. While the responsibility for levying the taxes lies fully with the resident tax authorities, the cost of setting up a reporting infrastructure is borne by the source (small open) country tax administration. Thus far, over 100 countries have committed to implementing and to exchanging information with each other under the AEoI framework; the first exchange of information taking place in the year 2017.

We consider a small open economy along the lines of Schmitt-Grohe and Uribe (2003) debt-elastic interest-rate premium model to analyze the consequences of the AEoI mechanism for small open economies, the majority of signatories.[1] This is a useful starting point and we emphasize features of international agreements that have not been the focus of primary attention, i.e., the impact of foreign investment taxation and the costs associated with information reporting requirements on the welfare of compliant countries. In our model, information exchange is not treated as a strategic choice, but rather a commitment under AEoI agreements with two main implications: lower net return on foreign debt and costs related to compliance with AEoI standards (e.g., the technology tools and staff capable to collect, monitor, understand and transmit the information (OECD (2013), pwc (2014)). We assume that information exchange costs are borne only by the source country (benchmark) and are increasing in the amount of tax information exchanged, i.e., in the amount of foreign debt.

AEoI agreements allow the home country to impose a proportional tax on its residents' foreign investment. In this sense, exchange of information is a way of getting closer to a situation where governments can tax the worldwide income of their residents as in a residence-based regime. Our results show that AEoI agreements are harmful to small open economies. For any combination of share of AEoI apparatus cost, international tax and interest rates, the source country always experiences welfare losses, while the resident country can benefit from information exchange agreements by collecting tax revenues from earnings abroad as long as it can tax them and pay little of the infrastructure cost that allows such taxation. This paper highlights that AEoI abiding small open economies would entail substantial welfare losses. Without commitment and proper enforcement, which is beyond the scope of this study, at any point in time, countries might be tempted to deviate from such agreements and share information only partially. One interpretation of this paper's result is that it provides a reason for cost-sharing of AEoI infrastructure expenses among

[1]For more details and a list of signatories of the Common Reporting Standard - Multilateral Competent Authority Agreement (OECD (2014), OECD (2011b)), see http://www.oecd.org/tax/automatic-exchange/about-automatic-exchange/

jurisdictions. Cooperation among tax administrations would reduce the welfare costs of the AEoI mechanism for source economies, while still raising some tax revenue for resident countries.[2]

Exchange of information is not new but it is only recently that it became more comprehensive and global in scope. Motivated by growing concerns over loss of revenue and perceptions of fairness, important developments occurred internationally, most notably the European Union Savings Tax Directive - STD (Council of the European Union (2014b), Council of the European Union (2014a)), the Global Standard of Automatic Exchange of Information by the OECD (OECD (2014), OECD (2015)), and the United States Qualified Intermediary mechanism and the Financial Accounts Tax Compliance Act - FATCA (U.S. Internal Revenue Service (2010), U.S. Internal Revenue Service (2012)). During the recent financial crisis, the fight against tax evasion became a political priority in rich countries and the pressure, particularly on tax havens, mounted. Developed countries urged countries to sign information exchange treaties under the threat of economic sanctions. Our framework sheds light on the mismatch of costs and benefits of AEoI agreements and, hence, the effectiveness of such treaties on cross-border tax evasion (Shaxson and Christensen (2011), OECD (2011a), Johannesen and Zucman (2014)).

This paper is related to a growing literature on the taxation of cross-border investment, including papers on the international exchange of tax information and cross-border tax evasion. Countries could mutually benefit from information exchange by diminishing the attraction of tax evasion. Information exchange may strength the tendency of each country to set a higher tax level on capital as the incentive for tax evasion in foreign countries decreases (Bacchetta and Espinosa (1995), Bacchetta and Espinosa (2000), Keen and Ligthart (2006a)). However, encouraging countries to share tax information effectively is not an easy task. While it is clear that high-tax countries would gain, information exchange would seem to go against the interests of low-tax countries. Providing information to the home tax authorities so they can further tax capital income makes low-tax countries themselves less attractive to foreign investors. For a primer on information sharing and international taxation, see Keen and Ligthart (2006b), and other relevant contributions include Eggert and Kolmar (2002), Huizinga and Nielsen (2003), Keen and Ligthart (2007), Hemmelgarn and Nicodeme (2009), Elsayyad and Konrad (2012) Gerard and Granelli (2013), Johannesen (2014), Konrad and Stolper (2016) and Dharmapala (2016).

The paper proceeds as follows. In Section 2 we present a small open economy model and introduce key features of compliance with the AEoI framework. Section 3 presents our numerical exercise and Section 4 offers concluding comments.

[2] An illustrative example is the United States decision to shift from a unilateral FATCA approach, in which the US tax authorities bore the whole cost of monitoring foreign financial institutions, to a more cooperative mechanism (U.S. Internal Revenue Service (2012)).

2 Exchange of information in a small open economy model

Our model is similar to Schmitt-Grohe and Uribe (2003)'s model of debt-elastic interest-rate premium, except for a costly exchange of information infrastructure and residence taxation of foreign earnings. Agents preferences are described as follows:

$$E_0 \sum_{t=0}^{\infty} \beta^t \frac{[c_t - \omega^{-1} h_t^{\omega}]^{1-\gamma} - 1}{1-\gamma} \tag{1}$$

where $\beta \in (0,1)$ is the discount factor, $\omega > 1$ and $\gamma > 1$ (Mendoza (1991)).

The evolution of foreign debt, d_t , is given by

$$d_t = (1 + r_{t-1})\, d_{t-1} - y_t + c_t + i_t + \Phi\left(k_{t+1} - k_t\right) + \eta \Psi(d_{t-1}) \tag{2}$$

where $y_t = A_t k_t^{\alpha} h_t^{1-\alpha}$ represents the domestic output and the function $\Phi\left(k_{t+1} - k_t\right) = \frac{\phi}{2}\left(k_{t+1} - k_t\right)^2$ captures capital adjustment costs, where $\phi > 0$ and is assumed to satisfy $\Phi(0) = \Phi'(0) = 0$. Acquiring or supplying information is costly, and the function $\Psi(d_{t-1})$ is meant to capture the cost of setting up and maintaining a reporting infrastructure.[3] The source country bears a fraction $\eta \in [0,1]$ of the total cost. Notice that according to AEoI agreements, $\eta = 1$(our benchmark), meaning that the tax authority in the source country pays for the totality of compliance costs. We allow it, however, to vary from zero to one hundred percent for the purpose of our numerical exercise and policy implications (for instance, the possibility that a cost-sharing scheme would improve welfare).

The stock of capital evolves according to

$$k_{t+1} = i_t + (1 - \delta) k_t \tag{3}$$

where i_t denotes gross investment, and k_t denotes physical capital. Preferences and technology in the rest of the world are assumed identical to those of our economy and the rest of the world is at

[3]The AEoI mechanism involves measures to facilitate the automatic exchange of tax information, as well as standardization of the information being shared. For instance, the OECD survey indicates that when the residence country receives information which contains a Tax Identification Number (TIN), the matching rate is increased significantly and as a result the identification of the taxpayer. For a TIN to be useful it must be the residence country TIN (not a source country TIN) and it must be a valid number without errors. Absent a TIN, the data items most frequently required by the residence country to identify its taxpayer are name, address and date of birth. Quality issues also exist with the name and address which is further complicated by different languages, multiple first names and family names, different alphabets and different address formulations from country to country. Countries might need to amend their domestic legislation to enable the gathering and cross-border sharing of information for tax purposes, while ensuring the confidentiality of the information and its use for specific purposes only. A standardized multilateral automatic exchange model requires a legal basis for: (i) the domestic reporting obligation and (ii) the exchange of the information. An effective model for automatic exchange of information requires an agreement on the scope of the information to be reported by domestic financial institutions and exchanged with residence jurisdictions (OECD (2013, 2014)).

the steady state (Correia (1996)).

The interest rate faced by domestic agents in world financial markets is increasing in the aggregate level of foreign debt ($\widetilde{d}_t$) and in the world interest rate (r^*). Under AEoI agreements, information exchange allows the tax authority of the home country to tax at rate τ^* its resident earnings abroad.[4] Hence, the net-of-tax rate of return earned by foreigners is determined abroad and, thus, the rate of return on foreign debt is given by

$$r_t = \frac{r^* + p(\widetilde{d}_t)}{(1-\tau^*)} \tag{4}$$

where the function $p(\widetilde{d}_t) = \psi(e^{d_t - \bar{d}} - 1)$ is a country-specific interest rate premium. We assume that the small open economy does not impose withholding taxes at source. Withholding taxes would make evasion less attractive in general, but the basic results would not be fundamentally changed. Moreover, because we consider the source country's net foreign asset position we abstract from any possible tax revenue generated by the small open economy residents abroad.

Households choose allocations $\{c_t, h_t, y_t, i_t, k_{t+1}, d_t\}$ to maximize the utility function (1) subject to (2), (3), (4) and a standard no-Ponzi constraint. The optimality condition for foreign debt

$$\lambda_t \;=\; \beta \left(1 + \frac{r^* + p(\tilde{d}_t)}{(1-\tau^*)} + \eta \Psi_d(t) \right) E\lambda_{t+1} \tag{5}$$

states that if the household chooses to borrow an additional unit, then current consumption increases by one unit. The value of this increase in consumption in terms of utility is given by the left-hand side of equation (5). Next period, the household must repay the additional unit of debt plus interest (equation 4). The value of this repayment in terms of today's utility is given by the right-hand side. At the optimum, the marginal benefit of a unit debt increase must equal its marginal cost, which includes not only the interest portion but also the marginal cost of information exchange (more foreign debt imply higher compliance cost for the source country).

3 Numerical Results

In this section we investigate the impact of AEoI agreements on source country's welfare costs and residence country's tax revenue. Estimates are derived by comparing steady states of small open economy model assuming different international tax and interest rates (τ^*, r^*) and the fraction

[4]Until very recently, the enforcement of cross-border investors' tax obligations has been based on information exchange upon request. The AEoI framework has established the legal requirements for source governments to collect information and exchange it with residence countries on an automatic basis. More than 100 jurisdictions have made commitments to begin the automatic exchange of information in 2017 or 2018 (see http://www.oecd.org/tax/transparency/automatic-exchange-of-information/).

(η) of the total compliance cost paid by the source (small open) country. Table I presents our baseline parameters taken from Schmitt-Grohe and Uribe (2003). We assume a linear compliance cost, $\Psi(d_{t-1}) = \lambda d_{t-1}$, where $\lambda = 0.01$.

Table I: Model parameters

γ	ω	α	ϕ	r^*	δ	$\bar{d}$	ψ	λ
2.00	1.455	0.32	0.028	0.04	0.10	0.7442	0.000742	0.01

First, we assess the abilities of the small open real business cycle with AEoI model to match the data, and verify that the cyclical characteristics of this economy are not significantly affected by the adoption of these agreements. Table II presents a number of unconditional second moments of interest implied by our model for different values of foreign earnings taxation and the share of AEoI apparatus cost (τ^*,η). The international interest rate r^* is kept at four percent throughout this exercise (Table II). We also include the observed second moments using Canadian data (Mendoza (1991)) and those implied by Schmitt-Grohe and Uribe (2003) model 2 (no AEoI, SGU model) - first and second columns of Table II, respectively - to evaluate whether the additional features regarding international exchange of tax information change the main properties of the model. The results displayed in Table II show that our model's predictions regarding second moments are well within the range of those observed in the data and predicted by the SGU model. We attribute the model's small differences of some of these measures to the combination of three main factors, namely, the international tax rate (τ^*), the cost function $\Psi(\cdot)$ setting up and maintaining a reporting infrastructure and the fraction η of this cost bore by the source country.

The welfare measure we use is based on the increase in consumption that an individual would require to be as well off as under no AEoI agreement. No-information exchange optimal allocations for our economy are equivalent to the equilibrium allocations for the same economy without residence taxation and compliance costs or, equivalently, for Schmitt-Grohe and Uribe (2003) debt-elastic interest-rate premium model, where $\overline{U}$ is the level of utility attained (in the steady state) under no AEoI agreement.[5] The results of the welfare calculations expressed as a fraction of steady-state real output ($\triangle c/y$), as well as the tax revenue to be received by the residence tax authority due to the AEoI agreement, are shown in Table III. The revenue measure is the tax revenue minus the share of the compliance cost as a proportion of the source country output, i.e., $(\tau^* rd - (1-\eta)\Psi(d))/y$. Reporting both the welfare cost and the tax revenue in terms of the small open economy output allow us to quantify the costs and benefits of information exchange agreements.

Table III shows that for any combination of interest rate, foreign earnings taxation and compliance cost, the welfare costs of AEoI are larger for the source country than the revenue is for

[5]The computer code used to calculate the baseline utility is available at https://github.com/JohannesPfeifer/DSGE_mod/tree/master/SGU_2003.

Table II: Observed and implied second moments

			Model with AEoI			
		No AEoI	$\tau^* = 0.10$		$\tau^* = 0.30$	
	Data	(SGU model)	$\eta = 1$	$\eta = 0$	$\eta = 1$	$\eta = 0$
Volatilities						
std(y_t)	2.8	3.1	3.2	3.1	3.2	3.2
std(c_t)	2.5	2.7	3.2	2.8	3.7	3.2
std(i_t)	9.8	9.0	10.8	9.6	12.4	11.1
std(h_t)	2.0	2.1	2.2	2.1	2.2	2.2
std(tb_t/y_t)	1.9	1.8	2.1	1.9	2.5	2.3
std(ca_t/y_t)		1.5	1.7	1.5	1.8	1.7
Serial correlations						
corr(y_t,y_{t-1})	0.61	0.62	0.64	0.62	0.65	0.64
corr(c_t,c_{t-1})	0.70	0.78	0.85	0.80	0.88	0.84
corr(i_t,i_{t-1})	0.31	0.07	0.03	0.05	0.00	0.02
corr(h_t,h_{t-1})	0.54	0.62	0.64	0.62	0.65	0.64
corr(tb_t/y_t,tb_t/y_{t-1})	0.66	0.51	0.48	0.51	0.51	0.52
corr(ca_t/y_t,ca_t/y_{t-1})		0.32	0.24	0.29	0.18	0.22
Correlations with output						
corr(c_t,y_t)	0.59	0.84	0.75	0.82	0.70	0.77
corr(i_t,y_t)	0.64	0.67	0.61	0.65	0.57	0.61
corr(h_t,y_t)	0.80	1.0	1.0	1.0	1.0	1.0
corr(tb_t/y_t,y_t)	-0.13	-0.044	-0.059	-0.057	-0.078	-0.082
corr(ca_t/y_t,y_t)		0.050	0.035	0.042	0.035	0.032

Note: First and second columns were taken from Mendoza (1991) and Schmitt-Grohe and Uribe (2003), respectively. Standard deviations: % per year.

the residence country. The welfare cost and tax revenue are increasing in the fraction of the AEoI reporting infrastructure cost paid by the source country (η). For a given international tax and interest rates, the more the small open economy has to pay of the costs associated with information reporting requirements, less resources are available for consumption and investment domestically and it experiences welfare losses. On the other hand, the residence country collects tax revenue that would not be possible without the AEoI, while bearing little of the cost of gathering such information. For instance, if $r^* = 0.04$, $\tau^* = 0.10$ and the source country pays the whole cost of the reporting infrastructure ($\eta = 1$), the welfare cost of AEoI is 3.54 percent of the source economy output, although tax revenue amounts to only 0.26 percent of output.

The mismatch between costs and benefits of AEoI goes down as the residence country pays more of the compliance cost. And it is the lowest when the residence country pays for all of the information exchange infrastructure (i.e., $\eta = 0$). As the residence country pays for more of the information exchange infrastructure ($\eta \to 0$), it experiences tax revenue losses (e.g., amount of tax

Table III: Welfare Implications of AEoI

		$\eta = 1.00$	$\eta = 0.75$	$\eta = 0.50$	$\eta = 0.25$	$\eta = 0.00$
Source country		Welfare Cost: $\triangle c/y$				
$r^* = 0.04$	$\tau^* = 0.00$	0.0236	0.0173	0.0112	0.0055	0.0000
	$\tau^* = 0.10$	0.0354	0.0287	0.0222	0.0159	0.0099
	$\tau^* = 0.30$	0.0736	0.0656	0.0578	0.0503	0.0430
$r^* = 0.02$	$\tau^* = 0.00$	0.0180	0.0130	0.0083	0.0040	0.0000
	$\tau^* = 0.10$	0.0228	0.0174	0.0124	0.0078	0.0035
	$\tau^* = 0.30$	0.0377	0.0316	0.0258	0.0203	0.0151
Resident country		*Tax revenue:* $(\tau^* rd - (1-\eta)\Psi(d))/y$				
$r^* = 0.04$	$\tau^* = 0.00$	0.0000	-0.0014	-0.0026	-0.0039	-0.0050
	$\tau^* = 0.10$	0.0026	0.0011	-0.0003	-0.0016	-0.0029
	$\tau^* = 0.30$	0.0112	0.0094	0.0076	0.0059	0.0043
$r^* = 0.02$	$\tau^* = 0.00$	0.0000	-0.0011	-0.0021	-0.0031	-0.0039
	$\tau^* = 0.10$	0.0010	-0.0001	-0.0012	-0.0022	-0.0032
	$\tau^* = 0.30$	0.0042	0.0029	0.0017	0.0005	-0.0006

collected is not enough to pay for the AEoI apparatus). The source country still faces a loss due to AEoI compliance (taxation on income of residents' investment abroad reduces the net return on foreign debt, which in turn reduces the demand of foreign debt, plus its share of AEoI costs).

The welfare cost and tax revenue are the highest when both international tax and interest rates are the highest. For the small open economy, a high world interest rate (r^*) and a higher taxation on foreign earnings (τ^*) increases the interest rate faced by domestic agents in world financial markets and, consequently, the cost to borrow from abroad. For a given level of foreign debt (d), this translates into higher welfare costs for the source country and more tax revenue for the resident country, depending on the share of AEoI costs paid by its tax authority.

The effect of foreign earnings taxation enabled by AEoI on the resident country tax revenue depends critically on the combination of two factors: how much the resident country taxes (τ^*) its residents' foreign earnings and how much it pays ($1-\eta$) of the total cost of the AEoI system (Table III). The resident tax authority experiences revenue losses when it pays at least fifty percent of the compliance cost ($\eta \in [0, 0.5]$) and taxes foreign earnings at a low rate ($\tau^* = 0.10$). If the main objective of AEoI agreements was simply to create a world financial registry (Zucman (2014)) and earnings abroad were not taxed ($\tau^* = 0$), both source and resident countries would experience welfare and revenue losses, respectively.

4 Conclusions

This paper presents a simple theoretical model of cross-border investment to analyze the consequences of the AEoI mechanism for small open economies. We emphasize the impact of foreign investment taxation and the costs associated with information reporting requirements on the welfare of compliant countries. Our results show that AEoI agreements are harmful to small open economies. For any combination of share of AEoI apparatus cost, international tax and interest rates, the source country always experiences welfare losses. On the other hand, the resident country can benefit from information exchange agreements by collecting tax revenues from earnings abroad as long as it pays little of the compliance infrastructure cost. The paper's result provides a reason for cost-sharing of AEoI infrastructure expenses among jurisdictions. If the residence country pays a fraction of the compliance cost, it gives up part of the tax revenue due to AEoI agreements, but it alleviates the burden of the source country. Jurisdictions could, for instance, benefit from technology that reduced the cost of AEoI apparatus.

Our analysis has abstracted from many quantitatively important factors, particularly heterogeneity of cross-border investors, the impact of information reporting requirements on the cost of providing financial services and optimal taxation of foreign earnings. It is, however, a very flexible starting point to which these other features can be introduced. We pursue these extensions in future research.

References

Bacchetta, P. and M. Espinosa (2000): "Exchange-of-Information Clauses in International Tax Treaties," *International Tax and Public Finance*, 7, 275–293.

Bacchetta, P. and M. P. Espinosa (1995): "Information sharing and tax competition among governments," *Journal of International Economics*, 39, 103–121.

Correia, I. H. (1996): "Dynamic optimal taxation in small open economies," *Journal of Economic Dynamics and Control*, 20, 691–708.

Council of the European Union (2014a): "Council Directive 2014/107/EU of 9 December 2014 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation," *Official Journal of the European Union*.

——— (2014b): "Council Directive 2014/48/EU of 24 March 2014 amending Directive 2003/48/EC on taxation of savings income in the form of interest payments," *Official Journal of the European Union*.

Dharmapala, D. (2016): "Cross-border tax evasion under a unilateral FATCA regime," *Journal of Public Economics*, 141, 29 – 37.

Eggert, W. and M. Kolmar (2002): "Residence-Based Capital Taxation in a Small Open Economy: Why Information is Voluntarily Exchanged and Why it is Not," *International Tax and Public Finance*, 9, 465–482.

Elsayyad, M. and K. A. Konrad (2012): "Fighting multiple tax havens," *Journal of International Economics*, 86, 295 – 305.

Gerard, M. and L. Granelli (2013): "From the EU Savings Directive to the US FATCA, Taxing Cross Border Savings Income," Discussion Papers (IRES - Institut de Recherches Economiques et Sociales) 2013-007.

Hemmelgarn, T. and G. Nicodeme (2009): "Tax Co-ordination in Europe: Assessing the First Years of the EU-Savings Taxation Directive," .

Huizinga, H. and S. B. Nielsen (2003): "Withholding taxes or information exchange: the taxation of international interest flows," *Journal of Public Economics*, 87, 39–72.

Johannesen, N. (2014): "Tax evasion and Swiss bank deposits," *Journal of Public Economics*, 111, 46 – 62.

Johannesen, N. and G. Zucman (2014): "The End of Bank Secrecy? An Evaluation of the G20 Tax Haven Crackdown," *American Economic Journal: Economic Policy*, 6, 65–91.

Keen, M. and J. Ligthart (2006a): "Incentives and Information Exchange in International Taxation," *International Tax and Public Finance*, 13, 163–180.

——— (2006b): "Information Sharing and International Taxation: A Primer," *International Tax and Public Finance*, 13, 81–110.

Keen, M. and J. E. Ligthart (2007): "Revenue Sharing and Information Exchange under Non-Discriminatory Taxation," *The Scandinavian Journal of Economics*, 109, pp. 487–504.

Konrad, K. A. and T. B. Stolper (2016): "Coordination and the fight against tax havens," *Journal of International Economics*, 103, 96 – 107.

Mendoza, E. G. (1991): "Real Business Cycles in a Small Open Economy," *American Economic Review*, 81, 797–818.

OECD (2011a): "The Era of Bank Secrecy is Over: The G20/OECD Process Is Delivering Results," Tech. rep.

——— (2011b): "The Multilateral Convention on Mutual Administrative Assistance in Tax Matters," Tech. rep.

——— (2013): "Delivering a standardised, secure and cost effective model of bilateral automatic exchange for the multilateral context," Paris.

——— (2014): "Standard for Automatic Exchange of Financial Account Information in Tax Matters," Paris.

——— (2015): "Automatic Exchange of Financial AccountInformation," Paris.

PWC (2014): "Final OECD standard for automatic exchange of tax information signals compliance challenges," Tax policy bulletin (aug 2014); tax insights from global information reporting.

SCHMITT-GROHE, S. AND M. URIBE (2003): "Closing small open economy models," *Journal of International Economics*, 61, 163–185.

SHAXSON, N. AND J. CHRISTENSEN (2011): "Time to Black-List the Tax Haven Whitewash," Tech. rep.

U.S. INTERNAL REVENUE SERVICE (2010): "Foreign Account Tax Compliance Act (FATCA)," http://www.irs.gov/businesses/corporations/foreign-account-tax-compliance-act-fatca.

——— (2012): "Joint Statement from the United States, France, Germany, Italy, Spain, and the United Kingdom regarding an Intergovernmental Approach to Improving International Tax Compliance and Implementing FATCA," Tech. rep.

ZUCMAN, G. (2014): "Taxing across Borders: Tracking Personal Wealth and Corporate Profits," *Journal of Economic Perspectives*, 28, 121–48.