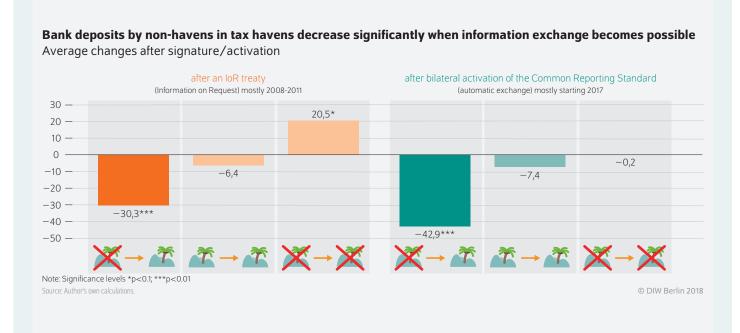
# **DIW** Weekly Report

#### AT A GLANCE

# International treaties insufficiently curb global tax evasion

By Lukas Menkhoff, and Jakob Miethe

- German Institute for Economic Research examines whether recent measures affect tax evasion via tax havens
- So far, bank deposits in tax havens dropped when information exchange on request become possible but effects die out after a few years
- · New OECD standard on automatic information exchange has similar effects on bank deposits
- Much speaks in favor of an interpretation that tax havens are still used for tax evasion and more rigorous transparency measures and aggressive forms of pressure should be examined



## FROM THE AUTHORS

"The reactions to the activation of automatic information exchange that we observe are hauntingly similar to the reactions to earlier treaties of which we can by now show that they were ineffective in the long term."

— Jakob Miethe, study author —

## MEDIA



Audio interview with Jakob Miethe (in German)
www.diw.de/mediathek

# International treaties insufficiently curb global tax evasion

By Lukas Menkhoff, and Jakob Miethe

#### **ABSTRACT**

In recent years, the global community has promoted several initiatives aimed at breaking bank secrecy in tax havens. Such treaties for the exchange of information among tax offices can be effective. A treaty between country A and tax haven B reduces deposits from A in banks of B by approximately 30 percent. However, the analysis shows that tax evaders react to such treaties not by becoming honest taxpayers but rather by adapting their practice of tax evasion. Consequently, the international community must crack down on tax evasion more aggressively — for example, by disclosing the final beneficiaries of assets in tax havens or making it difficult for financial institutions in tax havens to access international capital markets.

Tax evasion does not only reduce national tax revenue. International tax evasion (Box 1) in particular is only possible for very wealthy individuals. This contributes to lowering the general population's trust in fiscal justice and government action. Hence the OECD countries in particular are making the effort to prevent the use of tax havens to evade taxes. Based on data from the Bank for International Settlements that have only been published in fall 2016, the present study examines the effect of treaties for this purpose. Of course, the data does not contain a separate category called "tax evasion", but it can be used to determine whether funds were transferred after an international tax treaty was concluded. Such reactions only make sense when there is something to hide, namely, tax evasion. The indirect approach is based on an earlier study1 with proprietary data that the present one verifies and extends.2

# Measures against international tax evasion

On the international level, the Organisation for Economic Co-operation and Development (OECD) is the forum in which measures for preventing international tax evasion are negotiated. Here, the relevant model treaties are developed and the lists of tax havens prominent in the press are compiled (Box 2).

OECD members agree on specific treaties in order to expose international tax evasion. In the wake of the 2008 financial crisis, the G20 group threatened to apply economic sanctions if tax havens did not sign international information exchange treaties with at least 12 other states. The threat was effective: at present there are over 3,000 such signed treaties (see Figure 1) that are analyzed here. Such treaties are signed bilaterally and based on the OECD model treaties. A significant number of them were indeed signed between tax havens and non- havens. If they are based on the OECD initiative,

<sup>1</sup> Niels Johannesen and Gabriel Zucman, "The end of bank secrecy? An evaluation of the G20 tax haven crackdown," American Economic Journal: Economic Policy, 6 (2014): 65-91.

<sup>2</sup> For a detailed discussion, see Lukas Menkhoff and Jakob Miethe, "Tax evasion in new disguise? Examining tax haven's international bank deposits," (2018); and an earlier version, see Lukas Menkhoff and Jakob Miethe, "Dirty Money Coming Home: Capital Flows into and out of Tax Havens," *DIW Discussion Papers* no. 1711 (2017) (available online, accessed September 28, 2018; this applies to all other online sources in this report unless stated otherwise).

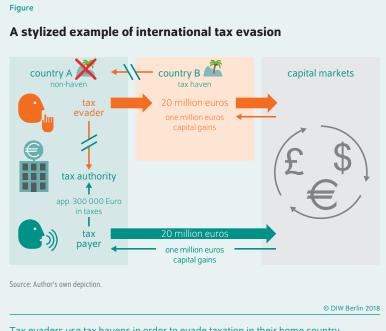
#### Box 1

#### International tax evasion

When a person who is both a resident and taxpayer in Germany illegaly circumvents taxes, this is called tax evasion. In the case of international tax evasion, evaders typically target a destination country for their capital where foreign capital is taxed at a low rate or not at all. They open a bank account in the country and deposit their capital gains in it. If they do not declare these capital gains on their German tax returns, this is a case of global tax evasion. A greatly simplified tax evasion scheme occurs as follows: a "friendly" company or a (shell) company founded by the tax evader presents invoices for, potentially overpriced, services rendered and has them paid to an account in the tax haven. Since no real costs are incurred for these services - consulting services or image rights that are difficult to verify, for example - the capital can be transferred with low "losses." Either the tax evader is the company owner, or the company transfers the funds to a local account of the evader, who is actually liable to pay taxes in Germany. The initial deposit grows over the years and capital gains accrue.

# **Fictive example**

A person from country A has assets worth 20 million euros. This capital is transferred to country B, a tax haven, by invoicing consulting services or selling image rights to a shell company. From the tax haven, people can make global investments: in financial products in Luxembourg, for example. Assuming their capital gains equal one million euros, a tax evader would normally have to pay 300,000 euros worth of taxes each year in country A. But the evader did not declare the capital gains on their tax return in country A – an illegal omission – therefore the capital gains are tax-free because country B does not have a capital gains tax. An honest taxpayer with the same assets would declare the capital gains in country A and pay taxes there.



Tax evaders use tax havens in order to evade taxation in their home country.

such Information-on-Request (IoR) treaties, the general term, are called tax and information exchange agreements (TIEA). Additionally, double taxation conventions (DTC), that already existed between countries, were expanded to include options for information exchange on request.

When Germany signs an IoR treaty with Bermuda, as it did in the third quarter of 2009, the German tax authorities can ask the authorities in Bermuda for information on the accounts of a specific person. To do this, however, the German authorities must have a documented suspicion of tax evasion via the country that is party to the treaty. They must also show that they cannot get the required information without the partner country's help, and the partner country must not incur disproportionate expenses due to the request. Due to this necessity of a specific and well documented suspicion these treaties have been able to uncover only very few cases of tax evasion.3

For this reason, the OECD has drawn up a standard for automatic information exchange called the Common Reporting Standard (CRS). The convention was signed by multiple countries.4 However, the actual exchange of information under the CRS can only be activated bilaterally. Such activations are taking place since 2017.

The CRS and other treaties on the international exchange of information<sup>5</sup> document the political effort involved in cracking down on international tax evasion. The issue is to quantify just how successful the measures are.

# The effect of international treaties has already been analyzed

Danish economist Niels Johannesen and his French colleague Gabriel Zucman authored a pioneering study on international tax evasion in 2014.6 They had exclusive access to Bank for International Settlements (BIS) data on the balance sheets of the banking systems of individual tax havens

<sup>4</sup> Called the Multilateral Competent Authority Agreement, it has been signed in several rounds by more and more countries. The list of the meetings and the countries that signed can be viewed on the OECD

<sup>5</sup> It is worth mentioning the Foreign Account Tax Compliance Act (FATCA), which implements automatic information exchange on a bilateral level, but only with the U.S. The list of FATCA signatories can be viewed on the website of the U.S. Treasury.

<sup>6</sup> Johannesen and Zucman, "The end of bank secrecy"

#### Box 2

#### Tax havens

Tax havens are states — or small, only partially independent jurisdictions — with specific characteristics. They levy low taxes or none at all on certain types of income such as capital gains. They also uphold high standards of bank secrecy and institutional stability. Tax havens thus function reliably, just not in the spirit of other countries. They specialize in enabling foreign owners of capital to circumvent the laws of their countries of residence in order to attract the capital to their own country. One line of business involves the design of legal constructs that help foreign owners of capital to avoid or significantly reduce their taxes. Another such line of business uses the same opportunities to completely evade taxes. Although morally questionable, avoiding taxes by the means described above is entirely legal. However, by definition tax evasion is illegal. The present study focuses on that second line of business: illegal tax evasion

Due to the illegal nature of some activities, states do not like to be labeled "tax havens". They would have to be prepared for countermeasures by other states. Accordingly, the political haggling over which states are called tax havens is often long and drawn out. And because the process is subject to political influence, the official lists of tax havens are not entirely useful.¹ With that in mind, we created a list in line with other international researchers. The present study is based on a list of 58 tax havens² consisting of countries that appear on the lists of two different, frequently cited studies.³

as reported by national central banks. The data contain the amounts of bank deposits by foreigners, including foreign companies. The BIS statistics used here only include direct international owners. Therefore, if the domestic company that owns the deposit has an international owner itself, the BIS statistics do not record the final beneficiary. The extent to which banks can see through such structures is an open question.

Using the BIS data, the effect of an IoR treaty concluded between two countries is established. If the parties involved are honest taxpayers, the agreement should not have any effect (see Figure 2). However, Johannesen and Zucman's analysis for 2008 to 2010 showed that after the bilateral agreement was concluded, the amount of bank deposits in question was actually lower. Tax evasion apparently declined in this specific bilateral connection, despite the fact that the treaties are basically toothless. However, it is possible to redeploy equity capital relatively cheaply in other countries (for as little as a few hundred U.S. dollars).<sup>7</sup>

Whether tax evasion also declines across all countries cannot be established with this method, because evasive maneuvers are possible. First, tax evaders can divert their money to tax havens that do not have treaties with their country of residence. Second, they can establish complicated structures beyond an account held in a tax haven. In both cases, the total volume of taxes avoided does not decrease. Indeed, the statistics in relevant studies<sup>8</sup> indicate that the total amount of untaxed capital even increases.

# More recent analyses: IoR treaties were bilaterally effective...

With the data publicly available since 2016, the analysis summarized above can approximately be reproduced. After an IoR treaty was concluded between country A and country B, whereby B is a tax haven, the deposits of citizens from country A into the banks of country B declined by 30 percent (see Table 1). Column 2 reproduces the findings of Johannesen and Zucman using the tax haven list, the agreements, and the time period of their study. The effect determined here (Column 1) is greater than the effect previously shown because a more rigorous definition of IoR treaties was used. It does not depend on the precise definition of a tax haven (see Box 2).

To be certain that the effects were actually due to the OECD-enforced TIEAs as anticipated, and not due to updated double taxation conventions (DTCs), these two types of IoR treaties

<sup>1</sup> See Jakob Miethe, "Die leere Liste der Steueroasen. Kommentar." DIW Wochenbericht no. 4 (2018): 72 (in German only; available online).

<sup>2</sup> They are: Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Bahrain, Barbados, <u>Belgium</u>, Belize, Bermuda, British Virgin Islands, Cayman Islands, <u>Chile</u>, Cook Islands, Costa Rica, Curacao, Dominica, Gibraltar, Grenada, <u>Guernsey</u>, Hong Kong, <u>Ireland, Isle of Man, Jersey</u>, Jordan, Lebanon, Liberia, Liechtenstein, <u>Luxermbourg</u>, Macao, Malaysia, Maldives, Malta, Marshall Islands, Mauritius, Monaco, Montserrat, Nauru, Dutch Antilles (as of 2010, Curacao and Sint Maarten), Niue, Austria, Panama, Saint Lucia, Samoa, San Marino, <u>Switzerland</u>, Seychelles, Singapore, Sint Maarten, St. Kitts and Nevis, St. Vincent and the Grenadines, Tonga, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Vanuatu, U.S. Virgin Islands, and Cyprus. The tax havens that reported bilateral deposits to the Bank for International Settlement in the data period are underlined.

<sup>3</sup> See Jane G. Gravelle, "Tax havens: International tax avoidance and evasion," Congressional Research Service Report 7-5700 (2015); also see Niels Johannesen and Gabriel Zucman, "The end of bank secrecy? An evaluation of the G20 tax haven crackdown," American Economic Journal: Economic Policy, 6 (2014): 65-91.

<sup>7</sup> See Jason C. Sharman, "Shopping for anonymous shell companies: An audit study of anonymity and crime in the international financial system," Journal of Economic Perspectives 24 (4) (2010): 127-140; also see Michael G. Findley, Daniel L. Nielson, and Jason C. Sharman, Global shell games: Experiments in transnational relations, crime, and terrorism, (Cambridge: Cambridge University Press, 2013).

<sup>8</sup> See Gabriel Zucman, "The missing wealth of nations: Are Europe and the U.S. net debtors or net creditors?," Quarterly Journal of Economics 128 (3) (2013): 1321-1364; also see Valeria Pellegrini, Alessandra Sanelli, and Eric Tosti, "What do external statistics tell us about undeclared assets held abroad and tax evasion?" (Working Paper, Bank of Italy, Rome, 2016).

<sup>9</sup> For details and robustness exercises, see Menkhoff and Miethe, "Tax evasion in new disguise?"

were examined separately. The analysis shows that DTCs did not drive the effect (see Column 3).

Most IoR treaties were signed immediately after the economic and financial crisis of 2008/2009, a time period when international bank liabilities were sharply reduced. To be certain that such developments do not drive the results, a placebo analysis was carried out that reflects this signature momentum. This placebo shows no effect (see Column 3).

To further verify that these effects do not reflect any other reactions, Column 4 shows, as expected, that IoR treaties between two tax havens (for example, Guernsey and the Cayman Islands) do not have an influence. On the other hand, IoR treaties between non-havens such as France and Japan even have slightly positive effects. These effects are primarily driven by DTCs that are concluded between countries in whose bank deposits untaxed capital most likely plays a minor role.

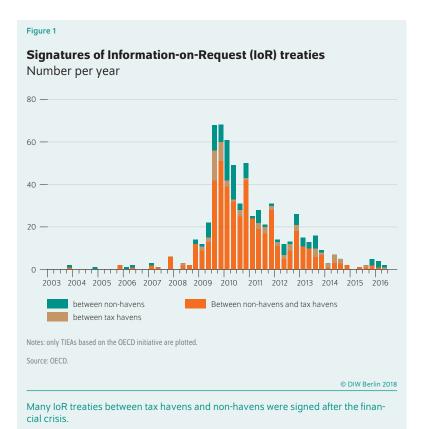
# ...but circumvented in the medium term

The effect of IoR treaties begins up to two quarters before they come into force and persists for at least 20 quarters after they are concluded. However, the effect is driven by earlier IoR treaties. To show this, we carried out a rolling analysis that took into consideration the average of the cases two years before and after a specific quarter (see Figure 3). It clearly indicates that the effect of TIEAs was only statistically significant and different from zero until around 2010. Since then, new TIEAs apparently have no longer had any effect on foreigner investors' level of bank deposits.

# **Effects of more recent CRS activations**

Although this diminishing effect has not been scientifically documented previously, those responsible at the tax authorities were surely aware of how little difference an IoR treaty can make on its own. The circumvention strategies are too obvious for these agreements to be successful at permanently preventing tax evasion. Various leaks have revealed how popular constructs work. As disclosed in the Panama Papers (Vladimir Putin's cellist¹¹) or the Football Leaks (Cristiano Ronaldo's consultant or Lionel Messi's father¹²), an unsuspicious relative or close friend becomes the owner of the account.

This is one of the reasons why the OECD developed the Common Reporting Standard (CRS) as a standard for the automatic exchange of bank information. The first bilateral exchange relationships were activated in 2017 and the initial evidence of their effect is now available. Using the method described above, we found the same effect that IoR treaties have. When country A and tax haven B have both signed the







Reactions to information exchange treaties are expected in bank deposits from non-havens in tax havens.

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**<sup>10</sup>** For a detailed discussion, see Menkhoff and Miethe, "Tax evasion in new disguise?"

**<sup>11</sup>** See Julian Hans, "Putin-Freund Sergej Roldugin: Melodien für Milliarden," *Süddeutsche Zeitung*, April 10, 2017 (in German; available online).

**<sup>12</sup>** See "Die Dose des Ronaldo," *Der Spiegel*, 49/2016, December 3, 2016: 15-25.

Table 1

# Reactions of bank deposits to IoR treaties (Information on Request)

Regression analysis with dependent variable: bilateral deposits

|   | deposits from non-havens in tax havens |   |                        | deposits between<br>tax havens | deposits between<br>non-havens |
|---|--|---|------------------------|--------------------------------|--------------------------------|
|   | main results                           | Johannesen & Zucman<br>(2014) specification (sam-<br>ple, list, treaties) | separation of treaties | falsification (4)              | falsification                  |
|   |  |   |                        |                                |                                |
| IoR treaty                                    | -0.303***                              | -0.133**  |                        | -0.064                         | 0.205*                         |
|   | (0.087)                                | (0.062)   |                        | (0.123)                        | (0.122)                        |
| quarter prior to IoR                          | -0.146 <sup>*</sup>                    |   |                        |                                |                                |
|   | (0.075)                                |   |                        |                                |                                |
| two quarters prior to loR                     | -0.130*                                |   |                        |                                |                                |
|   | (0.066)                                |   |                        |                                |                                |
| Tax Information Exchange<br>Agreements (TIEA) |  |   | -0.508***              |                                |                                |
|   |  |   | (0.094)                |                                |                                |
| Double Taxation Conventions (DTC)             |  |   | 0.097                  |                                |                                |
|   |  |   | (0.122)                |                                |                                |
| placebo                                       |  |   | -0.005                 |                                |                                |
|   |  |   | (0.045)                |                                |                                |
| financial weight                              | 0.554***                               |   | 0.567***               | 0.525***                       | 0.385***                       |
|   | (0.199)                                |   | (0.200)                | (0.196)                        | (0.131)                        |
| country-pair fixed effects                    | ✓                                      | ✓   | ✓                      | ✓                              | ✓                              |
| year-quarter fixed effects                    | ✓                                      | ✓   | ✓                      | ✓                              | ✓                              |
| observations                                  | 28.682                                 | 16.523  | 28.682                 | 11.133                         | 27.431                         |
| R <sup>2</sup>                                | 0.081                                  | 0.120   | 0.088                  | 0.083                          | 0.152                          |
| adjusted R <sup>2</sup>                       | 0.061                                  | 0.089   | 0.068                  | 0.061                          | 0.135                          |

Notes: Significance levels: \*p<0.1, \*\*\* p<0.05, \*\*\* p<0.01, standard errors in parantheses.

Source: Author's own calculations.

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Table 2

Reactions of bank deposits to the bilateral activation of automatic information exchange (CRS)

Regression analysis with dependent variable: bilateral deposits

|                            | deposits from non-  | deposits from non-havens in tax havens |                      | deposits between non-havens |
|----------------------------|---------------------|--|----------------------|-----------------------------|
|                            | only CRS activation | including all variables (2)            | falsification<br>(3) | falsification<br>(4)        |
|                            | (1)                 |  |                      |                             |
| CRS activation             | -0.429***           | -0.383***                              | -0.074               | -0.002                      |
|                            | (0.080)             | (0.076)                                | (0.133)              | (0.094)                     |
| oR treaty                  |                     | -0.275***                              | -0.061               | 0.205*                      |
|                            |                     | (0.080)                                | (0.123)              | (0.123)                     |
| amnesty                    |                     | 0.016                                  |                      |                             |
|                            |                     | (0.074)                                |                      |                             |
| olacebo                    |                     | -0.011                                 |                      |                             |
|                            |                     | (0.044)                                |                      |                             |
| inancial weight            | 0.557***            | 0.558***                               | 0.521***             | 0.385***                    |
|                            | (0.200)             | (0.198)                                | (0.196)              | (0.131)                     |
| ountry-pair fixed effects  | ✓                   | ✓                                      | ✓                    | ✓                           |
| rear-quarter fixed effects | ✓                   | ✓                                      | ✓                    | ✓                           |
| bservations                | 28.682              | 28.682                                 | 11.133               | 27.431                      |
| R <sup>2</sup>             | 0.079               | 0.084                                  | 0.083                | 0.152                       |
| adjusted R <sup>2</sup>    | 0.059               | 0.064                                  | 0.061                | 0.135                       |

Notes: Significance levels: \*p<0.1, \*\* p<0.05, \*\*\* p<0.01, standard errors in parantheses.

Source: Author's own calculations.

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CRS convention, the bank deposits from A in B decrease (see Table 2). At the same time, many countries have initiated an amnesty program that allows tax evaders to report themselves. On average, these have no effect (see Column 2). This contradicts the hypothesis that the CRS led to legalizations. The effects are also independent of IoR treaties and the placebo analysis described above.

Again, no effect on deposits between tax havens is visible. Examining the countries in which there is assumed to be no tax evasion of the type studied here as well – all non-havens – the effect described above does not occur. This indicates that the CRS convention does affect international tax evasion. Johannesen and Zucman already conjectured that there could be deposit shifting to tax havens that do not cooperate and have partially shown this in their data. It is also already possible to circumvent the CRS.

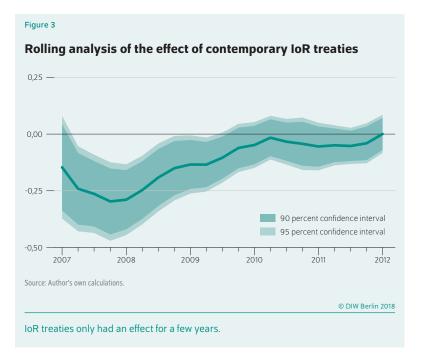
One possibility to do so is to conceal the ultimate beneficiary using a complicated ownership chain. In detail: individuals from Germany would not invest capital in Bermuda themselves or through a relative. Instead, they would found a company in Bermuda. In the next link in the chain of concealment, that company would belong to a company from Panama whose economic beneficiary is the person from Germany. Ownership chains like these make it difficult to uncover tax evasion. It is not impossible to look through them because banks are obligated to determine the ultimate beneficiary of a deposit to comply with anti-money-laundering regulations, but this can be difficult.

Another strategy that major tax evaders use is even simpler. They purchase citizenship and the associated tax residency. In the case of deposits in a bank in the Turks and Caicos Islands, for example, the capital would belong to a citizen and tax resident of the territory – who is a German citizen at the same time but does not officially declare this in the Turks and Caicos Islands. In this cases, no international tax agreement applies because those only cover foreigners. The deposits would not even show up in the BIS statistics used here since they would no longer constitute international liabilities.

Our reassessment of the effect of the automatic information exchange and exclusion of legalization movement allows us to conclude that a treaties only function until a method of adaptation is found. These adaptations can affect the form of tax evasion and new treaties will generate new effects. Since the changes in bank deposits in reaction to the CRS are of the same magnitude as in reaction to IoR treaties, it seems that tax evasion is taking different routes rather than disappearing.

# Conclusion: tax evasion must be tackled more systematically

The effectiveness of IoR treaties is still very doubtful. The reaction to IoR treaties and later, to the activation of the CRS convention, document that international tax evasion is still



taking place. Assuming that the transition from IoR treaties to the CRS exposes the adaptive maneuvers of tax evaders, we can expect that they will also respond to the CRS convention by adapting.

For economic policy, the measures contained in the CRS must be viewed positively because they are likely to be a deterrent in some cases and to increase the complexity and cost of evading taxes in any case. However, the loopholes are so large, the monetary benefits of evasion so high, and the supporters provide the required services to tax evaders so professional that the global community must become much more aggressive towards tax evasion in order to prevent it.

The first step is to expand participation in the CRS by completing the international bilateral activation network. The most difficult aspect will be integrating the U.S. However, this alone will not be sufficient because as described above, the CRS can already be circumvented.

Most people with private incomes tend to use very small countries such as Bermuda, which are economically almost insignificant, to evade taxes. It would be possible to "force" them to cooperate by billing them for part of the external costs (in the form of lost tax revenue in other countries). In 2013,<sup>13</sup> Zucman suggested levying an export tax for Switzerland, for example. However, actions like this could generate risks for foreign trade policy. Experience gained by enforcing IoR treaties also shows that even the threat of sanctions can lead to the cooperation of tax havens. On the other hand, Zucman's proposed global financial register of who possesses which financial product would increase transparency and could probably be implemented without triggering a trade war.

**<sup>13</sup>** See Gabriel Zucman, *The hidden wealth of nations: The scourge of tax havens*, (Chicago: University of Chicago Press, 2013).

#### **TAX EVASION**

The United Kingdom recently took a further step by stipulating that its overseas territories (such as Bermuda or the Cayman Islands) must not only determine the beneficiaries of the companies headquartered there, but publicize them as well. Unfortunately, the three British Crown Dependencies in Europe that are also key tax havens (Guernsey, Jersey, and the Isle of Man) are excluded from this transparency increasing measure.

The U.S. has provided another example by giving Switzerland's financial institutions an ultimatum: either reveal the names of American citizens with Swiss bank accounts (in other

words, break bank secrecy) or be excluded from the financial markets of the United States. Smaller tax havens might have to be compensated for the benefits of being a tax haven they would lose, because they often have no other model for economic development.

However, even ruthlessly pursuing such methods would at best contribute to minimizing the problem of private tax evasion. It would not even touch the much greater realm of corporate tax evasion, in which developed countries themselves are highly active.

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