

# **BIG DATA, AUTOMATIC EXCHANGE OF INFORMATION AND THE RIGHTS OF TAXPAYERS**

*Ann Barnshaw Kengaaju<sup>1</sup> & Lakshmi (Celina) Solayen<sup>2,3</sup>*

## **Abstract**

In the last decade, a new form of exchange has been adopted—the automatic exchange of information (AEOI)—which is viewed as the new global standard. Never before has there been so much enthusiasm for tax administrations around the world to cooperate in the fight against tax evasion. In a very short amount of time, there has been a drastic move from the exchange of information (EOI) on request to spontaneous AEOI. The development of the Internet of Things (or IoT) has also brought about astounding changes to the way in which tax authorities around the world operate, and the use of big data by the tax administrations has come as no surprise.

While the previous focus may have been on determining taxpayers' fair shares of tax, the current strategy focusses on tax transparency, where taxpayers' information is shared with governments around the world. The sudden occurrence of scandals that resulted in the denouncement of major tax evasion schemes that started in 2008 with the fall of the Swiss bank UBS made a major contribution to the development of the new framework of EOI, which was endorsed by the Organisation for Economic Co-operation and Development (OECD) in its fight against harmful tax practices. With estimated losses in annual tax revenues due to tax evasion schemes totalling more than USD 100 billion (OECD, 2021a), it is unsurprising that governments around the globe have been motivated to adopt the new global standard.

The aim of this paper is to explore how the rights of taxpayers have been disregarded in the quest to find a potential solution to curb tax evasion. While AEOI and big data have proved to be effective tools for tax authorities, some concerns about the protection of the rights of taxpayers and taxpayers' information arise as a result of their use. Accordingly, this paper has been divided into four main sections. After the introductory section, the different rights of taxpayers in the context of AEOI and big data are analysed. Section three delves into the current risks for taxpayers when their information is exchanged or processed on a large scale. Finally, section four includes recommendations about what can be done to ensure that the rights of taxpayers are respected in the context of AEOI and big data.

## **1. INTRODUCTION**

Cross-border trade has promoted the growth of economies through, amongst other things, foreign exchange. However, the opacity of these transactions has resulted in the loss of government revenue through base erosion and profit-shifting (BEPS) schemes, such as the concealment of assets offshore to avoid taxes (Cockfield, 2016). It has also promoted

---

<sup>1</sup> Tax Consultant, Global Taxation Services Limited, Kampala, Uganda; ADIT International tax affiliate.

<sup>2</sup> Lakshmi Solayen, ADIT, ACCA.

<sup>3</sup> This paper is based on a webinar, titled "Big Data, exchange of information and taxpayer rights", which was presented by the authors on the 1 June 2022. This webinar was part of the Chartered Institute of Taxation's Advanced Diploma in Taxation (ADIT) webinar series.

international crimes, like terrorism, which is often funded by illegal cross-border income, as was the case with the Ericsson List (Shiel, 2022). Consequently, in order to halt these activities, countries have elected to exchange relevant tax information with each other (OECD, 2012a).

The exchange of information (EOI) provides tax authorities with insight into taxpayer's activities and enables them to efficiently enforce domestic tax laws (OECD, 2021b). It can be done in various ways, including the exchange of information upon request (EOIR), country-by-country reporting, the spontaneous exchange of information (SEOI), the use of tax examination boards, and AEOI. Of these methods, AEOI is preferred due to its efficiency (Jaiswal & Biyani, 2017).

EOI, particularly AEOI, requires big data to be exchanged at regular intervals (OECD, 2012a). Big data is obtained from financial institutions and the revenue authorities of the source country. It comprises taxpayers' data, such as their bank account numbers, tax identification numbers, account balances, and places of residence (OECD, 2012a). The sharing of such private data raises concerns about taxpayers' rights, such as their right to privacy. Therefore, countries have devised mechanisms for protecting these rights, including the enactment of data protection laws (OECD, 2012b).

This article examines the use of big data in the EOI and its impact on taxpayer rights. It discusses the benefits and pitfalls of exchanging tax information. It also provides viable recommendations to ensure that governments are able to engage in EOI while protecting the rights of taxpayers.

## **2. RESEARCH METHODOLOGY**

We used the desk research method in order to conduct this study, and reviewed published literature, as well as laws governing EOI and taxpayer rights. We also reviewed the OECD's *Model tax convention on income and capital* (OECD, 2017), the 2011 European Union (EU) directive on administrative cooperation<sup>4</sup>, and the *United Nations model double taxation convention between developed and developing countries* (UN, 2021), which guided the drafting of EOI provisions. We elected to use this methodology because, in our opinion, it is a cost-effective and efficient way in which to investigate this topic.

## **3. FORMS OF EOI**

Tax information may be shared unilaterally, bilaterally, or multilaterally.

### **a) Unilateral Agreements for EOI**

EOI may rely on unilateral agreements, such as the intergovernmental agreements (IGAs) signed under the U.S. Foreign Tax Account Compliance Act (FATCA). This Act was enacted on the presumption that revenue losses were occurring as a result of secret offshore investments by U.S. taxpayers (Christians, 2013). It mandates foreign financial institutions (FFIs) to report information about accounts held by U.S. taxable persons (Internal Revenue Service [IRS], n.d.). The reportable information includes the name, income, account number, and taxpayer identification number of the account holder (IRS, n. d.).

---

<sup>4</sup> <http://data.europa.eu/eli/dir/2011/16/2020-07-01>

These IGAs have been signed with countries such as Cabo Verde and Brazil (U.S. Department of the Treasury, n.d.). To enforce compliance, the U.S. imposed a withholding tax of 30 per cent on 100 per cent of all income sourced to a U.S. asset on non-compliant FFIs (IRS, n.d.). According to Michel and Rosen (2011), “the most significant reaction” to this overseas “is the sense that FATCA is another example of strong-armed American law enforcement imposing its will on other countries without their consent”, particularly as the IGAs do not require U.S.-based financial institutions to share information with other states in turn (p. 711). Nonetheless, FATCA established a basis for AEOI across the globe (Sadiq & Sawyer, 2016).

In light of the above, unilateral agreements are not preferred because they promote the one-sided sharing of information.

### **b) Bilateral Agreements for the EOI**

Unlike unilateral agreements, bilateral agreements allow for the sharing of information between two states (OECD, 1998). This reciprocal sharing of data promotes EOI and tax transparency (Cockfield, 2017).

In order to promote EOI across the globe, the OECD (2002) developed the *Model agreement on the exchange of information in tax matters (Model TIEA)*, later supplemented with the model protocol (OECD, 2015). This provides guidance on how to draft EOI agreements between two states. A number of countries have signed TIEAs: Australia has signed a TIEA with the Netherlands Antilles, for example, and the United Kingdom has signed a TIEA with the British Virgin Islands. The progress made in the monitoring and implementation of the exchange of information agreements is summarised in the tenth anniversary report (OECD, 2019a) of the OECD’s Global Forum on Transparency and Exchange of Information for Tax Purposes.

### **c) Multilateral Agreements for EOI**

Multilateral agreements have promoted EOI by providing states with guidance on how to draft and implement EOI provisions between multiple jurisdictions (OECD, 2014). The obligation on banks to share information across multiple jurisdictions was first introduced in EU Council Directive 2003/48/EC on the taxation of savings income (Beer et al., 2019). Later, this directive was replaced with Council Directive 2014/107/EU which allows AEOI to be implemented in accordance with the OECD’s Common Reporting Standard (CRS) (Beer et al. 2019).<sup>5</sup>

The CRS provide guidance about the standard of AEOI in order to achieve consistency across states, including detailing what they may consider as reporting institutions, reportable accounts, and reportable information (OECD, 2014). Financial institutions that are required to report information include custodial and depository institutions, while reportable accounts comprise accounts held by reportable individuals and entities, whether passive or active. Reportable financial information includes, but is not limited to, all types of investment income.

---

<sup>5</sup> <https://www.oecd.org/tax/automatic-exchange/common-reporting-standard/>

#### **4. TYPES OF EOI**

The predominant types of EOI are:

##### **a) EOIR**

EOIR occurs when two or more countries agree to exchange information upon request. Where a signatory to the agreement needs information that is available in the other contracting state, the former may ask the latter to share the information (OECD, 2017). The information requested must relate to a specific case: the request must not be a fishing expedition (OECD, 2017).

This method is viable for developing countries with low technical expertise and technology. However, it is inefficient due to the bureaucracy involved (Jaiswal & Biyani, 2017). In addition, the need for the information to be “foreseeably relevant” (OECD, 2002, p. 4) limits the potential benefits of this method. This is because “tax evasion schemes are, by their very design, intended to ensure that information is concealed from domestic tax authorities” (Beer et al., 2019, p. 7). Therefore, in most cases, it is challenging to determine the relevance of the information beforehand.

##### **b) SEOI**

States may agree to share tax information whenever they find it and deem it to be relevant (OECD, 2017). For instance, in 2018, Switzerland shared tax ruling reports relating to BEPS activities with partner states, such as France and Russia, through SEOI (Swissinfo.ch, 2018). This method enables states to obtain information that they were previously unaware of. However, it is undesirable due to its “irregular nature” (Jaiswal & Biyani, 2017, p. 9).

##### **c) AEOI**

According to the OECD (2012a), “the AEOI is the systematic and periodic transmission of bulk taxpayer information from the source country to the residence country concerning various categories of income (e.g. dividends, royalties, salaries, pensions, etc.) (p. 7). AEOI is preferred to EOIR and SEOI due to its consistency and efficiency (Jaiswal & Biyani, 2017). It has been implemented worldwide in both developed and developing countries, such as Switzerland, the United Kingdom, South Africa, and Ghana.

#### **5. BIG DATA AND AEOI**

The OECD (2012a) summarised the AEOI process. Taxpayers provide information about their identity to a financial institution. The financial institution reports the non-resident taxpayer’s identity and payments to the authorities. The authorities then merge the big data according to the country of residence. Collosa (2021) describes big data as large amounts of reliable information from varied sources. In the context of AEOI, big data includes taxpayers’ names and the tax identification numbers assigned to them by their state of residence, as well as their temporary and permanent addresses. Furthermore, it includes the amount of income earned, tax refunds, and details of the payer in the source state (OECD, 2012a).

Having collected the data, the source country transmits it to the residence country. However, it must first encrypt it in order to avoid data leakage (OECD, 2012a). The residence country decrypts the data and feeds it into “an automatic or manual matching process” (OECD, 2012a, p.10). This allows the residence country to identify individual taxpayers and match any information received about them to their existing records (OECD, 2012a). Machine learning technology can be utilised to reveal patterns that would otherwise be obscured (Cockfield, 2019). The analytical reports compiled from the matching processes enable the residence country to determine the tax liability of its residents arising from their worldwide income or assets, as well as the accuracy of their income declarations (OECD, 2012a). Based on these reports, the residence country “may commence compliance action against a taxpayer that may not have complied with reporting obligations, or make a specific request” to the source country for “additional information” (OECD, 2012a, p. 10).

The use of big data and machine learning in tax administration has contributed to the efficiency of revenue authorities across the globe. In the United States, utilisation of machine learning technology has improved the IRS’s efficiency and increased revenue collection (Federico & Thompson, 2019). For instance, between 2012 and 2014, the IRS retrieved \$25 million in fraudulent refunds in Georgia through big data computer analysis (Bourquard & Kirsch, 2014).

While the use of machine learning has increased revenue collection, the process of establishing the algorithms often reinforces the biases of the actors involved (Löfgren & Webster, 2020). For example, biases related to race raise concerns with regard to algorithmic fairness (Löfgren & Webster, 2020; Politou et al., 2019). Unfortunately, according to the Information Commissioner’s Office (2017) “the autonomous and opaque nature of machine learning algorithms can mean that decisions based on their output may only be identified as having been discriminatory afterwards – when the effects have already been felt by the people discriminated against” (p. 52). However, incorporating accepted principles such as equality within the writing software may minimise the inclusion of biases (Binns, 2018).

## **6. THE BENEFITS OF EOI**

Countries, especially developing ones, have lost revenue to the BEPS schemes utilised by some multinational enterprises which rely on sophisticated technology, opacity, and lack of cooperation among countries to conceal information that would result in those enterprises paying taxes in the source countries. However, with EOI, some countries have obtained substantial information that has facilitated investigative audits into the dealings of these multinational enterprises and enabled them to collect the revenue that had been lost to BEPS schemes.

According to the OECD (2021b), between 2009 and 2020, EOI “enabled African countries to identify over EUR 1.2 billion of additional revenues (tax, interest and penalties) through offshore tax investigations” (p. 48). For example, Burkina Faso, Cameroon, Kenya, Senegal, South Africa, Uganda, Togo, and Tunisia identified more than EUR 196 million of additional revenue as a result of EOIR (OECD, 2021b). In 2021, Kenya identified more than EUR 8.1 million, Tunisia more than EUR 28.1 million, and Uganda about EUR 1 million in revenue as a result of requests shared through EOIR (OECD, 2022b).

Developed countries have also benefited from the EOI, which has compelled taxpayers to participate in voluntary disclosure schemes that have increased revenue collections. Between

2016 and 2019, 260, 592 taxpayers in Australia utilised the country's voluntary disclosure scheme to report overseas income, resulting in the identification of EUR 620 million in additional liabilities (OECD, 2019a).

Although EOI has promoted transparency and resulted in an increase in revenue collection, the existence of BEPS schemes has persisted across the globe. For developing countries, this is partly due to the high administration costs involved in establishing systems that can facilitate AEOI and ensure the secure transmission of information to and from these countries (Sadiq & Sawyer, 2016). However, with assistance and funding from developed countries, developing states such as Ghana and South Africa have now commenced AEOI. In Kenya, the Multilateral Competent Authority Agreement for the exchange of country-by-country reports (CbC MCAA) was signed in September 2022 (OECD, 2022c). Consequently, the Kenya Revenue Authority can now request country-by-country reports from cooperative jurisdictions under the CbC MCAA (Ernest & Young Global, 2022). In time, most developing countries will be able to participate in, and benefit from, AEOI.

The benefits of cross-border secrecy have also contributed the continued existence of BEPS schemes. Tax haven secrecy is not detested: countries only hate it when they lose revenue. Cockfield (2016) noted that capital importing countries “benefit from the inward portfolio and direct investments by non-residents that are encouraged by tax haven secrecy; the trillions of dollars of investment monies may, for instance, be used to fund new business ventures that promote economic activities and lead to higher employment” within those countries (p. 515). Consequently, this disincentive, and other political incentives, have deterred the total eradication of tax haven secrecy in the world (Cockfield, 2016). Therefore, the end of BEPS is far away, even with the implementation of EOI policies and legislation.

## **7. EOI AND THE RIGHTS OF TAXPAYERS**

There have been considerable changes in the international tax landscape over the last few years. However, the speed at which the EOI standard has changed has been surprising. At the outset, it was illegitimate for governments to use the powers vested in them by the people to assist other governments in the collection of taxes. Therefore, tax authorities had to seek special authorisation and EOI was still often restricted for fear of breaching the duty of confidentiality, especially in cases where no double taxation avoidance agreement (DTAA) was in place. When, in 2002, the TIEA was introduced, this new form of bilateral tax convention provided the legal basis for sharing of tax information. Hence, until 2013, the most common form of EOI was the on-request model (Baker, 2013).

In 2013, there was a complete shift in the standard of EOI, as states agreed to exchange information automatically—a project encouraged by the OECD. In the early 1990s, the OECD started to work to reduce detrimental tax competition as part of its objective to eliminate harmful tax practices. However, after 2001, the focus shifted to transparency and EOI, which led to the introduction of AEOI (Baker, 2013).

EOI has taken place for many years but AEOI was new. There had been considerable pressure on states from international organisations like the OECD to establish rules that made AEOI possible. AEOI was also made possible by enhancements in technology and political ambitions to counter tax evasion. However, AEOI appears to have been implemented in a rush, with little consideration having been given to how the new policies and framework could impact

taxpayers' rights. Pistone (2013) rightly highlighted that the rights of the taxpayers would be the "most ignored aspect of global tax law" (p. 217).

Indeed, in order to satisfy the compliance standards imposed by the OECD, many countries were forced to amend their local legislation and, in doing so, disregarded valuable protection of rights that were afforded to taxpayers. For example, in 2013, the Netherlands introduced a bill to amend its local legislation relating to international assistance in tax matters and abolished the notification requirement to taxpayers prior to any EOI, which subsequently also meant that the taxpayer could no longer legally challenge the tax authority's decision to grant information access to another state (Neve, 2017). Hence, not only did the changes made in the international tax landscape not include appropriate protection for taxpayers, they also indirectly contributed to the worsening of the taxpayer's position by restricting their rights.

Baker and Pistone (2015) have pointed out that it was highly scandalous that, due to international pressures on states, existing effective protection of taxpayers' rights was removed and no alternative was provided. In the context of big data and AEOI, we are concerned with four fundamental rights: the right to confidentiality, the right to privacy, the right to data protection, and the right to have an identity. Each of these is considered below:

#### **a) The Right to Confidentiality**

The right to confidentiality requires that a person's information is not disclosed to an unrelated third party, whether intentionally or by accident. In respect of EOI, taxpayers should have confidence that any information exchanged is only disclosed or used in accordance with the agreement/s which form the basis of the exchange. The tax treaties that relate to AEOI contain provisions that concern tax confidentiality and the obligation for the parties involved to keep any information exchanged confidential. If there is a data breach or necessary safeguards are not implemented by one party, the other could suspend the EOI. The expectation is that the requesting state should adopt the same level of confidentiality exercised by the other state.

For example, in 2019, the Bulgarian tax agency's security systems were breached and the data leak exposed information about the financial accounts of five million Bulgarian and foreign taxpayers (Krasimirov & Tsoleva, 2019). This caused countries like Switzerland to stop exchanging information with Bulgaria (OECD, 2019c).

It is the responsibility of the tax administrations to ensure that EOI occurs with sufficient safeguards in place to ensure that the information processed and exchanged is kept confidential. If sufficient protection is not equally in place in both states involved, EOI should be restricted. However, restrictions should not occur simply as a consequence of proven failures, but should be considered by states before any information exchanges take place. If a particular country cannot afford the same level of protection to taxpayers' information as the home state, the home country should not participate in any EOI, as it should risk a breach of the confidentiality of its taxpayers' information.

#### **b) The Right to Privacy**

The right to privacy means the right to have one's affairs kept private. It is one of our fundamental rights, i.e. a right afforded by the constitution in certain countries or by the United

Nations Declaration of Human Rights<sup>6</sup>, which implies that it is an essential component of the functioning of a democratic society. According to Kalyon (2022), “the right to privacy is an indispensable right for all taxpayers because a tax authority frequently has information which is pertaining to one’s private life” (p. 108). Therefore, it is of extreme importance that, when such powers are exercised, the process is conducted with care and within the limits of what is permitted by law. For example, taxpayers should be notified about any tax inspections to be undertaken and these inspections should be carried out by tax officials, rather than third parties.

The right to privacy encompasses the right to be secure in one’s house and the right to be protected against unreasonable search and seizures. “Unreasonable search” means that a person is protected against any search without probable cause to believe that evidence of a crime is present. However, what is happening with EOI and, more specifically, with AEOI is that information is being transferred without there being a need for an investigation and without any probable cause to believe that a crime or tax evasion has taken place. Taxpayers are not even notified that their details are being shared across borders.

### **c) The Right to Data Protection**

When it comes to the right to data protection, the TIEA effectively makes provision for two conditions for the EOI to happen. It requires any request to be specific and justified. A request should be specific in that it must relate to a particular taxpayer and a specified time period, the nature and form in which the information is requested should be mentioned, and the reason for the request must be provided. A request should be justified in that the information requested must be necessary for or “foreseeably relevant” (OECD, 2002, p.4) to the requesting party. Therefore, TIEAs (and DTAAs) provide for the EOI, but under very precise conditions.

AEOI, on the other hand, comes with no rules or limitations. The information is exchanged on a recurring basis and includes data relating to all relevant taxpayers. For example, FATCA is applicable to all U.S. citizens. AEOI does not solely occur as part of an investigation by the IRS or in relation to a suspected case of tax crime. Instead, all financial institutions are required to disclose information about U.S. citizens on a yearly basis. With AEOI, there is also no clarity regarding data retention requirements. No details are provided about how long the information shared can be stored for or the circumstances in which it will be destroyed.

### **d) The Right to an Identity**

Big data is all about predictions and forecasts, and there is a risk that a digital identity will be created for each data subject, i.e. taxpayer. There may be an over-reliance on big data analytics such that taxpayers themselves are no longer considered. This means that there is a risk that they could be discriminated against without being given the chance to react. With big data, we are often unaware of the information that is collected about us and how, or by whom, it is collected. As technology allows for data collection in a more invasive ways, it is therefore important for the law to be updated in order to ensure that taxpayers know what types of personal information are being collected and how this data is being used or processed.

---

<sup>6</sup> Article 8 of the Universal Declaration of Human Rights, which was proclaimed at the UN’s General Assembly on 10 December, 1948 (United Nations, n.d.).



## 8. THE RISKS FOR TAXPAYERS

Different states have different views about how taxpayers' information should be treated. Some countries, such as Norway and Sweden, publish taxpayers' returns on their online portals, which are available to the public (Stiglitz & Pieth, 2016). Their view is that if a person has made an honest declaration about their earnings, there should be nothing to hide (Stiglitz & Pieth, 2016). Other countries, on the other hand, might feel outraged by this because, for them, taxpayers' information should remain confidential (Stiglitz & Pieth, 2016). Of course, when compared to public disclosure, EOI does not erode taxpayers' privacy, as information shared with other countries should normally be kept confidential.

Indeed, EOI does not lead to the public disclosure of information. However, it results in an increase in the volume and intensity of the information being exchanged, especially via AEOI, where large volumes of data are shared and stored in various countries, which automatically increases the risk of this information being used in an unlawful manner (Brauner, 2013). The more people that have access to the information, the greater the risk that this information will be leaked, and when there is a lack of safeguards in place, it accentuates this problem.

### a) The Risk of Taxpayers' Information Being Hacked

When information collected and stored by tax administrations is not effectively protected, hackers could gain access to it. This is not only an issue for countries with poor technological infrastructures or tax administrations. Tax administrations in countries such as the United States, the United Kingdom, and Japan have faced massive taxpayer data losses to carelessness or because there is inadequate protection against hackers in place.

When information is exchanged, it is almost impossible to ascertain whether it is being processed on a secure network or not. Tax administrations have no control over the networks used by their counterparts in other countries and are unable to monitor their cybersecurity efforts. Every year, the interception of tax information results in hundreds of thousands of identity theft cases being reported. In the United States, several cases of tax fraud have been reported and astounding amounts of money were claimed in fraudulent tax refunds as a result of a cyberattack on the IRS (Smith, 2015).

### b) The Risk that Confidential Information will be Leaked to the Public

When taxpayers' information is leaked into the public domain, it can cause multiple problems. The information disclosed by taxpayers to tax administrators in their specific jurisdictions is often highly sensitive and may concern their income, net assets, and net worth. They may also need to disclose their expenditure patterns, which can reveal significant details about their lifestyles, religions, or even political affiliations. There is no doubt that taxpayers' information is "among the most sensitive forms of personal information" (Cockfield, 2016, p. 503).

If unauthorised people get access to this information, it may be dangerous for a taxpayer—for example, wealthy people may become targets for criminals, particularly in countries with high crime rates. In addition, the information may be used for the benefit of others and to the detriment of taxpayers. One example of this is the Satakunnan Markkinapörssi Oy and Satamedia Oy case, in which the personal information of more than 1.2 million Finnish taxpayers was published in the *Veropörssi* newspaper and a company was created that enabled

anyone who wished to obtain information about a person to send that person's name to the company in a text message and receive their tax information in return. This practice was challenged in court because it was considered to infringe people's right to a private life.

When confidential information is leaked, its authenticity and validity is often not questioned or verified. However, as Sangar and Blanco (n.d.) note, "the consequences of such leaks can be extremely severe, ranging from reputational loss to plummeting stock price or revenue, to lawsuits and significant regulatory fines being imposed". If we examine the Panama Papers leak, for example, around 11.5 million confidential records said to relate to thousands of offshore accounts used to evade taxes or launder money were revealed (Australian Taxation Office [ATO], 2021). This caused havoc in the international media and large enterprises, political figures, and high-net-worth individuals were accused of hiding their wealth in tax havens. However, investigations by tax administrators later found that most of the accused were compliant and had already declared their tax affairs in their home countries (ATO, 2021).

Following the publication of the Panama Papers by the International Consortium of Investigative Journalists (ICIJ), the ATO (2021) published a declaration stating that using offshore structures was not illegal and that, of the 1,400 Australians identified in the Panama Papers, the majority had already approached the ATO in order to make declarations about their tax positions. Unfortunately, however, when the international media alleges that someone has been involved in criminal activities, it can have a damaging and long-lasting impact on that person's reputation, even if the allegations are ill-founded. It is of extreme importance, therefore, that confidential information is kept secure.

### c) **The Risk that False Information will be Disclosed for the Sake of Being Compliant**

AEOI is subject to certain compliance requirements with reporting deadlines, and failure to adhere to these can either result in states incurring penalties or being labelled as non-compliant which can, in turn, result in other countries refusing to exchange information with them. For example, failure to comply with FATCA reporting could result in a 30 per cent penalty which would be withheld from any U.S.-sourced income. Countries not adhering to the CRS are placed on the "EU list of non-cooperative jurisdictions for tax purposes" (see Council of the EU and the European Council, 2022) and states are encouraged to apply defensive measures, which may include the non-deductibility of expenses incurred in the listed jurisdictions or withholding tax being imposed in relation to exemptions and refunds.

Pressure to comply with and meet filing obligations may lead to a state exchanging erroneous or unverified information with another country's tax authorities. A study conducted by the Aberdeen Group and Sovos Compliance (2016) into FATCA reporting indicated that more than 55% of reports were incomplete and inaccurate. Therefore, it appears that financial institutions reported information that had not been verified, simply in order to be regarded as compliant for FATCA filing purposes.

Another striking example is that of *Aloe Vera of America, Inc. v. United States*, 699 F.3d 1153 (2012) (*Aloe Vera Case*), in which the IRS disclosed tax information to the Japanese National Tax Administration (JNTA) during a joint investigation. The EOI was provided under the U.S.-Japan DTAA but, when submitting information, the IRS wrongly declared unreported income that was not supported by any investigation and had only been estimated by IRS employees. On receipt of the information, the JNTA claimed the undeclared taxes from the taxpayer, who

had no idea of the basis on which the JNTA had raised the assessment. The JNTA even leaked the information to the local news media, which caused prejudice against the taxpayer and had a negative impact on the reputation of the firm in the Japanese market, as well as causing an estimated corporate loss of more than \$47 million (Wöhler, 2018). All of this occurred simply because the IRS employees felt compelled to complete the EOI within the requested timeframe even though their own investigation was incomplete.

## **9. RECOMMENDATIONS**

While AEOI has been welcomed by tax administrators around the world as an effective tool with which to curb tax evasion, concerns have been raised in respect of the protection of taxpayers' data. It is therefore important that AEOI processes are carried out in a harmonised way and take the rights of the taxpayers into consideration. Therefore, we make the following recommendations to enhance the existing AEOI provisions:

### **a) Consultation with Taxpayers Should Become a Standard Part of the AEOI Process**

The priority of tax administrators should not be to amass taxpayers' information in bulk but, rather, to ensure that the information collected and exchanged is accurate, complete, and of sufficient quality. In order to eliminate the risk of erroneous disclosures being made and ensure that private information, such as trade secrets, is not exchanged, it is imperative that the taxpayers are given the chance to review their information prior to it being transferred to other tax authorities. Taxpayers should be allowed to verify and/or correct their information prior to processing or before it is transferred to another country. Accordingly, we recommend the modification of the AEOI process, such that consultation with the taxpayers becomes part of the normal procedure. The only exception to this rule should be where there are reasonable grounds to believe that notifying the taxpayer could prejudice an investigation.

### **b) Common IT Infrastructures Should be Utilised**

In March 2022, the OECD released details of the report formats required for AEOI, together with rules regarding what needs to be included and a user guide that explains how the reporting should be carried out (OECD, 2022a). Expectations have therefore been set, but nothing has been done to assess the readiness of states to operate reliable digital platforms.

In reality, countries differ in terms of their available resources, information processing and storing capacities, and priorities. For instance, some countries are still struggling to establish reliable online portals for their local tax administrations and some still rely on manual filing processes, as they do not have the expertise or the resources to implement changes to their IT infrastructures. However, due to international pressure, these countries may have given their consent to participate in the AEOI, which requires them to process and submit large amounts of information electronically on a recurring basis. It is questionable whether they will be able to securely and accurately process and store taxpayers' information with their current resources and expertise.

As countries are on an unequal footing, it also implies that they will not all benefit from EOI in the same manner. For example, despite having signed up for EOI, very few African countries are actually collecting tax information, even though it is estimated that Africa loses more than

USD 84 billion annually due to international tax evasion (“Africa loses more than \$84bn in illicit financial flows annually”, 2022). The problem not only lies with the challenging technological architecture within these countries, but also with their limited administrative capacities, which arise as a result of a lack of trained personnel and a lack of willingness on behalf of their political leaders.

A possible solution to this problem could, therefore, lie in the form of assistance from other developed nations or the OECD’s member states, with a common IT platform, developed by experts from high-tech countries, being used by all countries participating in AEOI. This would provide a level playing field for all participating members, which would not only improve the effectiveness of the information exchange but also help to reassure taxpayers that their information is being securely processed and stored whenever it is exchanged.

### c) Rules Should be Established with Taxpayers’ Representatives

The reality is that taxpayers’ welfare has never been considered. The focus was only on how tax authorities could improve their work in order to reach their objective of eliminating tax evasion. This is because the decisions were always taken by representatives of the states, whose aim was to collect the maximum amount of tax revenue. There was no person or institution that would see to it that the rights of taxpayers were not infringed and that taxpayers would not be made worse off by the changes occurring within the international tax landscape. Accordingly, we propose that taxpayers’ representatives should be given places at the table and participate in all decision-making matters that directly and indirectly concern taxpayers.

## 10. CONCLUSION

The focus of international organisations during the last decade has been on making the automatic exchange of taxpayers’ information a reality, but the position of the taxpayers whose information is being exchanged has not been considered. Countries have been under pressure to amend their laws to allow for AEOI, but have not really considered its impact on taxpayers or how it would infringe taxpayers’ rights. An increase in the scope of AEOI and the use of big data should be accompanied by an improvement in the protection of taxpayers’ rights to ensure balance in EOI procedures. The proposals made within this report focus on the achievement of a unified tax system, where the need to combat tax evasion is carried out with the involvement of taxpayers and without depriving them of their fundamental rights.

## BIBLIOGRAPHY

- Aberdeen Group & Sovos Compliance. (2016). *Stop playing with fire: Use centralised AEOI solutions to prepare for FATCA, CRS, and CDOT*. n.p.: Aberdeen Group & Sovos Compliance.
- Africa loses more than \$84bn in illicit financial flows annually. (2022, June 13). *African Business*. <https://african.business/2022/06/economy/africa-loses-more-than-84bn-in-illicit-financial-flows-annually/>
- Australian Taxation Office. (2021). *Data leaks*. Australian Government. <https://www.ato.gov.au/general/the-fight-against-tax-crime/our-focus/data-leaks/>
- Baker, P. (2013). Automatic exchange of information - the arrival of a new international norm of taxation. *British Tax Review*, 4, 371-373.

- Baker P., & Pistone P. (2015). General report. In P. Baker & P. Pistone (Eds.), *The practical protection of taxpayers' rights* (pp. 1-99). The Hague, The Netherlands: Sdu Uitgevers.
- Beer. S., Coelho. M. D., & Leduc. S. (2019). *Hidden treasure: The impact of automatic exchange of information on cross-border tax evasion* (IMF Working Paper WP/19/286). Washington D.C.: International Monetary Fund.
- Binns, R. (2018). Algorithmic accountability and public reason. *Philosophy & Technology*, 31, 543-556. <https://doi.org/10.1007/s13347-017-0263-5>
- Bourquard, J., & Kirsch, C. (2014, September 1). Big data = Big benefits. *State Legislatures Magazine*. <https://www.ncsl.org/research/telecommunications-and-information-technology/big-data-big-benefits.aspx>
- Brauner, Y. (2013). United States: Exchange of information and taxpayer protection. In E. C. C. Kemmerman, D. S. Smit, P. Essers, L. De Broe. F. Vanistendael, M. Lang, P. Pistone, J. Schuch, C. Staringer, & A. Storck (Eds.), *Tax treaty case law around the globe 2012* (pp. 295-299). Amsterdam, The Netherlands: IBFD.
- Christians, A. (2013). What you give and what you get: Reciprocity under a Model 1 intergovernmental agreement on FATCA. *Cayman Financial Review*, 31, A24-A27 . [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2292645](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2292645)
- Cockfield, A. J. (2016). Big data and tax haven secrecy. *Florida Tax Review*, 18(8), 483-540. <https://doi.org/10.5744/ptr.2016.1808>
- Cockfield, A. J. (2017). How countries should share tax information. *Vanderbilt Journal of Transnational Law*, 50(5), 1091-1132.
- Cockfield, A. J. (2019). Sharing tax information in the 21st century: Big data flows and taxpayers as data subjects. *Canadian Tax Journal/Revue Fiscale Canadienne*, 67(4), 1179-1199. <https://doi.org/10.32721/ctj.2019.67.4.sym.cockfield>
- Collosa, A. (2021, July 16). Big data in tax administrations. *Kluwer International Tax Blog*. <http://kluwertaxblog.com/2021/07/16/big-data-in-tax-administrations/>
- Council of the EU and the European Council. (2022). *Eu list of non-cooperative jurisdictions for tax purposes*. <https://www.consilium.europa.eu/en/policies/eu-list-of-non-cooperative-jurisdictions/>
- Ernest & Young Global. (2022). *Kenya signs MCAA for Exchange of country-by-country reports/ Implications for MNEs operating in Kenya*. [https://www.ey.com/en\\_gl/tax-alerts/kenya-signs-mcaa-for-exchange-of-country-by-country-reports---im#:~:text=On%209%20September%202022%2C%20Kenya,automatic%20exchange%20of%20CbC%20reports](https://www.ey.com/en_gl/tax-alerts/kenya-signs-mcaa-for-exchange-of-country-by-country-reports---im#:~:text=On%209%20September%202022%2C%20Kenya,automatic%20exchange%20of%20CbC%20reports)
- Federico, C., & Thompson, T. (2019). Do IRS computers dream about tax cheats? Artificial intelligence and big data in tax enforcement and compliance. *Journal of Tax Practice & Procedure*, February – March, 43-47.
- Gordon, R. K. (1996) Law of tax administration and procedure. In V. Thuronyi (Ed.), *Tax law design and drafting* (Vol 1., pp. 95-134). Washington D. C.: International Monetary Fund.
- Information Commissioner's Office. (2017). *Big data, artificial intelligence, machine learning and data protection*. Wilmslow, England: ICO.
- Internal Revenue Service. (2022). *Foreign account tax compliance act*. <https://www.irs.gov/businesses/corporations/foreign-account-tax-compliance-act-fatca>

- Jaiswal, S., & Biyani, N. (2017). *Automatic exchange of tax information: A primer on concepts, loopholes and developing countries' concerns*. New Delhi, India: Centre for Budget and Governance Accountability.
- Kalyon, A. (2022). The privacy right of legal person taxpayer. *Maliye Çalışmaları Dergisi/ Journal of Public Finance Studies*, 67, 107-116. <https://doi.org/10.26650/mcd2022-1074312>
- Krasimirov, A., & Tsoлова, T. (2019, July 16). In systemic breach, hackers steal millions of Bulgarian's financial data. *Reuters*. <https://www.reuters.com/article/us-bulgaria-cybersecurity-idUSKCN1UB0MA>
- Löfgren, K., & Webster, C. W. R. (2020). The value of big data in government: The case of 'smart cities'. *Big Data & Society*, 7(1). <https://doi.org/10.1177/2053951720912775>
- Michel, S. D., & Rosenbloom, D. H. (2011). FATCA and foreign bank accounts: Has the U.S. overreached? *Tax Notes International*, 62(9), 709-712.
- Neve, L. E. C. (2017). The peer review process of the global forum on transparency and exchange of information for tax purposes. *Erasmus Law Review*, 10(2), 89-105.
- Organisation for Economic Co-operation and Development. (1998). *Harmful tax competition: An emerging global issue*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2002). *Agreement on exchange of information on tax matters*. Paris, France: OECD.
- Organisation for Economic Co-operation and Development. (2012a). *Automatic exchange of information: What it is, how it works, benefits, what remains to be done*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2012b). *Keeping it safe; The OECD guide on the protection of confidentiality of information exchanged for tax purposes*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2014). *Standard for automatic exchange of financial account information in tax matters*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development, (2015). *Model protocol for the purpose of allowing the automatic and spontaneous exchange of information under a TIEA*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2017). *Model tax convention on income and capital: Condensed version 2017*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2019a). *Global forum on transparency and exchange of information for tax purposes: Transparency and exchange of information on tax purposes: Multilateral co-operation changing the world*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2019b). *Model tax convention on income and on capital (Full version)*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2019c). *Statement on the data breach in the National Revenue Agency of Bulgaria*. <https://www.oecd.org/tax/transparency/documents/statement-on-the-data-breach-in-the-national-revenue-agency-of-bulgaria.htm>



- Organisation for Economic Co-operation and Development. (2021a). *BEPS: Inclusive framework on base erosion and profit shifting*. <https://www.oecd.org/tax/beps/>
- Organisation for Economic Co-operation and Development (2021b). *Global forum on transparency and exchange of information for tax purposes: Tax transparency in Africa 2021: Africa initiative progress report*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2022a). *Global forum and global relations and development division release course on the automatic exchange of financial account information*. <https://www.oecd.org/tax/automatic-exchange/news/global-forum-and-global-relations-and-development-division-release-course-on-the-automatic-exchange-of-financial-account-information.htm>
- Organisation for Economic Co-operation and Development. (2022b). *Global forum on transparency and exchange of information for tax purposes: Tax transparency in Africa 2022: Africa initiative progress report*. Paris, France: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2022c). *Signatories of the Multilateral Competent Authority Agreement for exchange of country-by-country reports (CbC MCAA) and signing dates*. <https://www.oecd.org/tax/beps/CbC-MCAA-Signatories.pdf>
- Panayi, HJI C. (2016). *Current trends on automatic exchange of information* (Singapore Management University School of Accountancy Research Paper, 2016-S-43). <https://doi.org/10.2139/ssrn.2748659>
- Pasquale, F. & Cockfield, A. J. (2018). Beyond instrumentalism: A substantive perspective on law, technology, and the digital persona. *Michigan State Law Review*, 4, 821-868.
- Pistone, P. (2013). Exchange of information and rubik arrangements: The perspective of an EU academic. *Bulletin for International Taxation*, 67(4/5), 216-225.
- Politou, E., Alepis, E., & Patsakis, C. (2019). Profiling tax and financial behaviour with big data under the GDPR. *Computer Law & Security Review*, 35(3), 306-329. <https://doi.org/10.1016/j.clsr.2019.01.003>
- Sadiq, K., & Sawyer, A. (2016). Developing countries and the automatic exchange of information standard - a one-size-fits-all solution. *Australian Tax Forum*, 31(1), 99-130.
- Sangar, A., & Blanco, M. C. (n.d.). Leaked data needs to pass the test of 'accuracy of evidence'. *Diazerus*. <https://diazereus.com/leaked-data-panama-papers-investigation/>
- Shiel, F. (2022, February 27). About the Ericsson List investigation. *ICIJ*. <https://www.icij.org/investigations/ericsson-list/about/>
- Smith, J. F. (2015, May 26). Cyberattack exposes I. R. S. tax returns. *The New York Times*. <https://www.nytimes.com/2015/05/27/business/breach-exposes-irs-tax-returns.html>
- Stiglitz, J. E., & Pieth, M. (2016). *Overcoming the shadow economy*. Berlin, Germany: The Friedrich Ebert Foundation.
- Swissinfo.ch. (2018, May 8). Swiss share tax data with 41 nations. *SWI*. [https://www.swissinfo.ch/eng/politics/spontaneous-exchange\\_swiss-share-tax-data-with-41-nations/44105036](https://www.swissinfo.ch/eng/politics/spontaneous-exchange_swiss-share-tax-data-with-41-nations/44105036)
- United Nations. (2021). *United Nations model double taxation convention between developed and developing countries 2021*. New York, NY: United Nations.

United Nations (n.d.). *Universal declaration of human rights*. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

Wöhler, V. (2018). *Data protection and taxpayer's rights: Challenges created by automatic exchange of information*. Amsterdam, The Netherlands: IBFD.

The U.S Department of the Treasury. (n.d.). *Foreign account tax compliance act*. <https://home.treasury.gov/policy-issues/tax-policy/foreign-account-tax-compliance-act>