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The Role of the ATAD CFC Rule in Preventing Tax Avoidance Practices

Rola wdrożenia dyrektywy ATAD CFC w zapobieganiu praktykom unikania opodatkowania

Abstract

This study reviews institutional changes resulting from implementation of Council Directive (EU) 2016/1164 of July 12, 2016, laying down rules against tax avoidance practices that directly affect the functioning of the internal market (the ATAD). Moreover, it examined whether the controlled foreign corporations (CFC) rule provided by the ATAD has an effect on profit shifting to countries with harmful tax competition. For the empirical analysis, I use unique data of 110,907 non-residents from 134 countries who obtained passive flows paid by Polish payers and reported this on the IFT-2R withholding tax (WHT) return for 2012–2022. Thanks to Tobit estimating using panel data, I check responses of payers to non-residents as a result of the introduction of the ATAD. The results prove that services have reduced passive flows due to dividends, interest and royalties to countries that introduced ATAD CFC model A or B in 2018-2019 compared to other EU member states. In contrast, the more stringent ATAD regulations have not reduced the passive flows paid by payers in the manufacturing sector. The obtained results can guide policymakers on how to draft CFC rules to make them an effective response to base erosion and profit shifting (BEPS) concerns.

Keywords: Tax Havens, ATAD, Profit Shifting, CFC Rules, BEPS.

JEL: F38, G38, K34, M41

Streszczenie

W opracowaniu dokonano przeglądu zmian instytucjonalnych wynikających z wdrożenia dyrektywy w sprawie przeciwdziałania unikaniu opodatkowania (ATAD). Ponadto zbadano, czy zasada kontrolowanych spółek zagranicznych (CFC) przewidziana w ATAD UE wpływa na przenoszenie zysków do krajów o szkodliwej konkurencji podatkowej. Do analizy empirycznej wykorzystuję unikalne dane 110 907 nierezydentów ze 134 krajów, którzy uzyskali pasywne przepływy płacone przez polskich płatników i zgłoszone w deklaracji podatku u źródła (WHT) IFT-2R za lata 2012-2022. Wyniki dowodzą, że usługi zmniejszyły pasywne przepływy z tytułu dywidend, odsetek i należności licencyjnych do krajów, które wprowadziły model ATAD CFC A lub B w latach 2018-2019 w porównaniu z innymi państwami członkowskimi UE. Z kolei zaostrzone przepisy ATAD nie zmniejszyły pasywnych przepływów płaconych przez płatników w sektorze produkcyjnym. Uzyskane wyniki mogą być przydatne dla decydentów politycznych w zakresie projektowania przepisów dotyczących CFC, tak aby stanowiły one skuteczną odpowiedź na obawy związane z erozją bazy podatkowej i przenoszeniem zysków (BEPS).

Słowa kluczowe: raje podatkowe, przenoszenie zysków, ATAD, zasady CFC, BEPS.

JEL: F38, G38, K34, M41

1. Introduction

Tax optimisation using countries with competitive tax jurisdictions has become a common business strategy for multinationals from both developed and emerging markets (Beugelsdijk et al., 2010; Chari & Acikgoz, 2016; Jones & Temouri, 2016; Jones et al., 2018; Pereira et al., 2019; Kemme et al., 2020). For instance, to minimise royalty taxes, they may locate their intangible assets in a country with a low tax rate (Dischinger & Riedel, 2011; Gumpert et al, 2016; Merz & Overesch, 2016; Barrios & d'Andria, 2020). Through their capital structure, companies can also influence how accounting profits are distributed internationally. In fact, they can reduce their global tax payments by borrowing within their group and shifting loans to high-tax jurisdictions to maximise tax deductions for interest payments (Bilicka et al., 2022).

In addition, Tørsløv, Wier, and Zucman (2020 and 2023) indicate that countries with high corporate income tax rates are exposed to base erosion and profit shifting. Nearly 40% of multinational corporations' profits are transferred to tax havens annually (Sitkiewicz & Białek-Jaworska, 2024). Moreover, according to estimates by Cobham et al. (2015), losses in global tax revenues from profit shifting could be as high as USD 130 billion annually. By reducing tax revenues, profit shifting undermines the provision of public services such as education, health care and public infrastructure. Tørsløv et al. (2023) suggest that these losses are significant, amounting to 18% of corporate tax revenues in the European Union, 14% in the United States and 5% in other major economies. Reductions in these services then have knock-on effects throughout the economy.

This issue has been addressed by legislating to reduce the scale of tax avoidance through the use of foreign entities, especially those located in lower-tax countries. Regulations on foreign controlled entities (controlled foreign corporations – CFCs) provide for taxation of income earned by such entities at a rate of 19% income tax (PIT or CIT). A CFC is a foreign entity that does not have its registered office or place of management or registration in the territory of the Republic of Poland. At the same time, it is controlled by a Polish tax resident through participation in the profits or capital of that entity at a certain level, or through holding voting rights or exercising effective control over it.

In the EU, the issue of taxation of CFC income is regulated under Council Directive (EU) 2016/1164 of July 12, 2016, laying down rules against tax avoidance practices that directly affect the functioning of the internal market (the *ATAD)*. Its purpose is to counter tax avoidance practices that directly affect the functioning of the European Union›s internal market. This act identified the need to more closely link the place where profits are generated and produced with the place where they are actually taxed, in order to curb abuses on income tax grounds in EU member states. The ATAD states for example how to attribute the income of a controlled foreign subsidiary which is low-taxed to its higher-taxed parent.

This study aims to review institutional changes resulting from implementation of the ATAD and identify its role in preventing tax avoidance practices by Polish taxpayers. To date, literature has focused on determinants, channels and scale of profit shifting to countries with harmful tax competition. Therefore, my aim is to analyse the reaction of Polish payers to the implementation of the ATAD in trading partner (payment beneficiary) countries. In addition, due to expected differences, the analysis will be broken down by payers in the service and manufacturing sectors.

I explore administrative tax data on passive income payments to 110,907 non-residents from 134 countries made by 40,000 residents and declared in IFT-2R returns on withholding tax (WHT) for 2012–2022. This unique panel data set and exploiting Tobit model enables analysis of the response of WHT payers to the introduction of the ATAD and its impact on profit shifting by the service and manufacturing sectors.

The remainder of the paper is structured as follows. Section 2 presents the literature review on the ATAD CFC rule and implementation of this rule across Europe. I also analyse the relevance of CFC rules to profit shifting decisions with a particular focus on the approach to taxing foreign income and the concept of global minimum tax. Section 3 describes an empirical approach adopted to examine the changes resulting from the introduction of the ATAD. Section 4 summarises and discusses the results obtained. The last section states directions for future research.

2. Institutional setting

Expanding multinational company networks—both newly established and long-standing—are increasingly relocating business activities across national borders. These cross-border intra-group transactions place pressure on divergent legal and tax systems. For strategically oriented firms, this complexity creates opportunities for lawful tax planning, i.e. activities that do not constitute tax evasion (Schafer & Spengel, 2010; Slemrod, 2007; McGee, 2012).

Following the widespread use of offshoring, a new phase in profit maximisation to generate tax savings is gaining prominence. This approach is often less complex, as it does not require relocating entire production processes or physical assets to low-tax jurisdictions. Instead, it involves shifting profits—primarily through legal documentation—to take advantage of tax incentives or lower effective tax rates abroad.

There is a wide array of methods available to achieve these tax advantages. However, regulatory frameworks designed to effectively curb such practices remain limited. Following the OECD›s 2015 Action Plans (OECD, 2015) on Tax Base Erosion and Profit Shifting (BEPS), the European Commission took the view that a harmonised response was needed to counter tax base erosion and profit shifting across Europe. As a result, on July 12, 2016, the European Council agreed on the first draft of the Anti-Tax Avoidance Directive. According to the preamble in the ATAD, a key objective is to improve the internal market›s resilience against cross-border tax avoidance, ensuring that tax is paid where profits are generated (ATAD, supra n. 5, preamble points 1–3 and 16).

2.1. The ATAD CFC rule

As with all other provisions introduced in the ATAD, the CFC rule applies only to legal entities. It does not cover partnerships or sole proprietorships. In addition, according to Article 7(1) of the ATAD, the CFC rule applies only to parent companies that have at least one foreign subsidiary that meets two specific criteria. First, the parent company must control the subsidiary, which is defined as owning more than 50% of the ownership interest. Second, the subsidiary must be domiciled in a low-tax jurisdiction—a criterion that is considered satisfied if the subsidiary›s effective tax rate is less than 50% of the parent company›s statutory corporate tax rate. A foreign subsidiary that meets both criteria is classified as a CFC.

When a parent company falls under the scope of the ATAD CFC rule, certain categories of income generated by a CFC must be incorporated into the parent company›s corporate tax base and are subject to immediate taxation at the parent's nominal corporate tax rate. Crucially, this taxation occurs regardless of whether the CFC distributes the income as dividends[1]. By subjecting the CFC's income to immediate taxation at the typically higher tax rate of the parent company, the rule effectively neutralises the tax benefits associated with accumulating or retaining profits within the CFC. Consequently, the ATAD CFC rule weakens the financial incentive for parent firms to shift income to CFCs.

The ATAD CFC rule offers two alternative methods for determining the portion of a CFC's income (passive income) that must be included in the corporate tax base of the parent company (Moser & Hentschel, 2017; Schönfeld, 2017; Prettl & von Hagen, 2022). When transposing the ATAD CFC provision into national law, EU member states were free to select either of these two approaches. The first option focuses on passive income earned by an entity that qualifies as a CFC, which means that certain kinds of income earned by the CFC that are not distributed during a taxable year have to be included in the tax base of the shareholder. The list of passive income includes (Duenas, 2019):

- interest or any other income generated by financial assets,
- royalties or any other income generated from intellectual property,
- dividends and income from the disposal of shares,
- income from financial leasing,
- income from insurance, banking, and other financial activities,
- income from invoicing companies that earn sales and services income from goods and services purchased from and sold to associated enterprises and add no or little economic value.

The second option is a transaction-based method. Under Article 7(2)(b), only income arising from arrangements that have been put in place essentially to secure

[1] To prevent double taxation of income, foreign taxes paid by a CFC may be credited against the corporate tax liability of the parent company. Additionally, pursuant to Article 8(5) and (6) of the ATAD, any dividend income derived from a CFC, as well as any income arising from the disposal of shares in a CFC, shall remain exempt from taxation to the extent that such income has already been included in the corporate tax base in a prior year.

a tax advantage is subject to inclusion in the corporate tax base of the parent entity. For the purposes of this study, I refer to the category-based method as *Model A* and the transaction-based method as *Model B*.

2.2. The implementation of CFC rules across Europe

At the time of the adoption of the ATAD in 2016, only sixteen out of 37 European countries (43.24%) had pre-existing CFC rules aligned with Articles 7 and 8 of the ATAD. These countries had already institutionalised anti-avoidance provisions aimed at counteracting profit shifting to low-tax jurisdictions through foreign subsidiaries. Thirteen out of these sixteen were EU member states, including Germany, France, Italy, Spain, and the United Kingdom[2]. The remaining three were non-EU countries: Norway, Russia, and Turkey (Deloitte, 2021). This institutional variance highlights that while the concept of CFC rules was not new, there was insufficient harmonisation at the EU level, and many member states had no such legislation in place.

Out of the 21 countries without a CFC rule in 2016, sixteen countries (43.24%), all of which were EU member states, introduced a CFC rule in the years after 2016 due to the requirements of the ATAD. While Hungary and Romania implemented a CFC rule in 2017 and 2018 respectively, CFC rules in Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Ireland, Latvia, Luxembourg, Malta, the Netherlands, Slovakia and Slovenia were put into effect in 2019. Five European countries (13.51%), none of which is an EU Member State, had not implemented a CFC rule by 2021. These countries are Moldova, Montenegro, Serbia, Switzerland and Ukraine. In all 32 countries that have implemented a CFC rule, its application is conditional upon the existence of at least one foreign subsidiary that qualifies as a CFC. Under the ATAD, a subsidiary is considered a CFC if it is both controlled by the parent company and located in a low-tax jurisdiction.

A total of 27 countries (84.38%) align with the ATAD definition of control, presuming that a parent company exercises control when it holds more than 50% of the shares in the subsidiary[3]. Conversely, five countries—Finland[4], Portugal, Russia, Sweden, and the United Kingdom—apply a broader definition of control, considering it sufficient when the parent company owns more than 25% of the shares. With regard to the identification of low-tax jurisdictions, eighteen countries (56.25%) adopt the threshold set out in the ATAD, defining a low-tax jurisdiction as one in which the subsidiary's effective tax rate is less than 50% of the statutory corporate tax rate in the parent company's country[5]. Ten countries (31.25%) have opted for stricter thresholds above 50%, and these are Sweden (55%), Finland (60%), Iceland and Norway (66.67%), Russia, Spain, the United Kingdom (75%), Denmark, Estonia,

[2] The United Kingdom left the EU at the beginning of 2020.

[3] Poland changed the threshold for the control requirement from 25% to 50% in 2018.

[4] Finland changed the threshold for the control requirement from 50% to 25% in 2019.

[5] Poland and Lithuania changed the low-tax threshold from 75% to 50% in 2018 and 2019, respectively. Portugal changed the low-tax threshold from 60% to 50% in 2019.

and Latvia (100%). Since 2020, France has applied a lower threshold of 40%, thereby deviating slightly from the ATAD benchmark[6]. In contrast to the relative approach advocated by the ATAD, three countries—Germany, the Netherlands, and Turkey—apply fixed absolute thresholds. Specifically, they consider a subsidiary to be located in a low-tax jurisdiction if its effective tax rate is below 25%, 9%, and 10%, respectively. In 2021, these thresholds corresponded to 83.33%, 36%, and 50% of each country's nominal corporate tax rate.

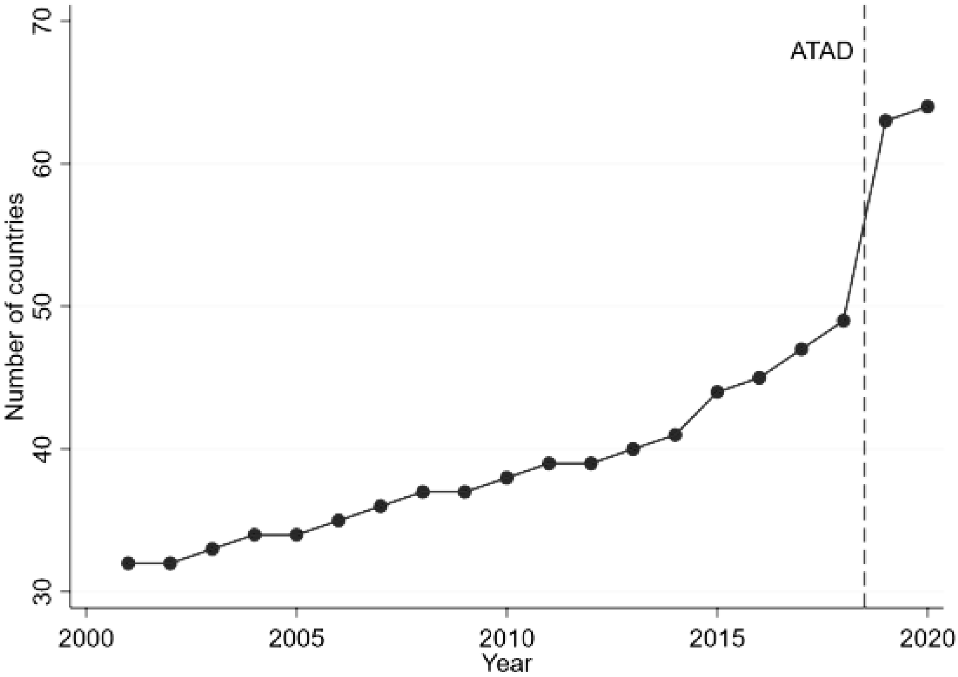
In eleven countries (34.38%), including France and Italy, the parent company is required to include the entire income of a foreign subsidiary classified as a CFC in its corporate tax base. In contrast, 21 countries (65.62%) mandate the inclusion of only certain portions of the subsidiary's income. Austria, Croatia, the Czech Republic, Denmark, Germany, Greece, Lithuania, the Netherlands, Romania, Slovenia, and Spain have adopted an approach consistent with Model A of the ATAD CFC rule, whereby only income from specific categories must be included by the parent company. Belgium, Cyprus, Estonia, Hungary[7], Ireland, Latvia, Luxembourg, Malta, Slovakia, and the United Kingdom follow Model B of the ATAD CFC rule, requiring that the parent company includes income from activities undertaken primarily to gain a tax advantage.

Furthermore, nineteen countries with a CFC rule (59.38%) provide an economic substance exemption. Among these, eleven countries (57.89%), including France and Italy, grant this exemption regardless of the CFC's location, while eight countries (42.11%), including Germany and Spain, limit the exemption to CFCs located within the European Economic Area (EEA). As recommended by the ATAD CFC rule, 24 countries (75%) have implemented a safe-haven rule. However, eight countries (25%)—Belgium, Bulgaria, the Czech Republic, Finland, France, the Netherlands, Slovakia, and Sweden—have not adopted such a provision.

Figure 1 depicts the number of countries that implemented a CFC rule in a given year. It shows that many countries have enacted CFC legislation over the last 20 years, in particular EU and OECD member countries. Following the adoption of the ATAD in 2016, particularly EEA countries have adopted CFC provisions since the implementation deadline in 2019.

[6] Prior to 2020, the low-tax threshold in France was 50%.
[7] Hungary had originally adopted Model A of the ATAD CFC rule but changed to Model B in 2019.

Figure 1.
Number of Countries with CFC Rule



Source: Overesch et al. (2024).

2.3. The importance of CFC rules on profit-shifting decisions

Profit shifting by multinationals to foreign low-tax countries and interweaving it with international corporate taxation has never been more complex than it is today.

A study by Ruf and Weichenrieder (2012) provides evidence that German CFC regulations effectively limit the allocation of passive assets to low-tax jurisdictions. Using data from MiDi (Microdatabase Direct Investment) compiled by the German Bundesbank, the main analysis of passive assets is based on more than 85,000 observations of German multinational companies (MNCs) over the course of a year. The authors take advantage of the variability in the application of the German CFC system and use panel regressions with fixed effects. They also exploit the fact that double-taxation agreements (DTAs) without activity clauses protect affiliates in those countries from CFC taxation, unlike affiliates located in jurisdictions where DTAs contain such clauses, thus allowing CFC rules to apply to passive income. The results indicate that affiliates located in jurisdictions classified as low-tax under the German CFC framework (i) have significantly lower levels of passive assets and (ii) are less frequently used as intermediary entities. In addition, the analysis reveals that German CFC rules also affect the extensive margin of foreign direct investment (FDI), as they significantly reduce the likelihood of German MNCs establishing subsidiaries in the affected jurisdictions.

Prettl (2018) find that CFC laws in general lead to around 19.1% less passive income in low-tax subsidiaries abroad. Moreover, he calculated that USD 11.67 billion is shifted abroad to avoid taxation in high-tax home countries. This proves that while CFC legislation is designed to curb profit-shifting behaviour by multinational enterprises, it can nonetheless be strategically circumvented. Firms are able to exploit the various thresholds embedded within the rules, positioning themselves just above or below these limits to avoid triggering CFC consequences. Moreover, the specific design of CFC provisions can have varying effects on investment behaviour. It is readily conceivable that certain thresholds are more stringent than others, thereby making the overall CFC regime either more or less restrictive in practice.

Clifford (2019) advances the existing literature by showing that once a CFC rule becomes binding, the financial profits of affected foreign affiliates decline by approximately 13%. Concurrently, financial profits increase by 4.4% in affiliates located in the ultimate owner's country and by 5.2% in other foreign affiliates. The study further demonstrates that multinational corporations tend to establish more affiliates in jurisdictions that lie just above the minimum tax threshold defined by the CFC rule i.e., in countries not subject to the beneficial owner's CFC regime. These findings indicate that CFC rules influence not only profit allocation but also the location decisions made by MNCs, with effective *haven affiliates* being strategically positioned just at the CFC threshold. Overall, Clifford's results strongly corroborate the theoretical predictions presented in Haufler et al. (2018).

Albertus (2023), in contrast, examines tax-motivated profit shifting by analysing data on US subsidiaries owned by foreign firms. The study leverages variation in the implementation of CFC rules across the parent firms' home countries. The findings indicate that when parent countries enforce CFC rules, there is a reduction in income shifting from the US to third-party low-tax jurisdictions.

Hansen, Merlo and Wamser (2023) show that the introduction of CFC rules by parent countries does not result in profits being shifted back to the parent firm from affected low-tax affiliates. Instead, when foreign affiliates fall under the scope of CFC regulations, profits are redirected to other foreign affiliates within the same multinational group that remain outside the reach of the rule. Using direct parent-affiliate ownership data from Orbis and a dataset comprising over one million observations, the authors provide robust empirical support for this pattern. Notably, while profits decline in affiliates subject to CFC rules, other entities within the MNC exhibit a marked increase in various indicators of real economic activity.

Income generated by a subsidiary can be transferred as dividends or retained by the subsidiary. If the subsidiary meets some of the criteria listed in Hansen, Merlo and Wamser (2023), the CFC's income is added to that of the beneficial owner for the purpose of taxing all income.

The criteria for recognising a foreign company as a CFC are crucial, because the mechanism for "assigning" its income to its owner is only triggered if the criteria are fulfilled. In model terms (OECD, ATAD as well as Polish regulations), they can be divided into three main groups:

1. Control criterion: checks whether the taxpayer actually controls the foreign company. Control can be:

- capital-related – ownership directly or indirectly of a certain percentage of shares (e.g., more than 50% of voting rights, capital or profit rights),
- economic – actual ability to make key decisions (e.g., through contracts, personal ties),
- joint – when several residents of a country together exercise control.

The meaning of this criterion is simple: the CFC rules are intended to apply only to situations in which the taxpayer can "park" profits in an entity over which he has real power.

2. Low taxation criterion: checks the level of taxation in the company›s country of residence. It is usually examined whether:

- the effective tax rate is significantly lower than in the owner's country of residence (e.g., less than 50% of the domestic rate),
- or the company benefits from special exemptions, concessions, preferential regimes (e.g. offshore regimes, special zones, IP box with very low effective CIT).

This criterion identifies jurisdictions to which it is profitable to artificially transfer income.

3. The criterion of the nature of income (passivity): the most important from the perspective of profit shifting. It is checked whether a significant portion of the company›s income is:

- interest,
- royalties,
- dividends,
- capital gains,
- income from low-value-added intragroup services,
- income from financial instruments.

Passive income is particularly susceptible to transfer because it can be easily "detached" from real operating activities and attributed to an entity in a tax haven.

In regulations, there is also a distinct **criterion of economic substance (actual activity)**. In this case, it is examined whether the company:

- has a real office, staff, management,
- actually bears economic risks,
- performs essential functions (*substance test*).

If the activity is artificial or minimal, and the income is high, this reinforces classification as a CFC.

However, if these criteria are not satisfied, there is still an obligation to pay dividends, royalties, interest, etc. to the parent company, resulting in profit shifting. In addition, some countries allow tax paid on income generated by a CFC to be deducted from tax on dividends, treating this as the same income from an economic point of view. Consequently, where tax has already been paid at the CFC level, the subsequent payment of dividends does not cause additional taxation. The main purpose of the CFC legislation is to tax retained earnings that are not paid out as dividends or other such institution.

2.4. Global minimum tax proposal

In 2013, Harry Grubert, an analyst at the US Treasury Department, and Rosanne Altshuler, a professor in the economics department at Rutgers University, examined various proposals aimed at improving the US cross-border income tax system (Grubert & Altshuler, 2013).

The study examines four variants of a minimum tax on foreign income:

- per-country minimum tax combined with a dividend exemption,
- a regime without an active business exception but allowing a current deduction for real investment in the source jurisdiction,
- a minimum tax applied at the aggregate foreign income level, but at an elevated rate,
- an overall minimum tax that permits immediate expensing of current investment against the US taxable base.

The study also considers a minimum tax imposed at the level of the CFC, but notes that appropriately formulated CFC rules may serve to mitigate the need for such a tax. The study proposes a 15 % global minimum tax (GMT) rate for income earned abroad. Under the proposal, foreign income would be subject to taxation at a rate corresponding to the statutory rate applied to the lower bracket of the US corporate income tax as in effect in 2013 (Sullivan, 2013). Grubert and Altshuler conclude that the introduction of a minimum tax offers a means to enhance the taxation of cross-border income by addressing the lockout effect, curbing income shifting, influencing location decisions more effectively, and making the system less complex.

With the implementation of the CFC rules, Overesch et al. (2024) emphasise the importance of introducing GMT as a new instrument against international tax competition. As part of the OECD's Pillar II initiative, member countries reached an agreement on the GMT in 2021. The objective of this framework is to encourage widespread adoption of the GMT through comprehensive tax reform. By 2024, for instance, all EU member states had implemented a minimum effective tax rate of 15% for MNCs operating within the EU. Although the GMT and CFC rules differ in scope and application, they share certain common elements. Unlike CFC rules, which are applicable regardless of company size, the GMT is limited to MNCs with a consolidated annual turnover exceeding EUR 750 million. Both frameworks aim to ensure higher taxation of low-taxed foreign profits. Under the GMT rule, a *top-up tax* is imposed—either by the low-tax jurisdiction through the Qualified Domestic Minimum Top-up Tax or by the jurisdiction of the parent entity through the Income Inclusion Rule. This top-up tax reflects the shortfall between the 15% minimum rate and the effective tax rate (ETR) applied in the foreign jurisdiction (de Wilde, 2024).

Consequently, the effective tax rate under the GMT rule consistently amounts to 15%. In a comparable manner, the CFC threshold effectively establishes a minimum level of taxation on passive income, as MNCs tend to adjust their behaviour by shifting profits to foreign affiliates or profit centres that fall just outside the scope of the applicable CFC rule (Clifford, 2019). As such, the CFC threshold influences the incentives faced by the parent company and other non-haven affiliates. A key distinction between the GMT and CFC rules lies in their scope: while CFC provisions typically target passive income, top-up taxes under the GMT rule apply to all categories of foreign income (Overesch et al., 2024).

3. Empirical approach

For the empirical approach, I explore administrative tax data on passive income payments to 110,907 non-residents from 134 countries made by 40,000 residents and declared in IFT-2R returns on WHT for 2012–2022.

The IFT-2R is an annual tax return containing information on individuals and legal entities not residing in Poland (non-residents) who have earned income subject to lump-sum income tax in Poland. The declaration contains the following information:

– the amount of income (revenue) earned in Poland by the non-resident,
– WHT collected,
– the applicable tax rate or exemption (e.g., under a double-tax treaty).

The declaration distinguishes between specific sources of income such as charges for the export of cargo and passengers accepted for transportation in Polish ports by foreign enterprises (transportation), air navigation (airlines), dividends, interest, advisory, accounting and legal services (intangible services), royalties, and show business. It also includes royalties and dividends from a foreign branch in Poland under Art. 21 and 22 of the CIT Act and capital gains (equity).

The obligation to file the IFT-2R is incumbent on any entity that entered into transactions with non-residents in a given year. Data from the IFT-2R is processed by the Ministry of Finance and is not made public.

To examine how introducing the ATAD for CFCs in 2018–2019 impacts tax avoidance practices, I consider the countries that introduced model A or B of this CFC directive, listed in table 1.

Table 1.
List of countries with regulations on CFCs

country	year of introduction
Austria	2018
Germany	2018
Ireland	2018
Romania	2018
Belgium	2019
Bulgaria	2019
Croatia	2019
Czech Republic	2019
Estonia	2019

country	year of introduction
Finland	2019
Greece	2019
Hungary	2019
Italy	2019
Latvia	2019
Lithuania	2019
Luxembourg	2019
Malta	2019
Netherlands	2019
Portugal	2019
Slovakia	2019
Slovenia	2019
Sweden	2019

Source: Own work based on OECD data.

Following the study by Gumpert et al. (2016), our research sample was split into manufacturing and service sectors due to differences in the flexibility of the location of affiliates used to profit shifting in response to regulatory changes. Gumpert et al. (2016) findings for German companies suggest that larger and more productive manufacturing firms are more likely to have affiliates in tax havens, especially if they are based in high-tax countries. In the services sector, tax havens are not as strongly associated with increased tax rates. Hebous and Johannesen (2016) discovered that the trade in tax haven services is partially indicative of genuine specialisation within service sectors, indicating that characteristics like low tax rates, confidentiality, and regulatory benchmarks provide a comparative edge in service production. The level of engagement in profit shifting can also be influenced by asset structure (Sitkiewicz & Białek-Jaworska, 2024). In the manufacturing industry, where fixed assets are prominent due to challenges in altering their geographic placement, we anticipate reduced passive inflows (along with dividends) compared to the services sector. This is due to the dominance of human resources and intangibles, which allows flexibility in choosing and changing locations.

Thus, based on the analysis of institutional changes in Section 2 and the literature review, I expect the following:

H1: *Once made more stringent, the ATAD reduced passive flows paid by payers from the services sector to recipients addressed in these tax instruments.*

On the contrary, such regulations should have less significant or even no effects in the manufacturing sectors, leading to H2:

H2: *Once made more stringent,the ATAD did not reduce passive flows paid by payers from the manufacturing sector to recipients addressed in these tax instruments.*

To verify hypotheses H1 and H2 concerning the impact of the ATAD on prevention of tax avoidance practices, I explore administrative tax data on passive income payments to 110,907 non-residents from 134 countries made by 40,000 residents and declared in IFT-2R returns on WHT for 2012–2022.

I estimate a Tobit model for the service and manufacturing sectors separately. The dependent variable is ln_*PSATAD*, defined as a logarithm of profit shifting, defined as the sum of taxed and non-tax payments from the analysed channels affected by ATAD CFC regulations, i.e. *dividends, interest and license*. The *treated_atad* group consists of the countries that introduced the ATAD for CFCs in 2018 or 2019. The variable *atad_cfc_model* is a binary variable taking the value of one for a period from 2018 to 2022. I winsorise the top 1% of the flow distribution. Table 2 presents the Tobit regression results for effects of ATAD CFC rules on profit shifting for EU member states for the whole sample and the manufacturing and services sector separately.

Table 2.

Tobit results for effects of ATAD CFC rules on profit shifting for EU member states

variable	entire sample	manufacturing	services
atad_2018_2019	0.0125***	0.0046**	0.0158***
	(0.0005)	(0.0020)	(0.0007)
atad_cfc_model_2019	−0.0087**	−0.211***	−0.0085***
	(0.00632)	(0.0031)	(0.0008)
DID_atad_2018_2019	**−0.009*** **	−0.0055	**−0.0112*** **
	(0.0009)	(0.0035)	(0.0011)
cons	0.0195***	0.0363***	0.0192***
	(0.0004)	(0.0015)	(0.0005)
Number of observations	342,026	77,990	223,318
Number of groups	203,84	46,612	131,685
Wald test	1605,37***	306.16***	1110.76***
p-value	0.000	0.000	0.000

Note: * p < 0.1, ** p < 0.05, *** p < 0.01, in parenth eses deviations of estimators (standard errors).

Source: Own work based using Stata/IC 16.0 software.

Results of DiD estimates give no basis for rejecting hypothesis H1. A negative significant estimate at the *DID* variable for the total sample and services allows us to conclude that the more stringent ATAD CFC tax legislation has reduced passive flows from dividends, interest and royalties services since 2019 in countries that introduced ATAD CFC model A or B compared to other EU member states. For the manufacturing sector, a coefficient estimate at the *DID_atad_2018_2019* variable (*atad_cfc_model_2019atad_2018_2019*) is insignificant, similar to a parameter estimate at the time dummy *atad_2018_2019* variable. This indicates that the ATAD CFC regulations introduced in 2018-2019 were inefficient for declining passive income flows due to dividends, interest and royalties, which is consistent with the H2 hypothesis. Thus, we have not found evidence that the more stringent ATAD CFC tax legislation has reduced passive flows paid by payers from the manufacturing sector to recipients addressed in these tax instruments since 2019.

As a robustness check for the Tobit specification, I estimate a dynamic difference-in-differences (event-study) model with country and year fixed effects, focusing on EU member states. The specification includes leads and lags around the 2018 and 2019 ATAD reform, with 2017 as the reference year (t= –1). Standard errors are two-way and clustered at the country and year level. The dependent variable remained unchanged (ln_PSATAD). The estimation results are presented in table 3.

Table 3.
DiD results for effects of ATAD CFC rules on profit shifting

variable	entire sample	manufacturing	services
did_ev_1 (2016)	0.0009	−0.0006	0.00187
	(0.0016)	(0.0019)	(0.0021)
did_ev_3 (2017)	−0.0010	−0.0013	−0.0007
	(0.0011)	(0.0010)	(0.0014)
did_ev_4 (2018)	−0.0057**	−0.0011	−0.0079**
	(0.0025)	(0.0015)	(0.0033)
did_ev_5 (2019)	−0.0057*	0.00143	−0.0093**
	(0.0034)	(0.0024)	(0.0044)
did_ev_6 (2020)	−0.0062	0.0003	−0.0097*
	(0.0039)	(0.0028)	(0.0049)
cons	0.0214***	0.0188***	0.0227***
	(.0005)	(0.0004)	(0.0007)
Number of observations	202,261	69,379	132,861
Number of clusters (kod_kraj)	176	136	166
F statistics	1.38	1.11	1.55
p-value	0.2347	0.3606	0.1776

Note; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$, in parentheses deviations of estimators (standard errors).
Source: Own work based using Stata/IC 16.0 software.

The coefficients for the pre-implementation years (did_ev_1 for 2016 and did_ev_3 for 2017) are small in magnitude and statistically insignificant across all samples. This indicates the absence of differential pre-trends between treated and control groups prior to the reform, lending support to the parallel trends assumption underlying the DiD design. Starting in 2018, when the ATAD CFC rules became binding in most EU countries, the estimates for the entire sample became negative and statistically significant. In 2018 and 2019, the coefficients indicate a reduction in profit shifting of approximately 0.6%, with the effect remaining negative but statistically weaker in 2020. This pattern suggests that the ATAD CFC rules were effective in curbing profit shifting, particularly in the immediate years following implementation.

The aggregate effect masks substantial heterogeneity across sectors. The manufacturing sector shows no statistically significant response to the introduction of the CFC rules. All post-reform coefficients are close to zero, indicating that profit shifting in manufacturing may be less sensitive to anti-tax avoidance legislation, possibly due to stronger links between profits and real economic activity. This is consistent with previous results. Services, by contrast, exhibit large and statistically significant reductions in profit shifting following the reform. The estimated effects range from –0.8% to nearly –1.0% between 2018 and 2020. This is consistent with the notion that services rely more heavily on mobile intangible assets and intra-group financial structures, making them more exposed to CFC-based anti-avoidance measures.

Overall, the results suggest that the ATAD CFC rules were effective in reducing profit shifting, particularly among service-sector firms. The absence of pre-treatment effects supports a causal interpretation, while the sectoral pattern aligns with theoretical expectations regarding the mobility of tax bases.

To falsify spurious trends, I also conducted a placebo event-study assuming the reform occurred in 2015, a year before the first plans for the ATAD began to be presented. The regression was performed using the same specifications as the main analysis, with country and year fixed effects and standard errors clustered at the country level. The results are shown in table 4.

Most event-time coefficients for the placebo year are statistically insignificant, indicating that there were no spurious trends in PSATAD revenues prior to the reform. The only exception, did_evpl_3 (2015), shows a small positive effect, which is likely due to random variation rather than a meaningful impact. Overall, the results from the placebo test for the whole sample and also for both sectors separately support the validity of the parallel trends assumption and suggest that the observed effects in the actual reform years are not driven by pre-existing trends or model artifacts.

Table 4.

DiD results for effects of ATAD CFC rules on profit shifting with placebo 2015 year

variable	entire sample	manufacturing	services
did_evpl_1 (2014)	0.00004	−0.0016	0.00089
	(0.0033)	(0.0042)	(0.0036)
did_evpl_3 (2015)	0.00468*	0.00342	0.00518**
	(0.0019)	(0.0042)	(0.0018)
did_evpl_4 (2016)	−0.0042	−0.0063	−0.0032
	(0.0044)	(0.0058)	(0.0044)
did_evpl_5 2017)	−0.0037	−0.0047	−0.0033
	(0.0050)	(0.0059)	(0.0052)
cons	0.04025***	0.03671***	0.04235***
	(0.0014)	(0.0022)	(0.0014)
Number of observations	135,644	48,985	86,659
Number of clusters (kod_kraj)	28	28	28
F statistics	5.80	3.83	4.22
p-value	0.0017	0.0136	0.0088

Note: * p < 0.1, ** p < 0.05, *** p < 0.01, in parentheses deviations of estimators (standard errors).

Source: Own work based using Stata/IC 16.0 software.

4. Conclusions

This study reviews the institutional changes resulting from the implementation of the ATAD. In addition to analysing the CFC rules and summarising the stage of their implementation in European countries, I consider their relevance to profit-shifting decisions. Also analysed are the CFC rules in the context of the introduction of a global minimum tax.

Existing research indicates that CFC legislation generally leads to a reduction of approximately 19.1 percent in passive income in low-tax foreign subsidiaries. In addition, an estimated USD 11.67 billion of profits per year are shifted offshore to avoid taxation in high-tax countries.

In addition, the analysis examines whether the CFC rule introduced under the ATAD influences profit shifting to jurisdictions engaged in harmful tax competition. For the empirical analysis, I use unique data of 110,907 non-residents from 134 countries with passive flows paid by Polish payers in the manufacturing or service industries and reported on the IFT-2R WHT return for 2012–2022. The findings show that for the total sample and services sector, the more stringent ATAD CFC legislation has reduced passive flows from dividends, interest and royalties services since 2019 in countries that introduced ATAD CFC. For the manufacturing sector, in turn, the obtained results do not provide evidence that the more stringent ATAD CFC legislation has reduced passive flows. It is worth noting that CFC relates to passive income. From the perspective of Polish subsidiaries, it is likely that most of them are subsidiaries of entities based in countries that have adopted CFC rules. However, many Polish subsidiaries, especially those in the manufacturing sector, are engaged in real activities due to lower costs, and real economic activity is a negative condition for recognition as a CFC, in contrast to the service industry, where passive income is more common and activities are directed more often towards profit shifting.

The review of legal changes, combined with an empirical analysis of the effects of the ATAD made for Polish payers and the use of unique data, contributes to the existing literature, which focuses on other European countries. Furthermore, the results provide valuable insights into the effectiveness of the regulations being introduced by sector of activity as this should prove insightful for policymakers. This means that policymakers in Poland and the EU should treat the ATAD CFC not just as a fiscal device, but as part of a broader strategy—combining the fight against the erosion of the tax base with building ofa competitive, transparent and stable environment for investment. The response of policymakers in Poland and the EU should first and foremost ensure regulatory consistency and simplicity by unifying the interpretation of CFC rules across the EU to reduce regulatory arbitrage between countries. The definition of *real economic activity* used in the rules should also be clarified, so that companies conducting real business are not penalised and artificial structures are effectively eliminated. In addition, countries should also give a boost to tax administration by investing in data analytics, information sharing and officials› competence in international structures. In addition, country-by-country-reporting (CbCR), introduced in recent years, should be used effectively to strengthen the automatic exchange of information between countries. With all these regulatory changes taking place, it is also important to preserve the competitiveness of the economy, i.e. parallel simplification of the tax system and stability of the law, so that companies do not perceive the EU (and Poland) as an area of excessive regulatory risk, and to offer legal investment incentives based on real activity (R&D, innovation, green technology), instead of tolerating artificial tax structures. No less important is *dialogue with business*. Global legislation does not provide for consultation with businesses and tax advisors to make regulations workable and predictable. They would certainly allow the development of safe havens for entities that meet certain criteria for viable business.

5. Future research directions

A valuable contribution to future research on the topic of the role of the implementation of the ATAD CFC rule and its impact on tax avoidance practices, first and foremost, is the extension of the period and use of data beyond 2022. Another important aspect is the integration of this analysis with the global minimum tax regime introduced in Poland as of January 1, 2025. There is a strong presumption that this tax will change the behaviour of entrepreneurs in relation to making transactions with non-residents, in particularly within services, which may be reflected in passive flows and profit-shifting transactions. However, these changes will be observed in the data z delay (about two years), therefore it would be valuable to extend the analysis to 2027.

This would all allow broader analysis that takes into account macroeconomic shocks that occur after the study period in this article. In particular, global inflationary pressures, caused largely by the war in Ukraine and energy prices, which triggered a cycle of interest rate hikes and slowed economic growth. In addition, restrictive monetary policy and higher interest rates may have caused a change in the behaviour of business entities with respect to intra-group borrowing and tax optimisation decisions.

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