



The CIT gap in Poland in 2014–2018

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Key figures

PLN 22 billion the size of the CIT gap in Poland in 2018

35% a fall in the CIT gap against 2014

PLN 17 billion corporate profits artificially transferred from Poland in 2018, which translated into CIT revenue loss exceeding PLN 3 billion

5% the share of CIT revenue in public revenue in Poland. It is below the EU average (7%)

Key findings

In the past few years, CIT revenue in Poland has risen exceedingly fast – markedly faster than GDP. In 2014–2019, CIT revenue in nominal terms went up by as much as 72%, whereas its share in GDP increased by nearly one-third – from 1.7 to 2.2%.

The rise in CIT revenue largely results from a fall in the CIT gap. In 2018, the CIT gap was PLN 22 billion. It was 35% less than in 2014. As a share of GDP, in 2014–2018 the gap dropped by half – from 2.0 to 1.0%. As a consequence, over this period up to 80% of CIT revenue growth might result from the reduction in the CIT gap.

There were two reasons for the decrease in the CIT gap. Firstly, **the decline in the CIT gap was favoured by good economic conditions in the period covered.** The propensity to carry out illegal or quasi-legal activities tends to diminish in periods of prosperity. Secondly, **the CIT gap was also pushed down by an**

increased CIT collection, resulting from various measures taken by the Ministry of Finance in 2014–2018.

The CIT gap is a decreasing but still significant problem in the Polish economy. Its current level – approximately 1% of GDP – indicates that there is still a much room for improvement with regard to reducing the CIT gap and increasing public revenue. In particular, **enterprises' artificial profit transfers abroad is a growing problem.** In 2018, profit transferred from Poland amounted to PLN 17 billion. It translated into general government revenue loss of more than PLN 3 billion. Furthermore, in contrast to the total CIT gap, in the period considered revenue foregone as a result of profit shifting was on the rise – in 2014 it was PLN 2.3 billion (0.13% of GDP), whereas in 2018 it was as much as PLN 3.2 billion (0.15% of GDP). The most profits artificially transferred from Poland are received by Ireland, Luxembourg and the Netherlands.

Introduction

The reliable fulfilment of tax obligations by economic actors is one of the main interests of the State as a community. It allows to maintain fair competition between firms and ensures the funding of public goods. It is worth emphasising that the corporate sector is one of the major beneficiary of such goods – it uses public infrastructure, educated workforce, the law enforcement system, etc.

Nevertheless, governments are facing a rising problem of the uncollectibility of taxes, especially in the past two decades. The issue of tax gaps has been increasingly addressed by governments and international institutions (G20, 2013; European Parliament, 2019; OECD, 2014). The corporate income tax (CIT) gap has also moved up on the agenda. The gap is defined as **the difference between theoretical revenue from corporate income tax, that should be received by the government institutions in a situation of fair and proper treatment of CIT law in the economy (in conformity with the letter and the spirit of the law) and the actual public revenue in that respect.**

In 2019, we presented first analysis of the CIT gap in Poland in the publication entitled *'How much Poland loses from the CIT gap?'*. In this report, drawing on various comments on last year's edition, we make appropriate modifications in the calculation methodology, update the CIT gap estimate and extend the period covered by our analysis to 2014–2018. Information on the calculation method and changes in relation to the previous year is provided in the Methodological annex at the end of the publication.

This time, our focus is on the CIT gap resulting from artificial profit shifting abroad by multinational enterprises. Globalisation, the formation of transnational corporations, the engagement of specialised consultancy firms – those factors combine to make it increasingly difficult for public institutions to counteract tax avoidance and evasion practices, whereas effective taxation of corporations is on the decline (Sawulski, 2020). Taking advantage of favourable treatment by certain tax jurisdictions, multinationals artificially transfer profits from countries where they are actually earned to those offering lower taxes on such profits. That part of the CIT gap is particularly harmful to countries such as Poland, still struggling with capital deficiencies; whereas a gap arising domestically implies that the money is not received by tax offices but largely stays in the economy (e.g. in the form of higher after tax corporate profits), profit transfers abroad mean that – from the point of view of the economy as a whole – such funds are irretrievably lost.

The report is composed of three chapters. **Chapter 1** analyses the role of CIT revenue in the public finance sector and changes in that revenue observed in recent years. **Chapter 2** shows the results of our calculations of the CIT gap in 2014–2018. **Chapter 3** provides insights into the issue of artificial shifting of corporate profits from Poland to other countries – the transfer amounts, destinations and public revenue foregone as a result of that phenomenon. The report concludes with a summary and a methodological annex.

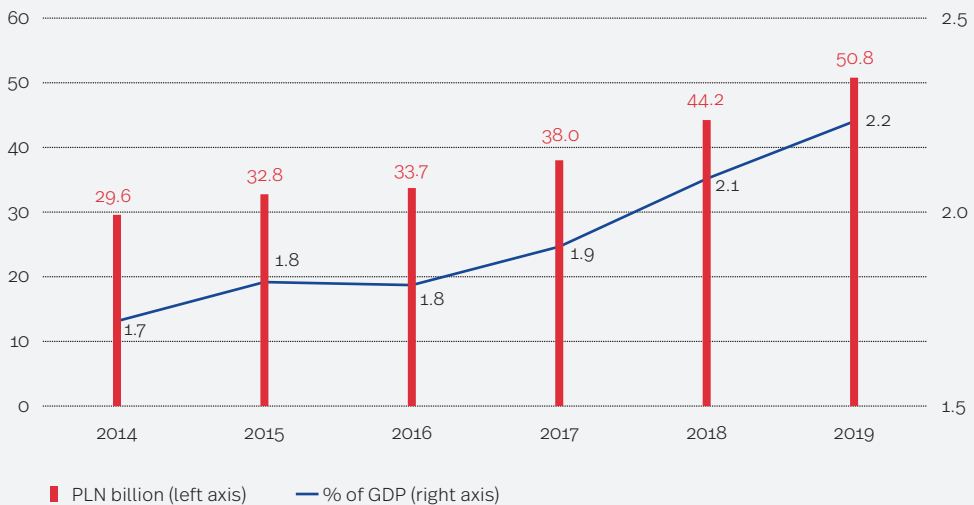
Chapter 1. CIT as a source of public revenue in 2014–2019

In the past few years, CIT revenue in Poland has risen markedly faster than GDP. In 2014–2019, CIT revenue in nominal terms went up by as much as 72% – from PLN 30 billion to PLN 51 billion. Over period considered, GDP at current prices rose by 32%. In consequence, CIT revenue as a share of GDP increased almost by one-third – from 1.7 to 2.2% (Chart 1). The growth is impressive, especially that in the period covered the standard CIT rate remained unchanged (19%) and a reduced rate (15%) was introduced for small businesses.

Despite of the rise in CIT revenue, it continues to represent a minor proportion of total

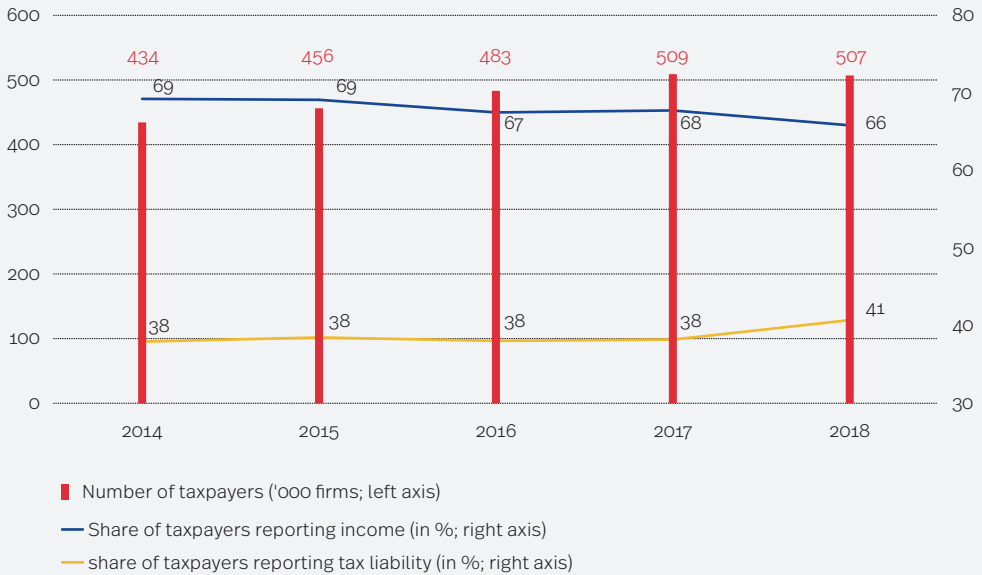
public revenue in Poland – below the shares noted in most EU Member States. In 2018, it accounted for 5% of public revenue. The EU average was 7%. A similar difference between Poland and other EU Member States is observed with regard to CIT revenue as a percentage of GDP. In 2018, the EU's average share was 2.9% – nearly 40% more than in Poland. Only six out of the 28 EU Member States recorded lower shares of CIT revenue in GDP. This shows that there is still a potential to increase CIT revenue in Poland.

↘ Chart 1. CIT revenue in 2014–2019



Source: own preparation by PEI based on: *Sprawozdanie z wykonania budżetu państwa w...* (editions from 2015–2020), Ministry of Finance, Warsaw; Macroeconomic Data Bank of GUS.

▼ **Chart 2.** Number of CIT taxpayers and the share of taxpayers reporting taxable income and tax liability in 2014–2018



Source: own preparation by PEI based on: *Informacja dotycząca rozliczenia podatku dochodowego od osób prawnych za...* (for specific years), Ministry of Finance, Warsaw, <https://dane.gov.pl/dataset/162,informacje-dotyczace-rozliczenia-podatku-dochodowego-od-osob-prawnych> [access: 19.6.2020].

The number of CIT taxpayers is on the rise, but more or less one-third of them show no taxable income. In 2014–2018, the number of CIT taxpayers increased by 17% – from 434,000 to 507,000 – whereas the proportion of taxpayers reporting income dropped from 69% in 2014 to 66% in 2018 (Chart 2). For some enterprises, running at a loss seems to be quite

normal – every fifth firm has shown losses for five years in a row (Kokoszczński, Smyk-Szymańska, Mazurek, 2019). Moreover, a major share of profit-making companies pay no corporate income tax since their incomes are subject to various exemptions. For the above-mentioned reasons, in 2018 merely 41% of CIT taxpayers showed CIT liability (3 pps more than in 2014).

Chapter 2. The CIT gap in 2014–2018

The CIT gap is defined as **the difference between theoretical revenue from corporate income tax that should be received by government institutions in a situation of fair and proper treatment of CIT law in the economy (in conformity with the letter and the spirit of the law) and the actual public revenue in that respect.** The CIT gap in Poland is calculated on the basis of the publication of the International Monetary Fund entitled ‘*Estimating the Corporate Income Tax Gap: The RA-GAP Methodology*’ and the paper by T. Tørsløv, L. Wier and G. Zucman entitled ‘*The Missing Profits of Nations*’. A detailed description of the calculation method is provided in the Methodological annex at the end of the report.

In 2018, the CIT gap was PLN 22.2 billion. It was equivalent to 1% of GDP and one-third of theoretical CIT revenue. For comparison, the CIT gap amount is similar to the total cost of maintaining the police force in Poland (PLN 22.9 billion in 2018) and more than double the government expenditure on the environmental protection (PLN 10.4 billion in 2018)¹. **The CIT gap showed a considerable fall against 2014.** In nominal terms, it declined by 35% – from PLN 34.1 billion to PLN 22.2 billion. As a share of GDP, in 2014–2018 the CIT gap

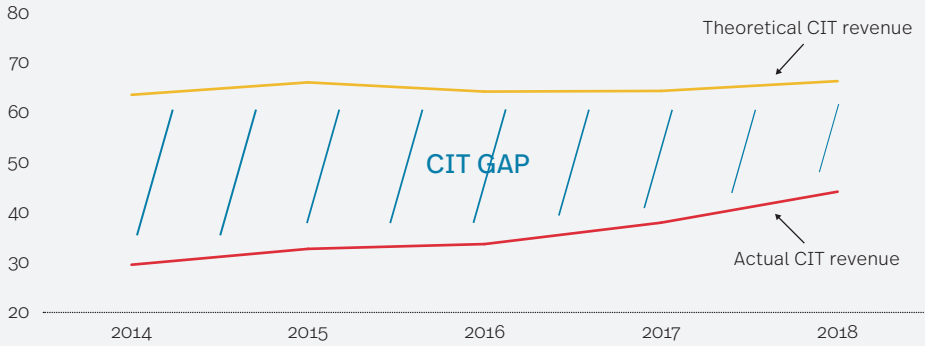
dropped by half – from 2.0 to 1.0% (Charts 3 and 4).

Interestingly, in recent years there has been no significant increase in theoretical CIT revenue, despite robust economic growth.

In 2018, it was merely 4% higher than in 2014, whereas GDP at current prices went up by 32% in the period considered. A similar phenomenon – growth distinctly slower than that in GDP – is also observed in the case of the operating surplus in the sectors of non-financial corporations and financial corporations. The category is the basis for calculating CIT gap (for more see the Methodological annex). In 2018, the combined surplus of the two indicated sectors was 14% higher than in 2014 and only 7% higher than in 2015. The results differed from those usually assumed in the literature, which suggests that corporate profits should be pro-cyclical (growing faster than GDP in periods of prosperity) (Krajewski, Piłat, Mackiewicz, 2012). One reason for the relatively limited rise in the operating surplus of non-financial and financial corporations may be a rapid wage increase in Poland in the period under analysis, accompanied by low inflation (or even deflation at times), driving down the share of corporate profits in GDP in favour of a higher proportion of wages.

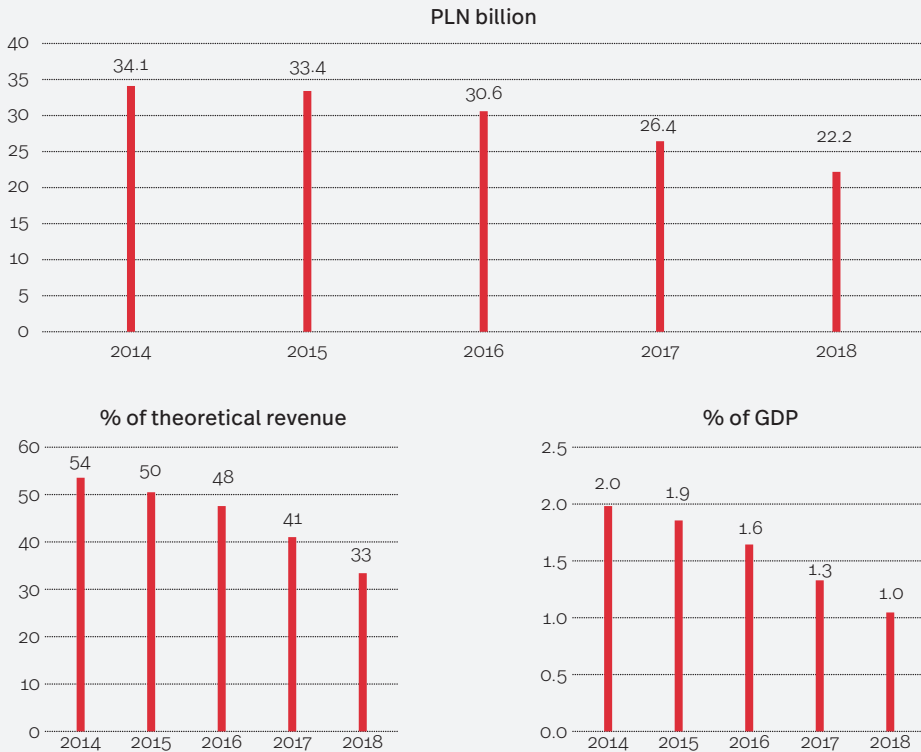
¹ Based on Eurostat data on general government expenditure according to the Classification of the Functions of Government (COFOG). But it is worth pointing out that it is virtually impossible to reduce the CIT gap to zero – there will always be a certain minimum CIT revenue foregone, even if due to accidental errors in tax returns.

Chart 3. Theoretical and actual CIT revenue in 2014–2018 (in PLN billion)



Source: own preparation by PEI.

Chart 4. The CIT gap in 2014–2018



Source: own preparation by PEI.

Box 1. The CIT policy gap

The CIT policy gap is CIT revenue foregone as a result of various tax preferences granted by the State – exemptions, deductions, etc. **The CIT gap presented in Chapter 2 excludes the policy gap.** The policy gap – especially with regard to CIT – is difficult to estimate. Not all exemptions or deductions represent actual tax preferences – some solutions are intended to optimise the tax system, reduce tax collection costs or arise from international commitments. They are seen as a tax standard – the initial (natural) scope of taxation (Ministry of Finance, 2010).

Therefore, Chart 5 shows the **minimum** policy gap – including the estimated CIT revenue foregone as a result of the application of three solutions:

- **Deduction for carried-over losses** – companies making losses in the year concerned may deduct such losses from their taxable income for the 5 consecutive years (no more than 50% of the loss amount in a year);
- **Special economic zones** – companies are entitled to obtain exemptions from CIT if they meet specific criteria – appropriately high investment expenditure, a certain (high) unemployment rate in the region of the investment location and quality criteria related to sustainable socio-economic development. Before 2018, there was also a territorial criterion (the zones were limited only to selected areas in Poland);
- **The reduced CIT rate** – small enterprises (whose turnover does not exceed EUR 1.2 million) and start-ups have the right to pay CIT at the reduced rate. It was 15% in 2017 and 2018, whereas from 2019 it was lowered to 9%. From 2020, the threshold for the ‘small enterprise’ status was raised to EUR 2 million.

Chart 5. CIT revenue foregone through selected tax preferences in 2014–2018 (in PLN billion)



Source: own preparation by PEI based on data of Ministry of Finance.

▸ Box 1. The CIT policy gap – continued

In consideration of the above-mentioned solutions, in 2018 the policy gap was PLN 7.2 billion. It was 8% more than in 2017 (PLN 6.7 billion) and 35% more than in 2015–2017 (from PLN 5.0 to PLN 5.5 billion) (Chart 5). Revenue foregone as a result of possible deductions for carried-over losses accounts for over half of the policy gap – PLN 3.9 billion in 2018. The solution is very widespread among enterprises. According to the research by Kokoszcyński, Smyk-Szymańska and Mazurek (2019), from 1997 two-thirds of firms in Poland reported at least one year closed with a loss, whereas 70% of such companies benefited from deductions for such losses in subsequent years (reducing their taxable incomes in profit-making periods). The carried-over loss mechanism, although in place in other countries as well, may provoke firms to intentionally report high losses in one year in order to lower their tax liabilities in the following years.

As a consequence, the fall in the CIT gap accounts for ca. 80% of the rise in CIT revenue in 2014–2018. In the period considered, the gap declined by PLN 11.9 billion, whereas CIT revenue augmented by PLN 14.6 billion. Such a significant fall in the CIT gap is attributable to two factors combined. Firstly, it is argued in the literature that the propensity of economic actors to illegal or quasi-legal activities tends to diminish in periods of prosperity (Buehn, Schneider, 2012; Elgin, 2013; Marti, 2009). The buoyant economic growth noted in 2014–2018 could be conducive to reduced willingness of firms to avoid and evade taxation,

even if – as indicated in the previous paragraph – their profits went up at a relatively low rate in the period concerned. Secondly, the CIT gap was also pushed down by an improved CIT collection as a result of various measures taken by the Ministry of Finance in 2014–2018. For extensive reviews thereof see: Lachowicz et al. (2019) and Konopczak, Łożykowski (2019). According to the latter publication, in 2016–2018 only structural factors (i.e. other than the economic situation) drove down the CIT gap by approximately PLN 6 billion, i.e. they accounted for more than 40% of the CIT revenue growth in the period concerned.

Chapter 3. The foreign CIT gap – the methods and scale of international tax avoidance

3.1. Methods of artificial profit shifting

The causes of the CIT gap can be divided into two categories (Konopczak, Łożykowski, 2019):

- unintentional errors in tax returns, different interpretations of legislation, taxpayers' unawareness, intentional or unintentional non-payment of tax when due;
- intentional measures aimed at reducing the CIT liability, including actions within the applicable law (tax avoidance) and unlawful activities (tax evasion, tax fraud).

The latter category comprises domestic and international measures for lowering the CIT liability. We described domestic methods in detail in last year's publication on the CIT gap (Lachowicz et al., 2019). In this chapter, the focus is on the international level or, more specifically, on artificial transferring of profits abroad by corporations.

Artificial profit shifting is understood as a situation where a profit was earned in the territory of one country and, in conformity with the letter and the spirit of the law, should be subject to taxation in the country concerned, but the taxpayer uses specific methods to shift such a profit to another tax jurisdiction in order to reduce its CIT liability.

According to the literature, **profits of multinational enterprises are relatively seldom transferred directly to countries**

traditionally considered to be tax havens, e.g. Bermuda, the Cayman Islands or the British Virgin Islands. Most frequently, they are first sent to the so-called 'conduit countries' from which they are transferred further. Thus, the leaders as well as the beneficiaries of the artificial profit shifting process are not only traditional tax havens, but also certain advanced economies that apply special legal regulations facilitating transfers of capital between tax jurisdictions.

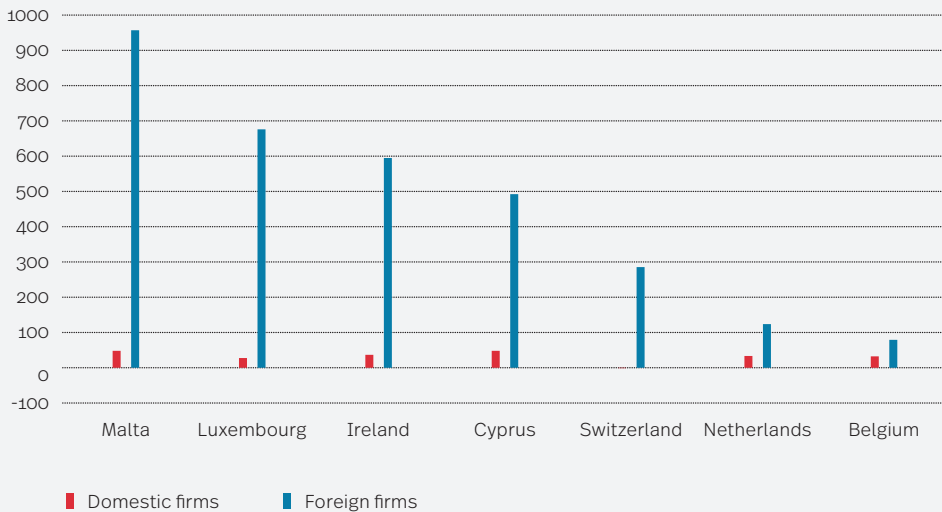
Cyprus, Ireland, Luxembourg and Malta as well as Belgium, the Netherlands and Switzerland – those are the countries to benefit from the transfer of profits by transnational corporations. Their gains are derived at the expense of other countries, including Poland. As indicated by Tørsløv, Wier and Zucman (2020), artificially transferred profits account for ca. 20% of CIT revenue in Belgium, ca. 40% in the Netherlands and Switzerland, ca. 60% in Ireland and Luxembourg and over 80% in Cyprus and Malta. According to Garcia-Bernardo et al. (2017), the Netherlands, Ireland and Switzerland rank among the world's five largest conduit countries for international capital (in terms of profits ultimately sent to traditional tax havens).

In the countries concerned, international corporations report profits disproportionate to the scale of local operations.

In Malta, Cyprus, Luxembourg, Ireland and Switzerland, the average operating surplus² shown by foreign firms is several times higher than wages. In Belgium and the Netherlands, the respective ratio is around 1:1. In all the above-mentioned countries, the profitability of foreign firms thus defined distinctly exceeds that of domestic businesses (Chart 6).

Such disproportions between the profitability of domestic and foreign firms are found in no other EU Member State. On average in the EU (excluding the Member States indicated in Chart 6), the profitability of domestic firms is even slightly higher than that of foreign firms (53% against 40%) (Tørsløv, Wier, Zucman, 2020).

➤ **Chart 6. Comparison of the profitability* of domestic and foreign firms in selected EU Member States and Switzerland (%)**



* The ratio of operating surplus to wages.

Source: own preparation by PEI based on: Tørsløv, Wier, Zucman (2020).

Frequent vehicles for shifting profits between countries are 'special purpose entities'. Entities operating in this form are often characterised by limited employment and the absence of significant production activities in the country of operation. Their principal business is the holding of intellectual property rights for the whole capital group (e.g. the

logo of the relevant global corporation) and financing activities of other group companies (e.g. granting loans) (OECD, 2015). Ireland, Luxembourg or the Netherlands are deemed to be particularly friendly to the setting up of such activities, whereas research demonstrates that corporations having special purpose entities within their structures are characterised

² Put simply, revenue less direct production costs.

by relatively low effective taxation (Deméré, Donohoe, Lisowsky, 2019; European Commission, 2016; Volckaert, 2016; United Nations, 2015).

The so-called ‘doubtful payments’ are often used for the transfer of profits between countries. Those are royalties and licence fees for the use of intellectual property rights, interest on loans granted or payments for management services rendered. Such payments are made by companies from high-tax countries to

undertakings from low-tax countries (or to businesses registered in intermediary countries). The relevant services tend to be overpriced, but not to an extent questionable by tax administrations (Hebous, Johannesen, 2016; Tørsløv, Wier, Zucman, 2020) (for a precise definition of doubtful payments see the Methodological annex).

A detailed description of selected methods for artificial profit shifting is presented in Box 2.

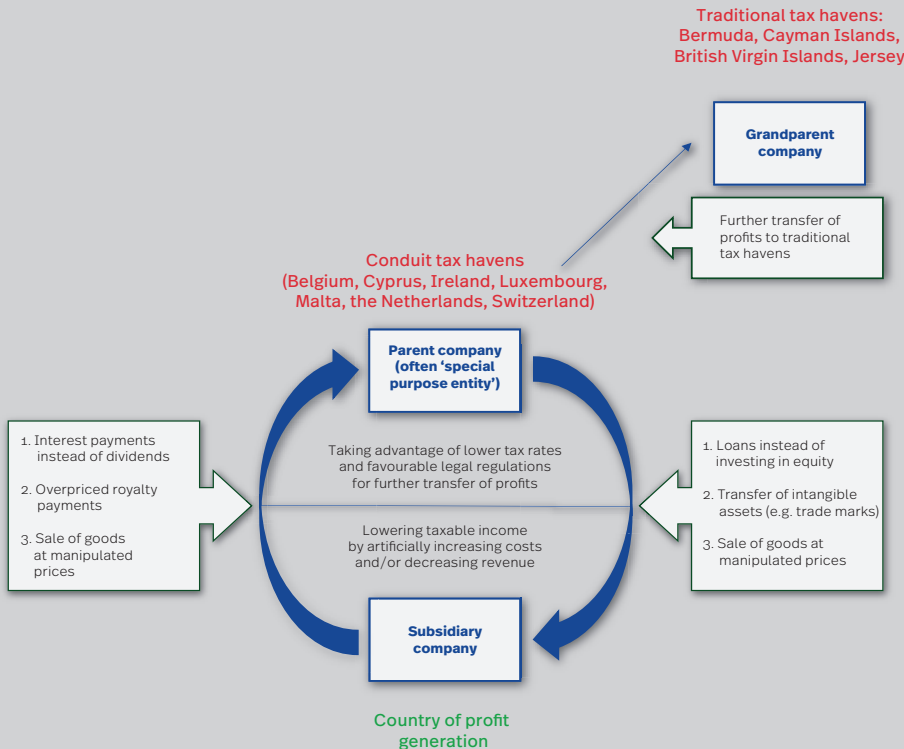
↘ **Box 2. Selected methods for artificial profit shifting by enterprises**

The most frequent patterns of international tax avoidance and evasion are as follows:

- **Payments for intangible assets** (e.g. the use of copyright, utility models, patents, trade marks, know-how, etc.). Rights in intangibles tend to be valuable and strongly individualised at the same time, thus escaping unambiguous measurement. Due to the above characteristics, intangible assets can be manipulated for tax purposes. Profit shifting usually consists in the transfer of intangibles (e.g. utility models) to a low-tax country and subsequently charging payments for the use of such rights to taxpayers in a high-tax country. Another method for avoiding taxation may also be the ‘realisation’ of an intangible, e.g. its sale and repurchase followed by amortisation;
- **Developing an appropriate financing structure in the group of companies** – in contrast to internal funding which generates no deductible expenses in most tax jurisdictions (although some countries allow the possibility to deduct hypothetical costs of equity), debt financing basically constitutes a deductible expense for the debtor. Through interest payments, it is quite easy to transfer profits earned in a high-tax country to countries offering lower tax liability;
- **Transfer price manipulations.** Unique goods and services are particularly susceptible to overpricing. But in the case of ordinary goods and services there is also certain room for manoeuvre to be used by groups of enterprises in manipulating their final taxable income;
- **Taking advantage of differences in tax regulations between countries** – it concerns, *inter alia*, different classifications of hybrid (financial, corporation) structures between two countries. Another obstacle to the enforcement of tax obligations can be the creation of a chain of tax-transparent partnerships, especially where it is impossible to determine the ultimate partner in such a partnership, thus the person liable to pay tax. With the use of

intermediation by countries engaged in harmful tax competition, it is also frequent to reduce tax liability arising from specific transactions, e.g. the sale of shares or real estate.

➤ **Diagram 1. Mechanism of artificial profit shifting**



Source: own preparation by PEI.

For more on the subject see: Beer, de Mooij, Liu (2018); Guzek, Stefaniak (2018); Loretz et al. (2017); Nawrot (2018); Meldgaard et al. (2015); Schwarz (2009).

3.2. The foreign CIT gap in Poland in 2014–2018

The foreign gap is defined as CIT revenue foregone as a result of artificial profit shifting by enterprises. Drawing on the scientific publications presented in the previous sub-chapter, we analyse capital transfers to seven countries:

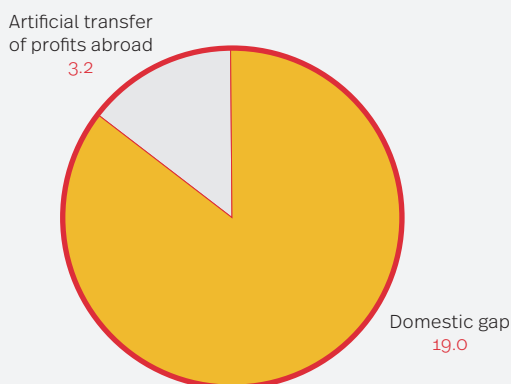
Belgium, Cyprus, Ireland, Luxembourg, Malta, the Netherlands and Switzerland. **Artificial transfer of profits is considered to be part of doubtful payments to the countries concerned** – only the part in excess of the 'standard'

amount determined on the basis of transfers to other countries. The foreign gap thus calculated must be treated as the **minimum gap** – we take no account of payments to all the countries in the world (primarily direct payments to traditional tax havens) and we adopt conservative assumptions. A more in-depth discussion on this subject and details of the method for defining and calculating the foreign gap are provided in the Methodological annex.

In 2018, the foreign CIT gap was PLN 3.2 billion. Therefore, it accounted for ca. 15% of the total CIT gap in that year (Chart 7). Both the domestic and foreign parts of the CIT gap contributed to public revenue loss and unfair market competition, both must be combated. Nevertheless, in the case of the domestic gap the funds not received by the public sector largely remain in the economy – usually as corporate savings, e.g. reflected in higher after tax profits. The size of the foreign gap constitutes outflows of capital, most probably irretrievably lost. Therefore, that part of the CIT gap can be regarded as the most harmful to the economy.

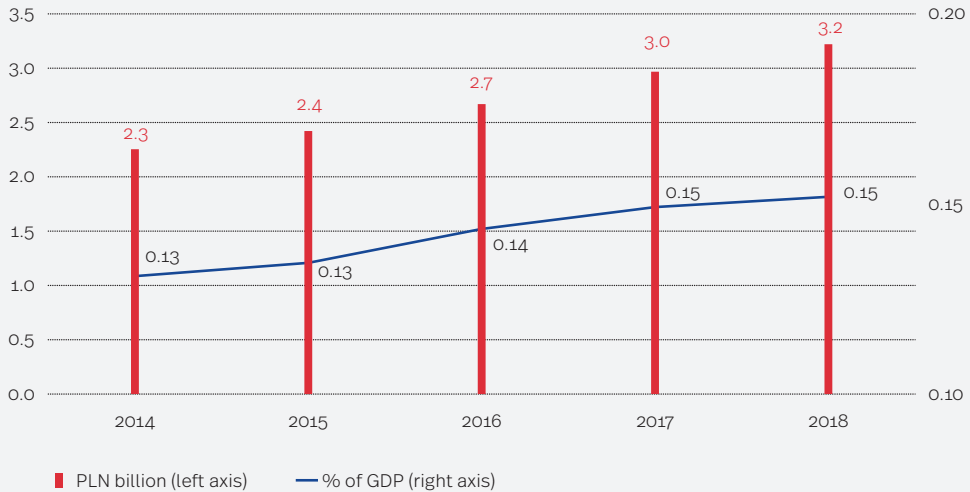
In 2014–2018, the foreign gap was on the rise. Therefore, it was the opposite of the trend observed for the overall CIT gap (described in Chapter 2). The foreign gap was more than 40% higher for 2018 than for 2014 (up from PLN 2.3 billion to PLN 3.2 billion). Growth in the foreign gap was recorded not only in nominal terms but also as a share of GDP. Whereas in 2014 and 2015 it represented 0.13% of GDP, in 2017 and 2018 it already accounted for 0.15% (Chart 8). Thus, the foreign gap went up despite measures taken by the Ministry of Finance with a view to reducing that part of the CIT gap as well (e.g. the limit for deductible purchases of intangible services introduced from 2018). However, the trend observed in Poland corresponds to worldwide developments. Tørsløv, Wier and Zucman (2020) indicate that the issue of artificial profit transfers has been aggravating dramatically – the amount of profits shifted globally rose by 20% in two years, from USD 616 billion in 2015 to USD 741 billion in 2017. The increase was distinctly faster than GDP growth in nominal terms in the period considered.

▼ **Chart 7.** Division of the 2018 CIT gap into the domestic and foreign components (in PLN billion)



Source: own preparation by PEI.

▼ **Chart 8. Foreign CIT gap in 2014–2018**



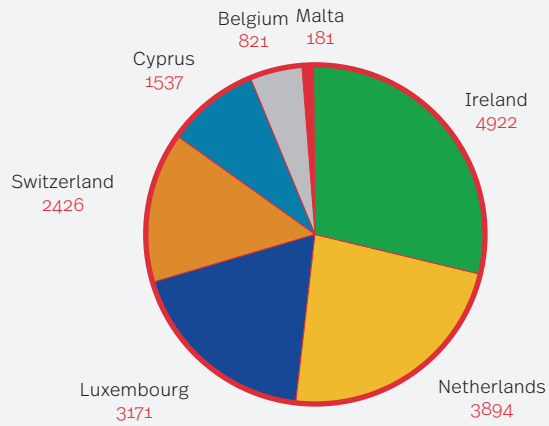
Source: own preparation by PEI.

In 2018, profits artificially transferred from Poland – the reason for the foreign CIT gap – represented PLN 17 billion. Artificial transfers to three countries – Ireland, the Netherlands and Luxembourg – accounted for almost three-fourths of the amount. Profits artificially shifted to these countries totalled nearly PLN 12 billion, including ca. PLN 5 billion to Ireland, PLN 4 billion to the Netherlands and PLN 3 billion to Luxembourg. Switzerland, Cyprus, Belgium and Malta were responsible for another PLN 5 billion in capital transferred from Poland (Chart 9). In comparison with the previous years, the highest growth rates were recorded with regard to profits transferred to Ireland and Malta – for the two countries, the amounts doubled between 2014 and 2018. At the same time, Switzerland was the only country in the group under examination for

which profit transfers went down (by 10% in 2014–2018).

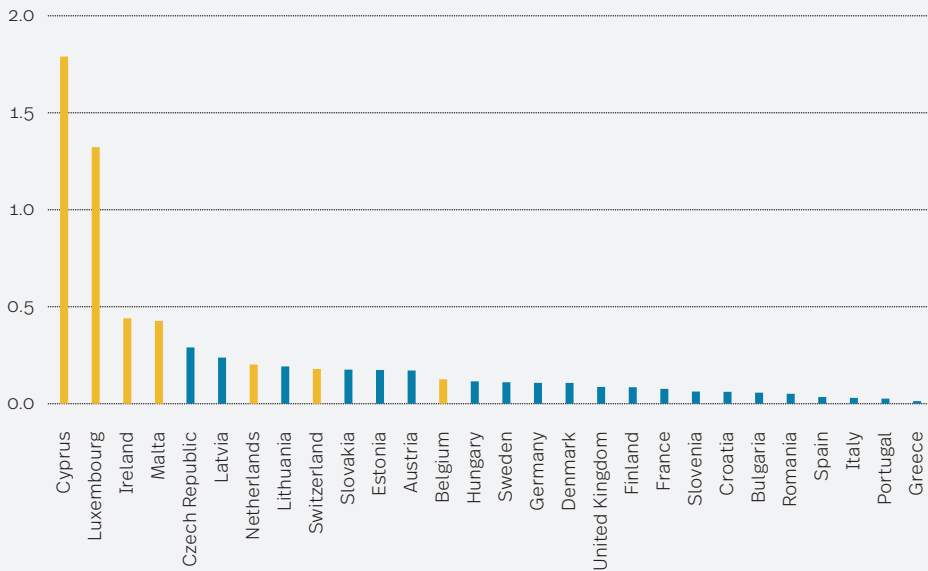
Doubtful payments from Poland represent disproportionately high shares of GDP especially in the case of Cyprus and Luxembourg. In the two countries, doubtful payments from Poland account for more than 1% of GDP; they are also markedly higher in Ireland and Malta than in other EU Member States (Chart 10). A detailed analysis of flows in respect of doubtful payments allows to identify certain ‘specialisations’ of selected countries. Interest payments represent more than half of doubtful payments from Poland to Luxembourg. It may suggest that the Luxembourgian legal system favours settlements between affiliates with the use of loans. As regards Ireland and Switzerland, nearly all doubtful payments are payments for doubtful services (e.g. management services).

▼ **Chart 9.** Profits artificially transferred from Poland by receiving country in 2018 (in PLN million)



Source: own preparation by PEI.

▼ **Chart 10.** Ratio of doubtful payments from Poland to the GDP of receiving countries (%)



Note: yellow bars indicate countries considered to be tax havens.

Source: own preparation by PEI.

Conclusion

The public sector faces a growing problem of tax avoidance and evasion by businesses. It concerns, especially, corporate income tax; globalisation, the rising market power of the largest firms, designing ever more sophisticated tax schemes – all those factors combine to make it increasingly difficult for government authorities to collect taxes.

The challenges seem to gain in importance in the context of the economic crisis caused by the COVID-19 pandemic. On account of the economic downturn and extensive stimulus packages, in the following quarters sovereign debt is expected to grow considerably. Even now questions are asked about sources of reducing this debt after the economic situation has stabilised – about who will bear the most of the deferred costs of the current crisis.

This report demonstrates that the CIT gap is a decreasing but still significant problem in the Polish economy. Despite the fast growth in CIT revenue in the past few years, the current CIT gap – around 1% of GDP – suggests that there continues to be much room for manoeuvre with regard to further reduction. One area that must be given particular attention is artificial transfer of profits abroad by corporations. It costs the general government budgets more than PLN 3 billion annually; the amount of revenue loss is on the rise despite measures taken by the Ministry of Finance to curtail the phenomenon.

Actions aimed at curbing tax avoidance and evasion must be increasingly international. In conditions of globalisation, attempts at building a fair tax system exclusively at the national level become less and less effective. The first and indispensable step forward should

be tax solidarity within the European Union; as demonstrated in this report, a major part of the CIT gap in Poland arises from the transfer of profits by transnational corporations to other Member States: Belgium, Cyprus, Ireland, Luxembourg, Malta and the Netherlands. Those countries apply special legal regulations facilitating artificial transfers of capital by multinational enterprises.

Our publication prepared in early 2020 proposes five measures which – in our opinion – will help combat such phenomena (Sawulski, 2020):

1. Including the EU Member States in the screening process for the grey- and black-list of tax havens.
2. Giving the European Commission the power to impose sanctions on countries (including the EU Member States) that have been classified as tax havens.
3. Introducing ‘compensatory taxation’ – a minimum tax paid by multinationals in each EU Member State they operate in, calculated on a tax base that disallows deductions of certain payments usually used for tax avoidance: interest, royalties, etc.
4. Establishing an obligation for multinational enterprises to disclose information on their tax strategies in a standardised format, applicable for all EU Member States.
5. Introducing solidarity in fighting tax avoidance and evasion to the mainstream political agenda in the EU, including political marginalisation of the countries failing to comply with the common rules.

The economic crisis caused by the COVID-19 epidemic may intensify talks on **the need to guarantee the EU’s own resources** (independent of direct contributions by Member

States). Possible EU-wide solutions related to corporate income taxation include:

- **Digital tax** – new regulations for the taxation of companies operating mostly or exclusively in the area of digital services, coupling income earned (or, possibly, revenue obtained) with the actual place of generation within the EU;
- **Passive income tax** – the taxation of passive capital flows between countries – such as dividends or interest – at a low rate (e.g. 1%) and placing revenue in that respect at the disposal of the European Commission;
- **Payment for using the common market** – the introduction of an obligation for large

non-EU transnational corporations to pay for access to the common European market, to guarantee their contribution to EU infrastructure at a level adequate to the benefits derived and to simultaneously improve the competitive position of EU businesses;

- **Financial transaction tax** – the taxation of transactions concluded between broadly understood financial corporations, which – in addition to the provision of revenue for the EU budget – would allow increased regulation of the market and reduced frequency of undesirable activities of financial and quasi-financial corporations.



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Methodological annex

The CIT gap from national accounts

There are two main methods for estimating the CIT gap:

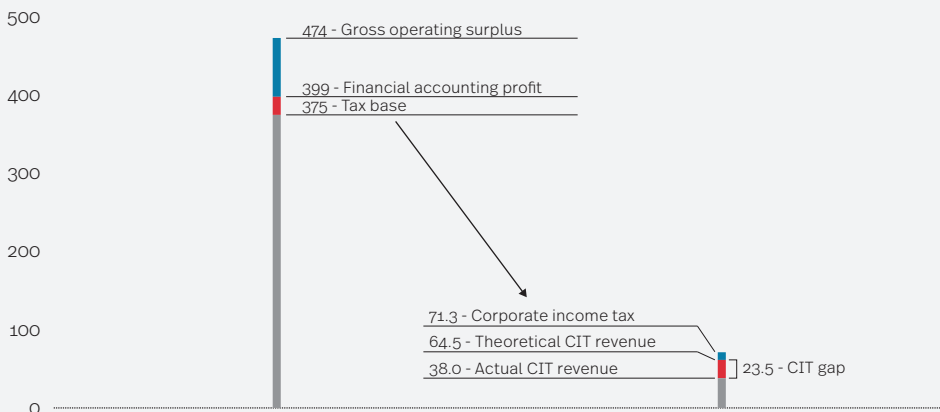
- The 'top-down' approach** – calculating the gap as the difference between theoretical revenue (resulting from the theoretical tax base) and actual CIT revenue for the economy as a whole. It is calculated using macroeconomic data;
- The 'bottom-up' approach** – estimating results of selected tax avoidance methods on the basis of audits of a limited number of enterprises.

This report uses a 'top-down' approach based on the 2018 publication of the International Monetary Fund (IMF) entitled 'Estimating the Corporate Income Tax Gap: The RA-GAP Methodology' (Ueda, 2018).

The approach has the merit of being comprehensive – the calculated gap shows all tax revenue foregone in the country and year concerned. **Its drawback is the limited accuracy of calculations.** This approach relies on large macroeconomic aggregates ('gross operating surplus' in the IMF methodology), gradually reduced to relatively low figures with the use of other aggregates and various assumptions. Therefore, the final calculation results must be treated as approximate values, whereas the key finding is primarily the direction of change in the gap rather than its exact amount.

The following diagram presents successive stages of calculating the CIT gap.

▼ **Chart A1.** Calculation of the CIT gap from national accounts – an example for 2017 (in PLN billion)



Source: own preparation by PEI.

▾ **Diagram A1. Calculation methodology**

<p>Gross operating surplus</p>	<p>Total gross operating surplus of sectors S11 (non-financial corporations) and S12 (financial corporations) is adjusted for specific items of national accounts, in accordance with the IMF methodology (e.g. interest, other investment income, rents), other current taxes (without CIT) and depreciation. Since national accounts data on financial corporations may be distorted due to specific asset valuation methods, provisions, reserves, etc., adjustments for items of national accounts were excluded for the sector concerned. Depreciation was estimated on the basis of GUS annual publications entitled '<i>Środki trwałe w gospodarce narodowej</i>', by making appropriate adjustments for the share of the private sector and the size of enterprise (micro- v small, medium-sized and large enterprises). In accordance with the IMF guidelines, gross operating surplus should not be reduced by the value of depreciation of fixed assets from national accounts (i.e. consumption of fixed capital) as the item presents the decline in the current value of fixed assets. Therefore, it is based on current prices rather than on historical costs of such assets.</p>
<p>Financial accounting profit (net profits and losses)</p>	<p>The financial result – financial accounting profit – obtained at the previous stage reflects data for both profit-making and loss-making corporations. Since corporate income tax is not calculated on the basis of negative values in the current year, the financial accounting profit obtained must be appropriately adjusted for the tax base to only cover profit-making firms (the next step takes account of possible deductions for carried-over losses). To this end, we used data from the GUS publication entitled '<i>Bilansowe wyniki finansowe podmiotów gospodarczych</i>' on the percentage of audited entities showing profits as at the end of the year concerned (more precisely: on the share of the revenue of such firms in total revenue).</p> <p>Next, corporate income was reduced by income not subject to taxation due to current legislation. It includes, <i>inter alia</i>, incomes earned in special economic zones and incomes from various statutory subsidies and grants. Carried-over losses (to the extent statutorily allowed) as well as expenditure on the purchase of new technologies and on research and development can also be subtracted from current-year income. Data on non-taxable and exempted incomes, deductions for carried-over losses and deductions from the taxable amount were derived from the publications entitled '<i>Informacja dotycząca rozliczenia podatku dochodowego od osób prawnych</i>' for specific years. In accordance with the IMF methodology, in the absence of other sources it is necessary to directly use tax return data for some quantities. It concerns items such as deductions from income. In the case of non-taxable and exempted incomes, deductions not related to sectors S11 and S12 were excluded.</p> <p>Incomes not subject to taxation due to the applicable legislation as well as CIT not paid as a result of the existence of such legal regulations combine to form the so-called CIT policy gap, described in more detail in Box 1 in Chapter 2.</p> <p>Note: moving from the financial accounting profit to the tax base includes both operations increasing the tax base (the separation of profits) and those decreasing it (deductions of certain incomes and for carried-over losses).</p>

Tax base	
↓	Income tax is calculated as the magnitude of the tax base multiplied by the standard CIT rate (19%).
Corporate income tax	
↓	<p>The calculated corporate income tax is not yet the theoretical CIT revenue.</p> <p>Firstly, national accounts cover all enterprises with more than 9 persons employed – also those subject to personal income tax. Therefore, the calculated income tax was reduced by the amount of PIT due from enterprises with more than 9 persons employed. The relevant estimate was obtained from the Ministry of Finance. The assumption was that the scale of tax avoidance and evasion among PIT and CIT payers with more than 9 persons employed was identical. At the same time, due to the relatively small scale of such incomes, the opposite was excluded – i.e. situations where firms subject to CIT employed 9 or fewer persons.</p> <p>Secondly, there is also a policy gap at this stage. It results from the reduced CIT rate (15%) for small enterprises and start-ups as well as from various deductions. As with regard to non-taxable and exempted incomes, in both cases estimates were based on ‘Informacja ...’ by the Ministry of Finance (the publication was used to calculate the amount of CIT that would have been due from beneficiaries of the reduced rate if they had paid CIT at the standard rate – 19%).</p>
Theoretical CIT revenue	
↓	The CIT gap is the difference between the theoretical and actual CIT revenue, as shown by the Ministry of Finance in its reports entitled ‘Sprawozdanie z wykonania budżetu państwa’ for specific years (the revenue of the public sector from corporate income tax).
The CIT gap	

The CIT gap resulting from artificial profit transfers abroad

In accordance with the methodology applied by the IMF, the CIT gap from national accounts **excludes revenue foregone as a result of artificial profit transfers by transnational corporations** to other countries (mostly to tax havens). Therefore, that part of the gap must be calculated separately.

The calculation of the CIT gap resulting from artificial profit transfers was based on the publication entitled ‘*The Missing Profits of Nations*’ (Tørsløv, Wier, Zucman, 2020). To begin with, the authors showed that there were enormous differences between countries in

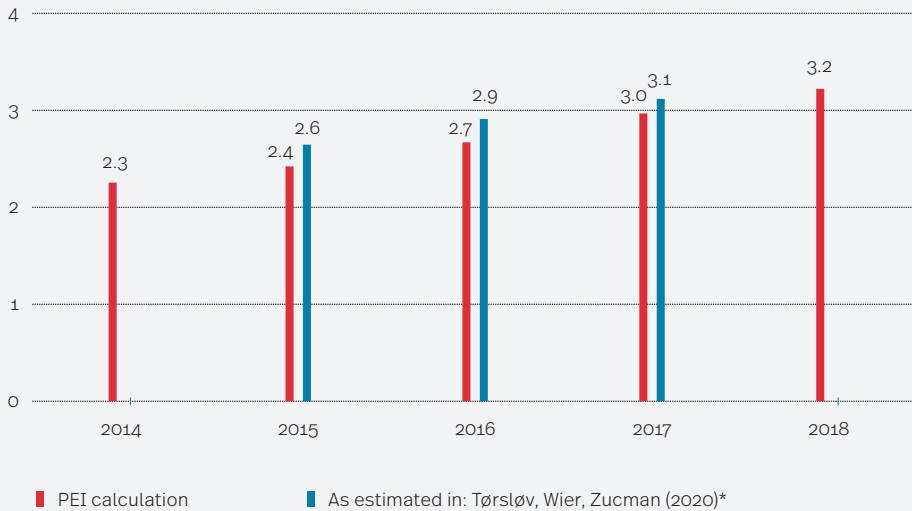
the ratio of (pre-tax) profits reported by firms to wages. **In particular, the differences are visible between domestic enterprises and affiliates of foreign multinationals** – defined as firms where foreign investors own at least half of shares with voting rights. The analysis allowed the authors (1) to identify countries with the most overestimated profits made by affiliates of foreign multinationals; (2) to calculate global profits shifted between jurisdictions. Next, using bilateral balance of payments data, the authors allocated profits shifted globally to particular countries.

In this report, we relied on part of the procedure. Firstly, the indicated analysis helped identify the countries receiving the highest shares of profits shifted by transnational corporations. Those are, in alphabetical order: **Belgium, Cyprus, Ireland, Luxembourg, Malta, the Netherlands and Switzerland**. Secondly, applying the methodology described in the publication concerned, we used data from balances of payments between Poland and the above-mentioned countries to estimate the amount of artificially transferred profits. In sequence:

1. **We defined the category of ‘doubtful payments’** as the sum of payments in respect of ‘doubtful services’ and interest. We included the following in doubtful services (as in: Hebous, Johannesen, 2016; Tørsløv, Wier, Zucman, 2020): insurance services, financial services, royalties and licence fees for the use of intellectual property, telecommunications services, ICT services and other business services. We used NBP data on international trade in services and on foreign direct investment in Poland.
2. **We calculated the share of outflows from Poland in respect of doubtful payments in the GDP of receiving countries** (considered to be tax havens): Belgium, Cyprus, Ireland, Luxembourg, Malta, the Netherlands and Switzerland.
3. We compared the values from point 2 with the proportion of the corresponding outflows in the GDP of the remaining 21 European Union Member States (without Poland and the six EU Member States considered to be tax havens).
4. **We assumed that the excess of outflows in respect of doubtful payments** in the GDP of each Member State considered to be a tax haven over the corresponding outflows in the GDP of the remaining 21 EU Member States **was the amount of artificially transferred profits**. In each case, the share of the outflows in the GDP of a tax haven was higher than their proportion in the GDP of the remaining EU Member States (as illustrated in Chart 10 in Chapter 3).

The amount of artificially transferred profits thus calculated can be treated as **the minimum CIT gap** in that respect. Firstly, the GDP of tax havens used as a reference value for doubtful payments is artificially overestimated due to the specific functioning of the economies concerned and the characteristics of the GDP indicator. For example, the high share of doubtful payments in the GDP of Luxembourg would probably be even higher should the very GDP of the country in question be adjusted for the factors increasing it artificially. Secondly, the paper by Tørsløv, Wier and Zucman (2020) providing the basis for a major part of the methodology described is wider in scope – the authors calculated the global amount of artificially transferred profits and subsequently used balance of payments data to allocate it between particular countries (including Poland). In consequence, the relevant CIT gap calculated by them is ca. 5 to 10% higher than our estimates (Chart A2).

▼ **Chart A2. CIT revenue foregone as a result of artificial profit transfers abroad by transnational corporations – a comparison of results (in PLN billion)**



* Amounts in USD were translated at the average exchange rates of the NBP for specific years.

Source: own preparation by PEI.

Differences from the 2019 calculation

In 2019, the Polish Economic Institute presented the first study attempting to estimate the CIT gap in Poland. The publication attracted significant attention in public debate, including interest from experts and scholars. We repeatedly discussed the adopted calculation methodology and proposals for improvements; the calculations presented in this publication are the outcome of those discussions. The most important changes we made include the following:

- We excluded some adjustments for selected items of national accounts – in particular, with regard to financial corporations. In accordance with the IMF methodology that we rely on, such adjustments must be made with caution as some items may be

distorted due to specific asset valuation methods, provisions, reserves, etc.;

- We changed the method of dividing the financial accounting profit into profits and losses – in the previous version, we applied a simplified method based on tax data from the Ministry of Finance. In the current edition, in accordance with the IMF recommendations, we relied on survey data – from GUS surveys concerning financial accounting profits of undertakings;
- We excluded the adjustment of the financial result (financial accounting profit) to taxable income – permanent differences between accounting legislation and tax regulations are largely included in the calculations when incomes not subject

to taxation under the applicable legislation are subtracted from profits. There are also temporary differences, resulting from different times of recognising items of revenue and expenses in accounting legislation and in tax regulations. We assumed that the amount of temporary differences between particular years was fixed. On that assumption, they have no effect on the CIT gap. The simplification is due to the fact that it is impossible to accurately estimate temporary differences, whereas an attempt to include an adjusting parameter could significantly distort the results. We decided that the possible benefit was lesser than uncertainty that such a parameter would introduce in the accuracy of results;

- We made an adjustment for incomes of enterprises employing more than 9 persons and subject to PIT. It was possible due to new data obtained from the Ministry of Finance;
- We changed the method of calculating the foreign gap (see: section 2 of the annex). We also gave up separate calculation of the 'KAS gap' separately – we decided that it represented part of the CIT gap calculated on the basis of national accounts.

In the 2019 publication, as the first to present such calculations in Poland, the CIT gap was indicated as a range. In this report, we adopt a traditional approach, i.e. the presentation of the gap as one amount, with the reservation (described in more detail at the beginning of the annex) that it is an estimate.

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The Polish Economic Institute

The Polish Economic Institute is a public economic think-tank dating back to 1928. Its research spans trade, macroeconomics, energy and the digital economy, with strategic analysis on key areas of social and public life in Poland. The Institute provides analysis and expertise for the implementation of the Strategy for Responsible Development and helps popularise Polish economic and social research in the country and abroad.

