



ShowCASE

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Editorial

In this issue of showCASE, we discuss determinants and historical dynamics of the Polish VAT Gap. In addition, we show what lessons from the past could be drawn for foresighting dynamics of the VAT Gap, especially in the context of the COVID-19 pandemic.

Using the results of the latest [Report on the VAT Gap in the EU-28 Member States](#) prepared by CASE, we show how crucial macroeconomic conditions are for VAT compliance. Non-favourable economic situation, therefore, adversely affects VAT revenues in two ways: through lower tax base and via a higher tendency for non-compliance of business entities. Given the economic slowdown induced by the COVID-19 pandemic, even stabilisation of the Polish VAT Gap at the level observed in recent years will be considered a success.

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CASE Analysis

The nitty-gritty of the Polish VAT Gap

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The topic of the VAT compliance has gained a particular significance in the recent years in Poland. It has become a part of a recurrent, heated political debate and has been often used instrumentally by politicians and experts alike. However, a growing interest in the forgone VAT revenues is not just limited to Poland. Thus, as the estimation techniques and underlying data on VAT components have been improving, Poland and many other countries in the EU have seized the opportunity to scrutinise national VAT Gaps and estimate their size using various techniques.

This article discusses observations for Poland based on the results and experience gained from estimating and evaluating the VAT Gap in all EU Member States. These conclusions relate to both the past and the future. Firstly, we summarise basic information on the topic, specifically in the historical context of the public finance in Poland. Second, we show what lessons from the past could be drawn for foresighting dynamics of the VAT Gap, especially in the context of the COVID-19 pandemic.

What exactly is the VAT Gap?

Since 2013, every year CASE has been **estimating the size of VAT Gap** of the EU countries under the request of the European Commission. A standardised methodology based on Own Resource Statements compiled at national level and over 500 observations for 28 countries over 18 years allowed us to develop an econometric methodology for studying VAT Gap

determinants. Our econometric model explains the nature of the relationship between VAT Gap size and other variables identified as most relevant to the problem (for the details, see the section on Future Obstacles).

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When studying the VAT Gap, it is crucial to understand its components. **The simplest definition** of the VAT Gap is the difference between the theoretical value of the VAT liabilities and the value of real VAT inflows. Usually, the VAT Gap is presented in relative terms – as a share of that difference in total VAT liabilities. The reasons for non-compliance are manifold, from fraud and criminal activity, through grey economy and tax avoidance, to tax optimisation and natural bankruptcies. All of those are heavily interconnected with formal and informal institutions and economic conditions and thus it is hard to find a tool which would be universally effective in the fight against the VAT non-compliance.

More than a theory

Reduction of the VAT Gap size has become one of the main goals for the currently ruling party in Poland (Law and Justice, PiS) since it assumed power in 2015, which created an awareness on the topic among the broader audience in the country. The increase of VAT revenues was to be a crucial source for financing of additional budgetary expenses, particularly flagships social programs of the ruling party (e.g. Family 500 plus programme). In 2016, the then Minister of Finance, Paweł Szalამacha, outlined a goal to reduce the VAT Gap from 24% to around 15% in three years. Indeed, the VAT Gap decreased substantially starting with a 4.3 pp drop in 2016 and 6.1 pp and 4.3 pp drops through 2017 and 2018, respectively. This was presented as a direct result of the government actions against VAT avoidance and the so-called “VAT mafia”, which fuelled further public debate on who and what can be credited with those successes.

including CASE, the remaining potential for sealing the VAT Gap is more dispersed now and close to the size of the grey economy itself. Further actions to fight VAT non-compliance, therefore, would have to be a part of a broader, more comprehensive strategy in order to bring it down considerably.

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The Budgetary Act for 2019 assumed a 7.3% increase in VAT revenues compared to 2018. Although in terms of nominal revenues the plan was met, due to an upward revision of 2018 revenue figures the actual increase in the revenue was somewhat lower – 5.8%. This might still seem like a lot, but that increase was achieved almost exclusively through the growth of liability

Table 1. Year-on-year change in VAT revenue and its components in Poland (2016-2018)

	Change in revenue	Change in base	Change in effective rate	Change in compliance
2018	11.4%	6.4%	-0.4%	5.1%
2017	14.9%	6.0%	0.4%	8.0%
2016	5.7%	1.3%	-0.3%	4.6%

Source: Study and Reports on the VAT Gap in the EU-28 Member States – 2018, 2019, and 2020 editions.

The success led to the belief that this trend will continue into the future to the extent that it was included into **Multiannual State Financial Plan for 2019-2022**, which outlined the long-term fiscal strategy of the Polish government. The plan thus assumed extra PLN 8 billion of VAT revenue in 2020 due solely to the increased VAT compliance. Already by the end of 2018, **some independent experts were sceptical** about the potential to close the gap further, suggesting that most of the ‘easy’ sources of increasing compliance were already depleted. According to some of those experts,

base, rather than as a result of increased tax compliance. Preliminary data suggests that in 2019 the VAT Gap fell only slightly, accounting for 9.7% of total liabilities, compared to 9.9% in 2018.

The plan to further decrease the Polish VAT Gap became even more important in the context of the 2019-2020 election season. One of the main points on the government agenda was a further extension of social transfer programs (e.g. fourteenth pension for each retired person) with

the maintenance of a balanced budget for the first time in 30 years. As such the Budgetary Act for 2020 was even more ambitious – VAT revenues were planned to reach PLN 196.5 billion (already after a downward revision) – a 7.9% increase from 2019 figures.

Future obstacles

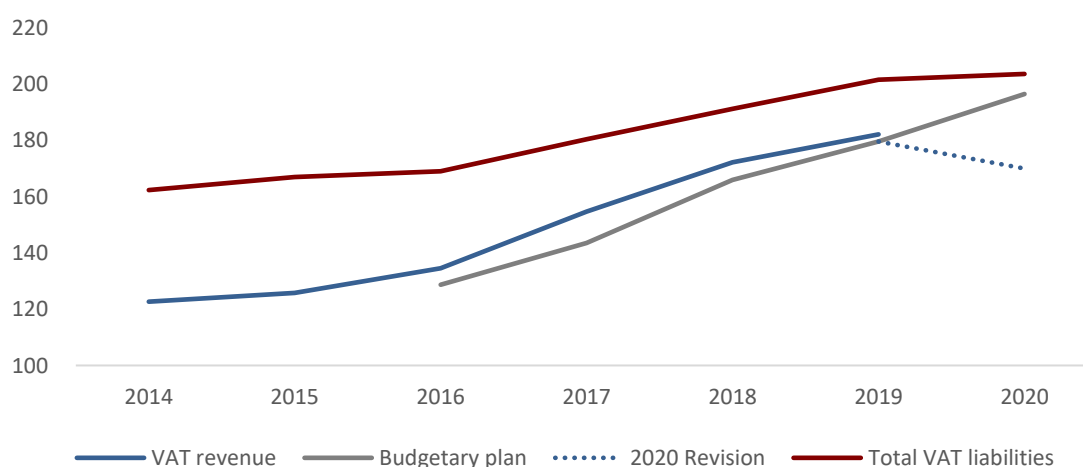
With the COVID-19 crisis that reached Poland in spring and a subsequent lockdown of a large part of the economy, quickly enough it became clear that the above-mentioned ambitious goals will not be possible to achieve. This can be explained not only by additional spendings within the Polish stimulus package worth PLN 115 billion (the so-called “anti-crisis shield”) but also by projected lower tax revenues for 2020.

» Main determinants of the VAT gap are GDP growth, public deficit, IT expenditures in the area of tax administration, sectoral structure of the economy, and share of trade of products and services associated with the biggest risk of tax fraud

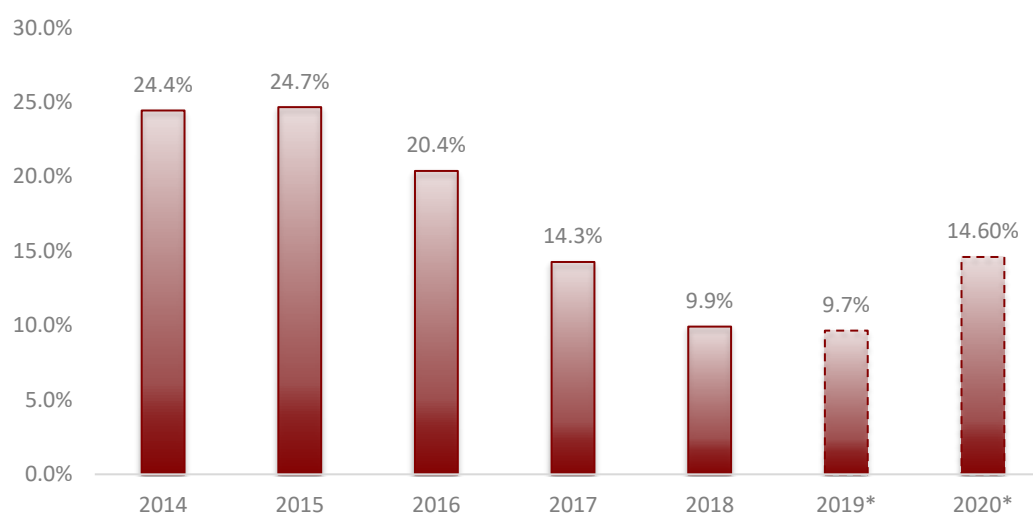
In August, the government amended the Budgetary Act and cut VAT revenue projections by about PLN 25 billion. The new 2020 figures at around PLN 170 billion thus revert Polish VAT revenue to its 2018 levels. This correction was made assuming that private consumption will remain stable (or even grow slightly) in the year-on-year perspective, which suggests that the government is probably fully aware of the strong relationship between economic conditions and VAT compliance.

In the latest *Report on the VAT Gap in the EU-28 Member States*, CASE investigated this relationship thoroughly. A wide set of variables was tested for their correlation with the level of VAT compliance across all Member States throughout 18 years for which the VAT gap was calculated. Those variables could be grouped as follows: (1) tax policy indicators; (2) indicators of the macroeconomic situation; (3) indicators of institutional environment; and (4) proxies of VAT fraud. According to the model specification selected as best fitting during the analysis, the main determinants of the VAT gap are GDP growth, public deficit, IT expenditures in the area of tax administration, sectoral structure of the

Figure 1. Budgetary plans for annual VAT revenues and their execution, 2016-2020 (in billion PLN)



Source: Eurostat, Budgetary Acts press releases.

Figure 2. VAT Gap as a percent of total VAT liabilities in Poland

Source: *Study and Reports on the VAT Gap in the EU-28 Member States. 2020 Final Report.*

Note: The results for 2019 are preliminary while 2020 is forecasted.

economy, and share of trade of products and services associated with the biggest risk of tax fraud. It is worth to mention that some factors (e.g. those related to the institutional environment, including trust in the system, harshness of tax authorities, etc.) are complex and difficult to measure thoroughly, hence have not been considered within the model.

The selected model parameters and their significance prove how crucial macroeconomic conditions are for VAT compliance. In short, non-favourable economic situation adversely affects VAT revenues in two ways: through lower tax base and via a higher tendency for non-compliance of business entities. Taking advantage of the [European Commission 2020 Spring macroeconomic forecast](#) of the GDP and budget deficit, we were able to assess the nature and scale of impact that these factors might have on the Polish VAT Gap. Based on numbers provided by European Commission we estimate that the VAT Gap in 2020 will increase by almost 5 pp or to 14.6% of total VAT liabilities, which would mean a return to its 2017 level. Of course the crisis caused by coronavirus pandemic is exceptional

and it is impossible to consider all the implications it will have – the model by its nature is based on historical data where the values of those macroeconomic variables were significantly different from those supplied for the purpose of forecasts.

Conclusions

This analysis shows the most probable scenario for public finance at this point and constrains it might face in the coming months and years.

» Based on numbers provided by European Commission we estimate that the VAT Gap in 2020 will increase by almost 5 pp or to 14.6% of total VAT liabilities, which would mean a return to its 2017 level.

Within those constraints, even stabilisation of the Polish VAT Gap at the level observed in recent years will be considered a success. In the

upcoming years, the economic situation, and consequently, situation of the public finance, will surely largely depend on severity of the pandemic and level of governmental success in mitigating its adverse health and socio-economic impacts. Needless to say, budgetary planning must be based on realistic assumptions and take into consideration factors that are outside of government control – VAT collection is cyclical in nature and should be planned with long-term horizon in mind.

Highlights

Trade, Innovation, and Productivity

The **Brexit trade negotiations** came into a deadlock with the EU and the UK failing to reach a deal by the scheduled deadline of October 15th. Alongside the negotiations on, inter alia, the matters of fisheries and competition rules as well as the intra-UK disagreement on the Internal Market Bill, the discussions are still ongoing on the issues such as Citizens' Rights and Ireland and Northern Ireland Protocol. With the end of the transition period on the December 31st, 2020 and legal proceedings launched by the EU on the horizon, the risk of the hard Brexit (no deal) is now higher than ever. Should it materialise, the trade relations between the EU and the UK will be governed by the WTO rules. This implies an imposition of tariff and non-tariff barriers to trade by the EU versus the UK exports at the level currently applied to third countries not enjoying any additional preferences and vice versa. The hard Brexit could thus have a significant and negative impact on both economies given that the EU accounts for 47% of UK exports, while the UK represents around 8% of total EU exports. With the return to trade negotiations in the last week of October, both sides enter a make-or-break phase.

At the same time, in case of the hard Brexit, the UK may decide to lower the MFN (most-favoured nation) tariff against all WTO members to counteract the disruption of imports. For now, London has moved forward with completing its first post-Brexit trade agreement. The **new deal with Japan** will make about 99% of the UK exports to Japan tariff-free with a potential to boost bilateral trade between the countries by EUR 16.8 billion and increase the UK GDP by 0.07% over the next 15 years.

Labour Market and Environment

The **European Vocational Skills Week 2020** will take place between November 9th and 13th. Being dedicated to the topic of 'VET for Green and Digital Transitions' this year's event is in line with the European Commission's recognition of the crucial role of the VET system in the fight against COVID-19 consequences. As a platform to make VET's potential more widely known, this annual event will allow local, regional and national organisations to share the very best of vocational education and training across Europe and beyond.

The upskilling of teachers in proper digital competences is indeed a crucial pillar of action for the development of sustained, resilient, and up-to-date VET systems during COVID-19 Pandemic. The **OECD** postulates that the VET systems require solutions to (1) digitalise their approach to education and courses curricula; and (2) support and accelerate digitalisation of other sectors because during forthcoming months. Indeed, while only 24.1% of the continuing vocational training (CVT) providers in the EU offered digital skills training, about 12.9% of the EU companies recognise lack of suitable courses on the market as the main reason for non-provision of CVT.

Macro and Fiscal

As a result of stronger economic outcomes in the second quarter than expected and signs of a stronger recovery in the third quarter, the IMF has revised its global economy forecast to a 4.4% contraction in 2020. Yet, the foresight for the EU is worse than previously outlined. The **IMF's World Economic Outlook published in October** forecasts the EU will contract by 7.6% with the 2020 budget deficit reaching 9.7% of GDP, which is 250 basis points higher than the April 2020 forecast. The same study predicts the EU will recover by 5% and the budget deficit will hit 4.8% of GDP in 2021. These numbers are potentially subject to revision, however. With the recent surge of the new COVID-19 cases in the EU and a gradual reintroduction of harsh restrictions, including potential lockdowns, the economic activity may fall sharply and the governments may announce new stimulus packages which would put further pressure on the budget deficits.

Other CASE Products

The Weekly Online CASE CPI

The online CASE CPI is an innovative measurement of price dynamics in the Polish economy, which is entirely based on online data. The index is constructed by averaging prices of commodities from the last four weeks and comparing them to average prices of the same commodities from four weeks prior. The index is updated weekly. For more information on our weekly online CASE CPI, please visit: <http://case-research.eu/en/online-case-cpi>.

Results of Online CASE CPI show that average prices in the Polish economy have been broadly unchanged since August. We are not observing the same volatility as in spring and early summer when price changes in categories such as “Transportation” and “Food” were driving the entire index up or down by more than 0.5 pp. In the latest read-out of our index, a category with the most significant change is “Other products and services”, where prices went up by 1.3% – mostly in case of products related to personal hygiene.

Our Weekly Online CASE CPI



Monthly CASE Forecast for the Polish Economy

Every month, CASE experts estimate a range of variables for the Polish economy, including future growth, private consumption, investments, industrial production, growth of nominal wages, and the CPI.

CASE economic forecasts for the Polish economy						
<i>(average % change on previous calendar year, unless otherwise indicated)</i>						
	GDP	Private consumption	Gross fixed investment	Industrial production	Consumer prices	Nominal monthly wages
2020	-4.7	-5.0	-8.3	-5.2	3.0	3.2
2021	3.8	4.0	3.4	2.8	2.6	3.2

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