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EFZG WORKING PAPER SERIES
EFZG SERIJA ČLANAKA U NASTAJANJU
ISSN 1849-6857
UDC 33:65

No. 2026-04

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Measuring Fine-Based Competition Authority Activity Efficiency in CEE Countries

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Abstract

This paper examines the activity efficiency of competition authorities in Central and Eastern European countries by developing a simple, externally verifiable fine-to-budget indicator. The study focuses on the directly measurable segment of competition authority activity: competition-related fines imposed in the areas of abuse of dominance, cartels, and merger violations, relative to the budget allocated to competition-related activities. Using a novel dataset constructed from national competition authority reports and OECD submissions, the paper compares seven CEE countries - Croatia, Czechia, Latvia, Lithuania, Poland, Slovakia, and Slovenia - over the period 2014–2023. The results reveal substantial heterogeneity across the region. Croatia and Slovenia display low fine-based activity-efficiency levels, while Czechia, Poland, and Slovakia exhibit relatively high and stable performance. Latvia and Lithuania also show high average ratios, but with greater variability, indicating more episodic enforcement patterns.

Key words
competition authority, enforcement activity, fine-to-budget ratio, competition policy; CEE countries, institutional efficiency

JEL classification
L4, K21

1. Introduction

In any organization, monitoring and evaluation are essential for effective governance, and for fostering accountability, transparency and trust. Competition authorities (from now on CAs) are no exception to this rule and are lately being increasingly pressured worldwide to show the wider economic benefits of their actions and to justify more complex budgets (OECD, 2025).

However, determining what makes a "good" CA is a matter of intense discussion in the literature. The task is made difficult due to the fact that CAs are non-profit organizations and have multifaceted goals that often prove elusive to measurement efforts.

Generally speaking, CAs are in the business of increasing the overall prosperity of a society by removing obstacles that prevent markets from behaving efficiently. Kovacic (2011, 2012) describes three main ways in which this is accomplished, and consequently on which CA performance should be measured: activity, influence on law and public education.

Public education is the effort to attempt to better inform market and public actors of the overall mission of the CA, and the way the rules are set up and why. It operates under the assumption that a substantial number of competition policy violations are due to lack of information and/or understanding. The "influence on law" dimension is the way in which CAs attempt to mould the legal system to better serve its mission. Both of these are inherently resistant to quantification.

The dimension that in principle should be most amenable to quantitative treatment is "activity". These are the day-to-day operations of the CA; how active it is in enforcing competition rules. These can be broadly divided into three main categories: abuse of dominant position, cartels and mergers. The results of a successfully tried abuse of dominant position and/or cartel case are fines, which give a simple and direct tool for measurements and comparisons. The results of merger cases are more complex, they are either allowed, prohibited or allowed under a set of qualifications (remedies). To assess the effects of merger decisions, researchers undertake "impact studies" which try to quantify how much consumers/society benefited from a specific decision in money terms.

Consequently, of the three main dimensions of CA performance mentioned by Kovacic, only one can be directly measured (activity), and only partially. This inherent vagueness surrounding CA operation has led to a situation where there are no agreed upon key performance metrics by which to ascertain their effectiveness. Most CAs present annual reports to their governments, but there are often no standards to which their results should be compared against.

This creates space for CAs to simply "go through the motions" of competition policy enforcement, i.e. to open a minimal number of cases needed to justify its budget in the eyes of policy makers and the

public without attempting to seriously tackle market distortions. This potential danger is especially relevant in the case of CEE countries, where competition policy was relatively recently transplanted into legal systems not originally designed for it, and where competition culture is often still in its infancy (Kaufman, 2023).

This problem is generally acknowledged by international institutions such as the OECD and the EU, which are encouraging CAs of their member states to perform impact studies. These studies aim to estimate the monetary value of CA interventions for society. However, they are highly data and labor intensive, conducted exclusively in-house, and therefore prone to bias, particularly in the selection of counterfactuals, which constitutes a critical stage of the process. Despite their limitations, they do offer a measurable performance indicator and are preferable to having no assessment at all. Nonetheless, this paper argues, it is in the taxpayers' interest that such self-assessments should be complemented by independent external research and alternative metrics. This is especially true in the case of CAs in Central and East European (CEE) countries, most of which do not perform self-assessments, leaving outside research the only option with which to try to gauge their effectiveness.

This paper aims to help address this scarcity of performance metrics within the CEE competition policy landscape. We achieve this by creating a novel dataset which focuses on the directly measurable parts of CA activity: fines and budget.

The rest of the paper is structured as follows: section 2 gives a literature review detailing the current and past thinking on CA performance measurement, section 3 gives a description of our preferred activity metric, section 4 discusses the relevant database construction, section 5 contains the results of our analysis and section 6 discusses the results and provides concluding remarks.

2. Literature review

The literature on measuring CA performance can be subdivided into three broad categories: input and capacity indicators, output indicators, and finally outcome and impact indicators.

Input and capacity indicators examine budgets, staff expertise, legal powers, independence, investigative tools, and prioritization systems. They are designed to measure the quality of the tools and processes the CA employs in its operations. Following this line of reasoning Ma (2010) finds a relationship between competition authority independence, institutional quality, and antitrust effectiveness. A more EU-focused study (Guidi, 2015) similarly examines whether independence affects competition enforcement outcomes. The consensus seems to be that independence alone does not guarantee performance, but that weak independence can reduce credibility, expose agencies to political pressure, and impair long-term deterrence.

The OECD identifies output indicators as central tools for administrative accountability and operational monitoring because they are comparatively easy to quantify and standardize across jurisdictions (OECD, 2014). Commonly used measures include the number of cartel investigations, abuse-of-dominance proceedings, merger notifications reviewed, decisions adopted, fines imposed, market studies completed, and advocacy opinions issued. The OECD further notes that many authorities also evaluate procedural efficiency through indicators such as case duration, clearance speed, judicial appeal rates, and compliance with statutory deadlines. The literature also highlights the growing importance of advocacy-related output indicators. Modern competition authorities increasingly measure non-enforcement activities such as regulatory opinions, public consultations, compliance guidance, workshops, and sector inquiries. This development reflects the broader evolution of competition agencies from purely enforcement-oriented institutions toward broader market-governance and regulatory-policy actors. OECD and ICN frameworks both recognize advocacy outputs as increasingly important components of agency performance evaluation.

Published activity analysis relies predominantly on output indicators reported in annual reports and OECD submissions. These include the number of administrative proceedings, merger-control decisions, unfair-trading practice investigations, advocacy opinions, court proceedings, and sectoral analyses. In the specific CEE context, substantial work has been done by Pecotić-Kaufman (2023; 2025), who uses similar indicators to examine the institutional development and enforcement evolution of Croatian competition policy within the broader post-socialist and EU-integration context. Although these studies provide valuable descriptive analysis, the literature notes that Croatia, like many smaller CEE jurisdictions, still lacks extensive outcome-oriented and econometric evaluation of competition-agency effectiveness.

As far as outcome-oriented studies are concerned, ex post evaluation is one of the strongest themes. The OECD states that governments increasingly want to assess policy effects and institutional effectiveness, and it provides methods and examples for reviewing enforcement decisions after implementation (OECD, 2016). Common methods include price comparison, before-and-after studies, counterfactual analysis, merger retrospectives, compliance reviews, remedy evaluation, and surveys of market participants. The methodological challenge is isolating agency impact from broader market forces.

Finally, CA performance is shaped by the surrounding institutional environment. Rodriguez (2007) finds that competition agencies perform poorly in jurisdictions characterized by corruption and weak competitive intensity. Another study (Kronthaler, 2007) uses a panel-data framework which similarly treats effective competition-law enforcement as dependent on wider institutional and economic conditions. This implies that agency quality cannot be assessed solely by internal metrics; and that the

broader institutional environment including courts, ministries, legislatures, procurement systems, and regulatory bodies play a large role in the overall effectiveness of a CA.

3. Activity efficiency

To calculate how efficient CAs are in their fines-related activities, we opt for a fines to budget ratio. The OECD publishes its own version of this (OECD, 2025) in which they calculate and publish the ratio of total fines vs total budget only for members and non-members, not on an individual state level. Additionally, there are several problems with their approach. First, CAs have differing abilities to impose fines for violations which are not strictly competition related. Secondly, due to different missions and domains of activities, the budgets allocated to competition related activities that produce fines also vary significantly between countries. We attempt to alleviate these problems by focusing exclusively on fines imposed on competition related activities (defined as those that deal with abuses of dominance, cartels and mergers), and budgets allocated to those activities. We do this by creating a novel dataset for which the relevant data was extracted from the publicly available national and OECD reports, as discussed in chapter 4.

Generally speaking, a fines to budget ratio loosely corresponds to the microeconomic concept of MRP (marginal revenue product) which calculates the revenue obtained from a unit of input. Conceptually this treats a CA as a firm with a production process that receives a budget (in euros) as an input, and produces fines (in euros) as an output. Since reports are published in yearly intervals, to get an average level of efficiency for a time period we take the mean of the sample. More precisely, we calculate the efficiency of a CA with the following expression:

$$E_x = \frac{\sum_{t=1}^{n} \frac{F_{x,t}}{B_{x,t}}}{n}$$

where Ex is the efficiency of a specific (x) Competition Authority, $F_{x,t}$ is the amount of competition related fines imposed by CA x in a given year t, Bx,t is the competition related budget of CA x in year t, and n is the total number of years in the sample.

Efficiency calculated in this manner outputs a simple metric which answers the question of how many euros of fines a CA imposes per euro of budget on average. To put it more colloquially, it measures how much “bang for their buck” taxpayers get out of CA activity in the domain of competition infringement.

The relative simplicity of this approach has numerous advantages. The data requirements are modest (yearly amount of fines and budget) which can facilitate more widespread research that does not rely heavily on CAs internal data. Its main strength however, is cross-country comparisons. Since we are dealing with a ratio of fines to budget, there is no need for data scaling according to GDP, GDP per

capita, income levels etc. Countries are ranked based on how well they use their budget; not how large the budget is. This presents a relatively clean, data non-intensive way of making a between country CA efficiency ranking.

However, as with all simplifying metrics of this type, tradeoffs have to be made. There are three main potential avenues of argumentation against this approach as far as we are aware, one technical and two conceptual.

The technical objection is that CA activity takes a substantial amount of hours to realize. This means that the results of budget funds allocated in year x can result in fines allocated not in the same year, but in year x+1, x+2 etc. Addressing this problem would involve tracking down fines imposed and worker hours allocated to each case, which is not feasible for outside researchers, but would be a welcome addition to CA reports. Nevertheless, our expectation is that the results would not change substantially using this approach, since each country dataset suffers from the same limitation, cross country comparisons are not affected. The problem would be more pronounced in the case of year by year within country comparisons.

Secondly, on a conceptual level, there is a limit to how far this analogy of a "CA as a firm" can go. CAs are not firms, their goal is neither profit maximization, nor "fine amount maximization", but rather prosperity maximization by way of maintaining competitive markets. As stated by Kovacic(2011,2012), this involves substantially more than simply enforcing competition rules. While this is true, it is certainly the case that taxpayers would generally prefer CAs to be efficient rather than inefficient in their activity. We would argue that efficiency in general, while not being the whole story, is certainly a sizable part of what it means to be a "good" CA (especially in the case of our dataset, as will be argued in the next chapter).

Finally, there is the question of what exactly is measured here, and whether it is a good proxy for true efficiency. There is an argument to be made that perhaps an economy can have well established markets with a strong competition culture, where most of a CAs resources are spent on public education, sector investigations etc. (i.e. maintaining a healthy status quo). It is possible in theory that the CA then finds itself in a position where there is no need to impose large fines because the economy is "well behaved" from a competition policy standpoint. While this remains a theoretical possibility, we would argue that the chances of this being the case in our dataset is negligible.

4. Data

We construct a novel dataset by extracting competition related fines and budgets from CA reports. To our knowledge this is the first such attempt in the literature. Our data sources are national CA reports and OECD reports. National reports are given by a CA to a ruling body (i.e. parliament) usually on a yearly basis. These were in most cases written in local languages and were translated to English using

machine learning tools. The OECD reports are sent by CAs to OECD, also on a yearly basis. The OECD and national reports overlap in a number of areas, however OECD reports have entries which are not explicitly given in national reports and vice-versa, in most cases making it a necessity to use both.

There were several challenges involved with the extraction. National reports are vastly different in what they contain not only between countries, but also within countries (the structure of the reports for a given country changes over time). Thus, data which is readily available for the period 2020-2023 is not available for 2018 etc. In the case of the OECD reports, the structure of the OECD questionnaire does not vary, however the information supplied by the CAs does (sometimes total fines in a year are reported, other times only fines pertaining to most relevant cases etc). All of this requires treating each CA in each year as a special case, making data collection extremely time-consuming. In this section we provide an overview of the variables used, with more detailed explanations on how each country-year case was handled relegated to Appendix A.

When selecting which data to use for $F_{x,t}$ in equation (1) there is a choice between fines imposed and fines collected. We opt for fines imposed for two reasons. First, the time interval between opening cases and imposing fines is shorter than between opening cases and collecting fines, thus minimizing the technical problem discussed in chapter 3. Second, our main goal is to measure how efficient CAs are in performing tasks under their control. Up to the point of fine imposition, all of the work is done in-house, however between fine imposition and collection, there is room for other institutions to get involved (i.e. courts). Since in our sample it is not unusual for there to be friction between the native legal system and EU competition law (Kaufman, 2023) we feel it is more representative of a CAs efficiency to include only the segments of the process under their strict domain.

Since our sample involves CAs with very different jurisdictions (some in addition to competition related cases deal with regulatory work, consumer protection etc) we opted to zero in on exclusively competition related fines, in order to make the comparative analysis consistent. Where the data was not readily available, we approximated using different methods depending on the country (see Appendix A).

As far as the budget $B_{x,t}$ is concerned, the first choice is between “allocated budget” and “actual spending”. The numbers are very close across the entire sample so the choice is not very impactful in the context of our analysis. For consistency and for marginal improvements in data quality we opt for “allocated budget” as our variable of choice. More precisely, we attempt to pinpoint “allocated budget” to competition related departments/activity. Where the data is not readily available, we use staff numbers by department as a proxy.

Our sample consists of the following seven countries: Croatia, Czechia, Latvia, Lithuania, Poland, Slovakia and Slovenia. These are the CEE countries for which the required data can be reasonably inferred from the available reports. Overall data quality and the availability of the OECD reports limits our timeframe to the ten year period between 2014-2023.

Finally, there is the issue of outliers. Since we are calculating the mean efficiency, outliers have outsized effects on the results. There are two notable cases in our sample. One is the decision of the Polish CA to impose a 7 billion euro fine on Gazprom in relation to building the Nord Stream 2 pipeline. The second is the decision of the Slovenian CA to impose a 50 million euro fine on Agrokor (a Croatian food conglomerate). In both cases the fines were imposed for a "failure to notify" of an impending merger, and the amount is several orders of magnitude larger than any decisions before or since. There is reason to believe that these present unusual events which are heavily influenced by international/domestic politics and do not represent "normal" CA activity.

For these reasons we opted for removing outliers using the IQR (Inter-quartile range method). This approach defines outliers as observations that fall substantially outside the central portion of the data distribution. Specifically, the IQR is calculated as the difference between the third quartile (Q3) and the first quartile (Q1). Observations lying below $Q1 - 1.5 \times IQR$ or above $Q3 + 1.5 \times IQR$ are classified as outliers and excluded from the analysis. For completeness, the results obtained without removing outliers are given in Appendix B.

5. Results

Our results are presented in Table 1 and Diagram 1. Although the median is not a representative metric by itself due to the small sample size, we include it as a useful tool when combined with the mean to detect skewed distributions. This allows us to see whether the final numbers are mainly due to relatively constant uniform activity (the mean and median are close), or periods of relative inactivity interspersed with short high bursts of activity (the median and mean largely differ). We can see that roughly speaking, Croatia, Czechia, Poland and Slovakia fall into the former category, and Lithuania, Latvia and Slovenia in the latter. We find these results interesting, and we leave to future research to determine the exact cause of this discrepancy. One possible explanation is that this has to do with strategic/stylistic differences (perhaps more focus on large drawn out cases by the latter group etc.)

Country	Mean Ratio	Median Ratio
Croatia	0.134	0.131
Czechia	5.643	5.377

Latvia	4.342	2.566
Lithuania	6.728	1.237
Poland	3.256	2.526
Slovakia	5.385	4.811
Slovenia	0.551	0.102

What in our opinion is the most representative ranking of the overall activity of CAs in our ten year sample (the Mean Ratio from Table 1) is visually represented in Diagram 1. The numbers range from almost 7 euros of fines imposed per euro of budget in Lithuania, to 0,13 euros of fines per euro of budget in Croatia. While it is true that these rankings/numbers could vary to a degree due to alternative specifications (i.e different approximations of fines/budgets, different methods of handling outliers, alternative definitions of efficiency) there are some general conclusions that can be drawn that in our opinion will prove robust.

First, the Croatian and Slovenian CAs are not operating at the same level as the rest of the sample, and by our metric are the candidates with the most room for improvement. Second, the other 5 countries are operating at an overall similar level, and it is conceivable under alternative specifications the rankings could shift to a degree. But, the five are not homogenous, there seems to be a difference in the intensity of activity (measured by the mean vs median difference) with Latvia and Lithuania operating on a more sporadic basis, compared to the more uniform activity of the central bloc of Czechia, Poland and Slovakia. Thus the countries can be roughly subdivided into three distinct groups: South (Croatia and Slovenia) with low overall activity efficiency, Central (Czechia, Poland, Slovakia) with high and uniform activity, and North (Latvia and Lithuania) with high but sporadic activity.

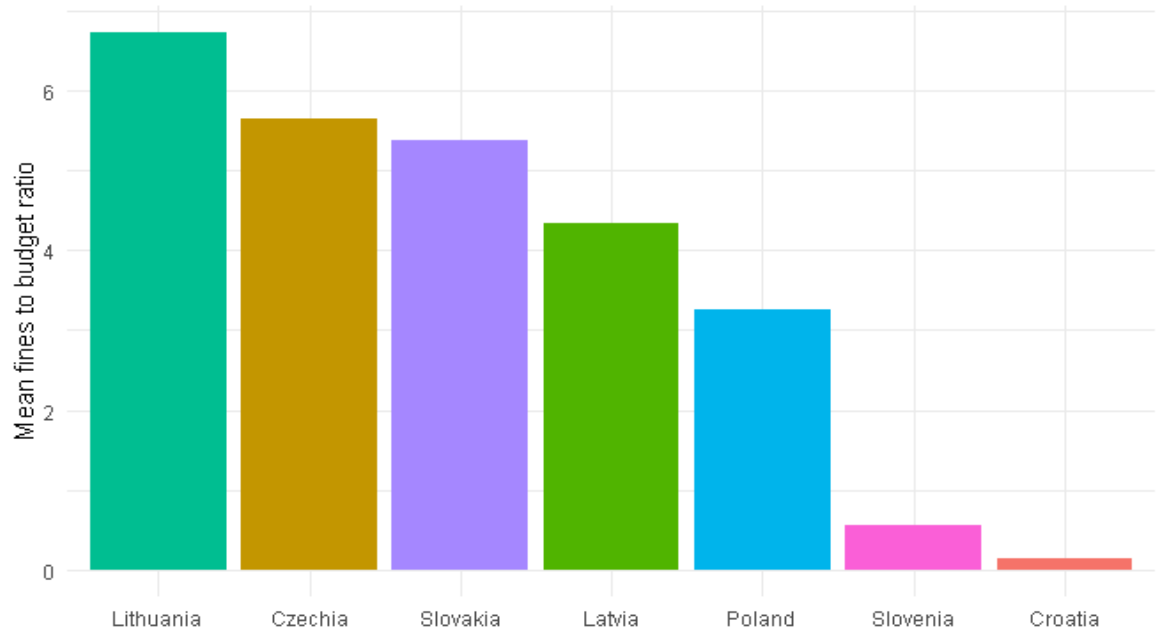

Figure 1 - Mean fines to budget ratio 2014-2023

As a robustness check, in Appendix B we present the mean fine-to-budget ratios without outlier removal and the median fine-to-budget ratios. The non-adjusted mean ratio shows the oversized effect of the Polish Gazprom decision, confirming the intuition that extreme merger-notification cases can substantially distort average activity-efficiency measures. On the other hand, the median ranking highlights the high and relatively stable position of Czechia and Slovakia, while indicating that Lithuania's high mean is driven more strongly by episodic enforcement peaks. These alternative specifications therefore support the distinction between uniformly high and sporadically high enforcement activity.

It is interesting to note that the described differences fit neatly into a geographical/cultural pattern, with each of the countries sharing deep historical and cultural ties with the other members of their group (often being parts of the same state). We leave to future research to explore this correlation further.

6. Conclusion

This paper aims to help address this scarcity of performance metrics within the CEE competition policy landscape. To achieve this, we contribute to the growing literature on CA performance by proposing a novel, simple, externally verifiable metric of activity efficiency, calculated as a fine-to-budget ratio related to the core competition areas of: abuse of dominance, cartels and merger violations. This necessitated the construction of a novel database which enables systematic comparison

of competition-related fines and budgets across CEE countries. We argue that in a policy environment generally characterized by limited transparency and weak benchmarking standards, this approach offers a useful and replicable tool for cross-country comparison, which is important for policy considerations.

Our results reveal substantial heterogeneity in activity efficiency across the CEE region. Croatia and Slovenia display persistently low efficiency levels, indicating considerable scope for institutional strengthening. Of the remaining five countries in our sample, Czechia, Poland, and Slovakia as a group exhibit high efficiency levels uniformly scattered across the timeframe of the sample. Latvia and Lithuania, on the other hand, display high overall efficiency, accompanied by high variability of enforcement intensity depending on the year in question. The emergence of these three distinct groups, which broadly align with historical and cultural linkages, perhaps points to the power of institutional legacies in shaping enforcement practices.

From a policy perspective, these findings highlight the need for differentiated reform strategies. In CAs that exhibit low comparative efficiency, it can be argued that more focus is needed on developing core competencies (capacity building, procedural streamlining, dedicated investigative departments etc.) On the other hand CAs exhibiting relatively high efficiency would likely profit from more focus on consistency, deterrence and keeping pace with current market evolutions, such as the challenges posed by high market concentrations in sectors dealing with digital technology. More broadly, the results underscore the importance of developing standardized, transparent, and externally verifiable performance indicators to strengthen accountability and public trust in competition policy.

As with any other metric, there are assumptions and limitations. Efficiency calculated as a fine-to-budget ratio, however precise, represents only one dimension of enforcement activity. It does not accurately capture deterrence effects, education and outreach quality and their impact or long-term market dynamics. Consequently, there is room for future research to integrate qualitative institutional variables, case-level enforcement data, and independent impact assessments, as well as to explore more formally the historical and cultural determinants suggested by our findings.

However, these limitations notwithstanding, this study argues that this approach offers a useful benchmark for evaluating competition authority activity in data-constrained environments, and provides a foundation for future empirical work on competition policy effectiveness in Central and Eastern Europe.

References

1. Guidi, M., 2015. The Impact of Independence on Regulatory Outcomes: the Case of EU Competition Policy. JCMS J. Common Mark. Stud. 53, 1195–1213. https://doi.org/10.1111/jcms.12280
2. Kaufman, J.P., 2023. Judicial interpretation and competition law enforcement: Authoritarian legal culture, semantic dissonance and skewed agencification in post-socialist Croatia. Rev. Cent. East Eur. Law 48, 275–318.
3. Kronthaler, F., 2007. Effectiveness of Competition Law: A Panel Data Analysis. Halle Inst. Econ. Res. IWH Discuss. Pap.
4. Ma, T.-C., 2010. Competition authority independence, antitrust effectiveness, and institutions. Int. Rev. Law Econ. 30, 226–235. https://doi.org/10.1016/j.irle.2010.04.001
5. OECD, 2016. Reference Guide on Ex-post Evaluation of Competition Agencies' Enforcement Decisions [WWW Document]. OECD. https://doi.org/10.1787/262476ff-en
6. OECD, 2014. Guide for assessing the impact of competition authorities activities [WWW Document]. OECD. https://doi.org/10.1787/c92c2cd0-en
7. Pecotic Kaufman, J., 2025. Intensity of Cartel Enforcement in Central And Eastern Europe: A Comparative Analysis. https://doi.org/10.2139/ssrn.5809203
8. Rodriguez, A.E., DeNardis, L., 2007. Examining the Performance of Competition Policy Enforcement Agencies: A Cross-Country Comparison. Polit. Sci. Glob. Aff. Fac. Publ.

Appendix A - data sources

Two primary sources were used: CA reports submitted to OECD, and national CA reports available on the website of the institution which are submitted to parliament of the respective country on a yearly basis

Croatia

For Croatia, the precise antitrust fines data can be extracted from the national reports which give a list of all the cases closed and fines imposed in a given year. The cases are categorized by type (ie. dominant position, forbidden agreements, forbidden trade practices etc) which makes filtering out pure antitrust cases relatively simple.

As far as the budget is concerned, the agency only reports the total budget. To approximate the antitrust budget, we use the headcount by department as a proxy. The national reports state that AZTN is divided into 7 subdivisions: Council (*Vijeće)*, Office of the Council (*Ured Vijeća*), Office of the Chief Economist (*Ured glavnog ekonomista*), Department of market competition (*Sektor za tržišno natjecanje*), Department of international and European Communications and cooperation (*Sektor za međunarodnu i europsku suradnju i komunikaciju*), Department of forbidden trade practices (*Sektor za zabranu nepoštene trgovačke prakse*) and the Department of general affairs (*Sektor za opće poslove*). Of these we classify the Council, both Offices, and the Department of market competition as dealing with antitrust. Depending on the year, this amounts to approximately 70-75% of the total workforce. This ratio is then used as a proxy for the budget ratio allocated to antitrust activities.

Poland

The competition/antitrust fines in a given year are explicitly stated in national reports, no approximation required.

The amount of budget allocated to antitrust activities is given explicitly for the years 2021-2023, and had to be approximated for the rest of the series. The number of employees by department is available in the data. The category: “Competition enforcement staff (non-administrative)” contains multiple subcategories, of which only the “Mergers” and “Antitrust” categories are included. This gives a stable ratio of around 25-30% of the total workforce employed in pure antitrust depending on the year. The budget allocation gives a slightly higher number for the three years it is available (28-42%), suggesting that antitrust employees have higher wages compared to the rest of the staff. With this in mind, we opted for the mean of the three available years (34%) as the approximate antitrust budget ratio for the whole period from 2014-2020.

Czechia

The competition related budget is explicitly given in the OECD reports for 2023 and 2022, for the rest of the series we proxy the budget ratio via the competition staff share in total employment.

The OECD reports contain the total competition related fines for most years (2023, and 2016-2021). For the years 2014, 2015 and 2022 the total had to be approximately reconstructed from the case list given in the national reports.

Slovakia

The fines data is available in the national reports. The number used is total fines imposed by the CA, since the reports indicate that the only non-antitrust fines imposed are for state aid regulation in the last few years of the period (2021-2023) and these constitute less than 1% of the total.

The authority does not give department level budget allocation information, however it does give department headcounts in the OECD reports. We approximate the competition to total budget ratio with the competition to total headcount ratio.

Slovenia

The fines data for Slovenia is readily available from the national reports, which clearly differentiate fines for competition-restricting practices (as defined by the ZPOmK-1 law) from other categories.

The Slovenian authority only reports the total budget, it does not go into detail on its allocation between departments. Additionally it does not give headcount data within departments, closing our standard avenue of competition budget approximation. The internal structure of the body is similar to that of Croatia however, (Director, Office of the director, followed by the departments for Competition, State aid, and General affairs) we therefore approximate the competition related budget to be roughly the same as Croatia (75% of the total).

Latvia

The Latvian CA national reports give a comprehensive list of fines imposed by case, which can be subdivided into competition related and non competition related activities. These cases are then summed to arrive at the total figure for fines imposed in a year.

However only the total budget is given, with no headcount numbers per division. Because of the internal similarities with Lithuania, we again opt for the conservative rough estimate of 85% of resources devoted to competition policy. Here we have a case where if different estimates are used (i.e less than 85%) Latvia could theoretically move up in the rankings closer to Slovakia or Czechia.

Lithuania

The Lithuanian CA distinguishes fines imposed by type, however the total number is not given explicitly, but has to be inferred from the case list. The OECD reports often only include notable cases, so cross referencing with national reports is necessary.

Only the total budget information is given, with no headcount by department. Judging by the number of cases and overall CA activity in the report, we opt for a rough approximation of 85% of the budget

allocated to competition related activity. While this number has less grounding than is the case in other countries, the potential error is not significant for the results (if the number is less than 85% Lithuania only solidifies its first place, if the number goes up to 100% Lithuania still remains in first place)

Appendix B – alternative specifications

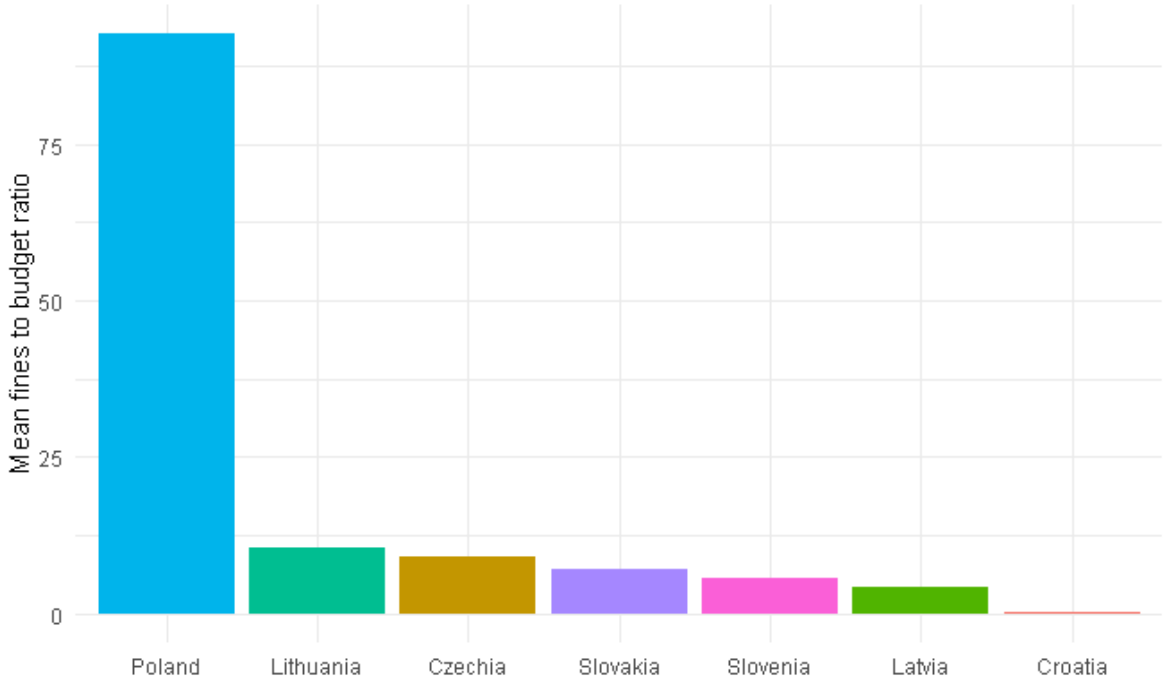

Figure 2 - Mean fines to budget ratio without outlier removal