

## OPEN-SOURCE INFORMATION IN COMBATTING UNDERVALUATION AND TAX NON-COMPLIANCE

*Undervaluation of imported goods is one of the reasons for the trade gap between the theoretically calculated revenues from import duties and the amounts actually received. In the context of Ukraine's move towards membership in the EU, the risk of budget revenue losses is a cause for concern, since customs duties on imports belong to the EU's traditional sources of revenues, known as own resources. The possibilities to use open-source information have been researched to form a source of relevant and transparent price information for both customs authorities and economic operators. A high level of transparency of such data model are shown which allows to increase the efficiency of automated customs control and ensures better cooperation between customs and foreign trade entities.*

**Purpose.** *To assess the weak points and the most problematic issues, which pose the greatest risk for ensuring budget revenues of import duties. Given that the vast majority of import duty rates are ad valorem, control over the customs valuation compliance is one of the key factors ensuring proper collection of the traditional own resource. Therefore, enhancing the customs valuation control is a necessary condition to ensure the possibility to fulfill obligations imposed by EU law to make available the traditional own resources including import duties.*

**Methods.** *To accomplish the research task, general scientific methods are applied, such as statistical and comparative analysis as well as generalization.*

**Results.** *Benefits of open information resources are examined to fulfill the obligations in the context of targeted control enhancing. The advantages of open-source information are studied focusing special attention on the need of robust information support for combatting the underinvoicing and other customs fraud. The use of available methods of abnormal pricing detection is defined as one of the main points of risk factor specifying. A significant role of appropriate statistical data and other available transparent price information is shown to reveal potential underinvoicing.*

**Conclusions.** *The paper identifies the most vulnerable areas where financial obligations are foreseen for EU member countries to guarantee the completeness and relevance of revenues and proposes the effective method of analysis to provide more transparent and robust control measures.*

**Key words:** under-invoicing, traditional own resources, budget revenues, abnormal pricing, customs value, open-source information, fraud combatting.

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**Introduction.** In the light of the ongoing Ukraine's movement towards full-fledged membership in the EU, more attention should be paid to issues that have to be optimized causing noticeable changes in the present mechanisms of governance. It requires proper planning and arranging of a reliable basis for easier and effective launching of new ones, in accordance with new European rules. Today, there is a need for the most advantageous and convenient use of available resources of state institutions to ensure that Ukraine will definitely fulfill its obligations without a radical restructuring which is costly and requires more efforts. The objective of this research is to study the possibilities of the use of open-source information such as trade statistics as a helpful tool to provide support in the detection of abnormal pricing of imported goods to optimize customs value control strategy.

**Literature review.** The problem of state revenue losses caused by underinvoicing has recently been considered very thoroughly and objectively both by many scientists and practitioners, in particular I. Musselli, V. Nitsch, A. Cobham, D. Perrotta, A.K. Biswas, M. Erkoeka, WCO and OLAF experts and others.

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**Main issue.** One of the key pillars enabling the EU to achieve its strategic development goals successfully, is a system of EU own resources, which make up the EU budget. These resources are utilized to support policies, the most promising initiatives, and investments that contribute to promote the EU strategic goals. Customs duties are categorized as «Traditional Own Resources» and make up one of the sources of revenue for the EU budget. When goods enter the EU customs territory, customs duties are collected by the national customs authorities of member states and transferred to the EU budget, after deducting the costs of tax administration. EU member states ensure compliance with the rules of import duty collection and control over the completeness of taxation and, in turn, are fully responsible for the violation of the contractual terms of the transfer of revenues to the EU budget and must compensate for losses at the expense of their own funds. Revenues from customs duties made up about 12-15 percent of the EU's annual budget in the first two decades of the 21st century (Farion, 2016). DG TAXUD, DG Budget and the European Anti-Fraud Office (OLAF) are the main institutions whose functions include supporting of customs policies and strategies, monitoring and ensuring their proper application. The OLAF is responsible for investigating fraud against the European budget and for drawing up the European Commission's anti-fraud policies. The detection and fight against commercial customs fraud, preventing the use of fraudulent schemes are certainly the priority areas of their activity. Control over the proper tax payments is therefore a key factor to make available traditional own resources. The country's failure to fulfill its financial obligations to ensure the EU's own resources entails very difficult and extremely undesirable consequences. Thus, on March 8, 2022, the European Court of Justice published its decision in case C-213/19 (Commission v. United Kingdom) regarding the failure of the UK obligations under EU legislation on control and supervision in relation to the recovery of own resources and under EU legislation on customs duty and VAT. With this decision, the Grand Chamber of the Court of Justice partially supported the Commission's statement, essentially ruling that the United Kingdom had not fulfilled its obligations under EU law having not applied effective customs control measures and not entered in the accounts the correct amounts of customs duties. Thus, the UK hasn't made available to the Commission the correct amount of traditional own resources in respect of certain imports of textiles and footwear from China and provided the Commission with proper information necessary for calculating the amounts of customs duties and own resources due for payment (Judgement in Case C-213/19, 2022). Undervaluation of imported goods is an illicit activity, which according to the recently published WCO Trendspotter Study, is considered by most experts to be one of the three main and most significant types of customs fraud, namely: undervaluation, misdescription, and smuggling (WCO, 2022).

OLAF has been highlighting the fraud risks associated with the undervaluation of the customs value of imported goods since 2007 (textiles and footwear from China). The organization of customs control in Member States (hereafter – MS), including control measures to establish the accuracy of customs value, is carried out in the context of a risk management framework. Besides warnings, the European Commission has additionally monitored and scrutinized the risk control procedures applied by the customs administrations for this group of products (European Commission, 2018). The Joint Research Center of the European Commission has developed and scientifically substantiated the use of the «Fair prices database», a special set of information, obtained from the customs declarations dataset and processed in a certain way, which can be used to support to the determination of the customs value at the moment of the customs formalities as well as for post-clearance audit. This data-driven innovative approach is based on statistical theory and uses trade data to estimate robust price values with monthly precision (Arsenis, 2015, Perotta, 2020). In addition, many countries have elaborated and are using their own risk management systems. At the same time, the category of customs value is the most complex issue, from the point of view of legal settlement, on the one hand, and the possibility of automated detection, on the other. The reports of the European Court of Auditors for 2017-2021 contain a description of many cases of undervaluation of goods, mainly when imported into the EU from China and other Asian countries. The issue of combating customs value manipulation was the focus of WCO experts preparing the first large-scale study on commercial fraud and methods of detecting and combating it (WCO, 2022). All this emphasizes that organizing effective control of customs value declaring can be really challenging because of the lack of uniformity, inconsistencies, fraudulent and evasion behavior, limited resources and complexity of trade.

One of the most important issues for the State Customs Service of Ukraine is to outline the appropriate and well-timed arrangements to enhance control measures and information support, which should include proper planning, risk assessment, development of alternative options, selection and implementation of

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the most relevant mechanisms. Ukraine currently is maintaining limited financial and time resources for the development and deployment of a more effective automated control mechanism. Therefore, all possible measures should be taken to improve the customs control framework, to detect and prevent underestimation of the customs value more efficiently. Targeting is a key element to boost the control of customs value declaring. The lack of reliable price information is often a great problem for customs authorities as it may preclude quick and proper decisions in the framework of control.

Special benefits and simplifications facilitating the import of the goods most needed by people in Ukraine were put into action by the Ukrainian government as martial law was imposed in Ukraine to repel the large-scale armed aggression launched by the Russian Federation. Such measures also include exemption from taxation; therefore, it affected the values/figures contained in the national database of customs information that is formed from the data contained in the customs declaration. To confirm certain doubts arising during customs control or post audit the objective price information is definitely required.

The use of price information from open sources promotes transparency and prevents unwanted administrative intervention, which causes persistent business dissatisfaction and reduces the level of trust in the authorities (Chalendar, 2017, Muselli, 2022).

**Empirical results.** World trade statistics databases such as the World Bank's World Trade Integrated Solution (WITS), the International Trade Center's (ITC) Trade map containing trade and market access data for more than 220 countries and territories are used by leading economists around the world for research, forecasting and planning. The Comtrade database, maintained by the United Nations Statistics Division, is one of the most comprehensive sources of international trade data, covering detailed merchandise trade statistics for over 200 countries and territories. Such data have a high degree of relevance and recognition by leading scientists and economic institutions, as they are usually provided by responsible official organizations (national statistical agencies, international organizations and government departments), ensuring the maximum completeness of coverage, relevance and data quality control. The transparency of standardized data collection and compilation methodologies increases their reliability and allows users to interpret the data correctly.

According to the methodology of the United Nations Statistical Office, discrepancies when comparing export and import most often arise due to the following reasons: different methods of data collection and distribution, coverage, inaccuracies or errors in customs declarations, errors in data compilation and processing, delays in reporting and updating data, ineffective data collection quality control, etc. Given the certain delay in displaying the aggregated data in the UN Comtrade Database, such discrepancies are not considered suspicious, as it is consistent with the data matching methodology. At the same time, the informational value of open data is often groundless underestimated, despite the fact that mirror analysis makes it possible to reveal noticeable inconsistencies that have no obvious explanation and may indicate fraud, both in imports and exports. The use of international trade statistics data is necessary in the framework of the abnormal pricing detection. This concept, like the basic tax transfer pricing rules, uses the arm's length principle.

The application of statistical methods to determine the range of FOB customs values further applied as a benchmark for arm's length prices as well as to determine abnormal pricing for imported goods was shown in the previous research (Zhuchkov, 2021). Using these methods of discrepancies detection is only possible while taking into account that congruency of methodologies of the data collection, compilation and distribution is extremely important. However, even bearing in mind all possible discrepancies-causing factors: time, complexity of the collection, the level of automation, differences in the classification systems of goods, the detected contradictions may anyway indicate possible suspicious transactions. During the first stage of the mirror analysis, the most significant discrepancies are usually revealed, which may indicate the need for a more thorough check according to the specified criteria (partner country, period, product HS code). In the context of checking the customs value, there are 2 types of such discrepancies: inconsistency of the weight indicators, as well as significant contradictions between the declared value of goods. Similar cases are described in the WCO Commercial Fraud Typologies Summary and WCO Commercial Fraud Manual for Senior Customs Officials (WCO, 2022).

For example, let's compare the statistics regarding the import into Ukraine of tobacco refuses and tobacco, partly or wholly stemmed/stripped using data obtained from the UN Comtrade Database. The research was carried out using 5-year-period data to identify certain trends in pricing. The dataset was formed providing also a range of prices per unit (1 kg) of the product. In the vast majority of cases, the indicators given in the statistics

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of the exporting countries correspond to the statistical data declared by Ukraine as an importing country. At the same time, noteworthy are the discrepancies in the import and export figures from the USA. Thus, according to Comtrade data, the commodity «tobacco refuses» was exported from the USA to Ukraine during the years 2017 – 2018 and 2020 – 2021, and the total weight was 2 068 043 kg. The price of the product on FOB terms ranges from \$ 0,58 to 0,72, which generally corresponds to the trend of price formation for this product in the world and among the largest exporting countries.

At the same time, the data on the volume of imports of Ukraine show that the import of goods, the country of export of which is the USA, took place during the years 2017-2022, without exception. The total weight of the product is 4 329 204 kg, the cost per 1 kg is from \$ 0,93 to \$ 1,23 dollars. USA, which is also acceptable, given that the cost of imported goods includes transportation costs on CIF terms. However, the difference of almost 2 000 tons is quite a questionable issue and point for further analysis. As can be seen from the table, annually the volumes of imports into Ukraine exceed the figures provided by the USA trade statistics. Indicators of discrepancies range from 218,3 to 757,5 tons. Some cases of similar examples of commercial fraud are described as incorrect commodity classification, for instance to declare the commodity as a cheaper one which, in turn, leads to a decrease in the customs value and duties paid, as other tobacco raw materials cost is much higher. Another type of discrepancies can be detected by comparing the price filter ranges and average indicators of the declared goods value, (on the FOB terms when exporting and CIF terms when importing, so that customs value of goods when importing is usually at least 10% more). Mirror analysis at the most detailed level (6 characters of the HS code and 1 month of the year) allows us to identify indicators that do not correspond to this trend.

The next example is the following comparison: in 2018, the price for 1 kg of tobacco refuses under HS code 2401 30, imported from Pakistan, according to Ukrainian statistics, was \$1,2 per 1 kg on CIF terms, while according to Pakistan data, it was \$2 per 1 kg on FOB terms. One more contradiction is the following: according to Ukraine import statistics 47 tons of tobacco products were imported from the Netherlands during 2018-2022; among them 27,8 tons of raw tobacco under HS code 2401 20 and 19,2 tons of tobacco refuses under HS code 2401 30, the declared customs values (on CIF terms) were, in average, \$7,4 and \$1,3 per 1 kg, respectively. However, at the same time in export statistics data of the Netherlands only raw tobacco export under HS code 2401 20 can be found in 2020 and 2021, of total weight 990 tons having customs value of \$6,2 per 1 kg. Such confusing discrepancies surely should be examined in detail to reveal possible fraud.

**Conclusions.** Thus, having calculated data on general trends and defined price ranges, such an analysis provides grounds for checking overvaluation at export or undervaluation as well as at import. By themselves, discrepancies in such data are not definite evidence of commercial fraud, but can be used by customs risk management units, post customs audit as a reliable source of additional price information. The nuance that the use of open sources of information is free and does not require expenses from the state budget is also important.

The development of methods for improving and automating this kind of search is a promising direction to enhance the work of customs and contribute to post audit and customs risks profiling strategies. The further development of the information component in the context of the new information paradigm of the customs services functioning organization has been determined by the WCO as the main prospective direction of the enhancement of the work of customs in all countries.

In view of the given facts, it seems appropriate to analyze all possible open information resources to achieve a higher level of transparency, customs duties and taxes compliance and customs service reliability in the holistic context of global trade.

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## ВИКОРИСТАННЯ ІНФОРМАЦІЇ З ВІДКРИТИХ ДЖЕРЕЛ ЯК МЕТОД ПРОТИДІЇ ЗАНИЖЕННЯМ МИТНОЇ ВАРТОСТІ ТОВАРІВ ТА УХИЛЕННЯМ ВІД СПЛАТИ ПОДАТКІВ

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Заниження митної вартості імпортованих товарів визначається як незаконна діяльність, яку, відповідно до опублікованих у 2022 році даних дослідження Всесвітньої митної організації, переважна більшість експертів відносить до трьох найбільш розповсюджених видів митного шахрайства, до яких належать: заниження митної вартості, недостовірне декларування та контрабанда. Також це явище є однією з причин торгового розриву між теоретично розрахованими надходженнями від імпорту мита та фактично отриманими сумами. У контексті руху України до членства в ЄС потенційний ризик становлять можливі втрати бюджетних надходжень, що може у підсумку перетворитись на суттєву проблему, оскільки імпорту мито належить до традиційних для ЄС джерел державних доходів – власних ресурсів. Враховуючи, що переважна більшість ставок ввізного мита є адвалорними, підвищення ефективності контролю є ключовим фактором для виконання фінансових зобов'язань наповнення бюджету ЄС. Тому удосконалення системи митного контролю за належним декларуванням митної вартості є необхідною умовою для забезпечення можливості виконання фінансових зобов'язань, що покладаються законодавством ЄС на країни-члени ЄС щодо забезпечення надходження власних ресурсів до бюджету ЄС.

**Мета дослідження:** вивчення переваг використання відкритих інформаційних ресурсів для вирішення найбільш проблемних питань в організації контролю за декларуванням митної вартості.

**Методи.** В ході дослідження застосовувались загальнонаукові методи аналізу та узагальнення, а також порівняльний аналіз. Продовжено застосування двоетапного аналізу цінової інформації з відкритих джерел для використання в рамках ризик-орієнтованого підходу для боротьби із митним шахрайством.

**Результати.** Продемонстровано використання доступних методів виявлення аномального ціноутворення для визначення факторів ризику. Показано значну роль відповідних статистичних даних та іншої доступної прозорої інформації про ціни для виявлення випадків заниження митної вартості імпортованих товарів та

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*оптимізації аналітичної роботи. Аналіз виявлених розбіжностей показав можливі ризики заниження митної вартості товару, декларування товару за іншим кодом УКТЗЕД або інших видів митного шахрайства, які потребують подальших досліджень та більш детального аналізу*

**Висновки.** Запропонована модель використання цінової інформації з відкритих джерел може ефективно застосовуватись для виявлення можливих порушень митного законодавства, які призводять до зменшення бюджетних надходжень.

**Ключові слова:** власні ресурси ЄС, бюджетні надходження, митна вартість, протидія митному шахрайству, відкриті джерела інформації.