Analysis of an Enterprise's Compliance with the Authorized Economic Operator Status in the Context of the Customs Policy of Ukraine

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Abstract. In view of international trade transactions increase worldwide along with the Customs policy of Ukraine aimed at reducing government control and pressure over business, the issue of assigning the Authorized Economic Operator (AEO) status is becoming more and more important. Therefore, there is a strong need to develop a methodology for objective quantitative assessment of the qualitative characteristics of enterprises involved in international trade operations during Customs diagnostics in order to determine whether they comply with Customs laws to obtain the AEO status or not. A methodical approach to Customs diagnostics based on an integral indicator of compliance of an enterprise's quality characteristics with Customs rules divided into five thematic blocks has been worked out, which allows determining an enterprise's rating and avoid subjectivity in assigning a company the AEO status. To make a decision whether to assign a company the AEO status or not, it has been proposed to use a scale of compliance of an enterprise's rating with one of the committee's conclusions such as unconditionally positive, positive, conditionally positive, negative, refusal to assign the status.

Keywords: Customs policy · Foreign economic activity · Customs diagnostics · Integral indicator · Rating assessment · Authorized Economic Operator

1 Introduction

The current situation of international economic relations development is characterized by a dramatic global division of labor and growing pace of Country's integration into the world trade [1–3]. The expansion of companies' foreign economic activity and accelerated globalization processes require adaptation and improvement of the organizational and economic mechanism of Customs control of international transactions.

Carrying out foreign economic transactions is inherently accompanied by Customs control, which makes it important to seek for effective ways of interaction between

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business and Customs authorities. The current Ukrainian Customs policy implies that one of possible forms of such cooperation is simplified Customs procedures through the mechanism of assigning an enterprise the AEO status.

Along with the adoption of the Customs Code of Ukraine [4], which introduced the possibility for domestic exporters and importers to obtain the AEO status, there occurred a requirement to draw out and implement a range of criteria for assessing whether a company is worthy of the AEO status or not. This status provides Ukrainian companies with obvious benefits in European markets and a number of preferences, which significantly saves time and simplifies Customs procedures. The benefits include: preferences and special simplifications; enhanced trust from Customs authorities; good reputation in the market; Customs post-audit once every 30 months; increased speed of supplies; greater compliance of management system with European standards. All these are bound to considerably improve trade conditions and facilitate export of domestic goods into European markets. However, the procedure of assigning the AEO status still has not been implemented due to the lack of criteria and rules developed by the government.

In 2013 the Ministry of Revenue and Duties of Ukraine proposed a draft order "On assigning a company the AEO status" [5], which provided that a subject of foreign economic activity should make self-assessment according to the questionnaire of a standard form, while the auditors from the Ministry of Revenues and Duties were to verify this information by conducting factual and documentary checks. Despite the ultimate need for settling up the relationships in the field of assigning the AEO status, public discussion of this project did not lead to a decision on its final adoption. Therefore, the question of objective assessment of the qualitative characteristics of an enterprise remains open and still challenging.

In early 2016 the Ministry of Finance of Ukraine worked out and the Cabinet of Ministers of Ukraine approved a draft amendment to the Customs Code of Ukraine in terms of assigning the AEO status [5]. The law entails five thematic units to assess a company's compliance with Customs requirements, which are described in detail and contain characteristics against which a company is to make self-assessment of compliance with certain criteria ("yes" – complies with the criteria, "no" - does not comply). Then a special committee of the Customs authority at its discretion may decide to assign the AEO status or refuse it. Yet this law has not been adopted so far because of the change of the Ukrainian government in the spring of 2016 and sequential withdrawal of all government bills.

In October 2019 the Verkhovna Rada adopted the Law of Ukraine "On amendments to the Customs Code of Ukraine related to certain issues of Authorized Economic Operator functioning", which clarifies the procedure for assigning the AEO status as well as special simplifications and benefits for certified enterprises.

This situation leaves the issue of objective assessment of the qualitative characteristics of subjects of foreign economic activity open and even more challenging in the light of the Customs policy of Ukraine aimed at reducing government control over domestic business participating in global trade. Still a lack of a universal method of integral quantitative assessment of the qualitative characteristics of subjects of foreign economic

activity is obvious and, to our mind, the system of Customs diagnostics of an enterprise developed by the authors of this paper can help resolve this problem.

The issues of diagnostics, evaluation and analysis of enterprises have been studied by a number of Ukrainian scientists including Mitsenko (2012), Kostyrko (2008), Kovalchuk (2005), Dovbnya (2015), Datsii et al. (2021) and others [6–18]. Methods of integral assessment have been researched and developed by Bassova (2012), Ignatenko (2014), Larikova (2014), Rushchyshyn (2007), Khrushchev (2011) etc. [19–21]. The procedure of obtaining the AEO status as a new option in the field of Customs services, the questions of computerization of this process, defining the impact of AEO on supply chain security are covered in the works of such foreign researchers as B.K. Bachtiar (2021), Fletcher (2007), Grottel (2013), Huang (2016), Chang (2015), Erceg (2014), Knysh (2013), Laszuk (2016), Manuj (2008), Torello (2020) [22–31].

However, the methodology of quantitative measurement of qualitative characteristics of an enterprise and the integration of assessments of its compliance with Customs rules still require further development and improvement.

The purpose of the paper is to work out a methodological approach to Customs diagnostics of a subject of external economic activity based on an integral and rating assessment of its qualitative characteristics in order to make a decision whether a company deserves the AEO status or not.

2 The Model of Assessment of a Company's Compliance with the Requirements Put Forward for Authorized Economic Operators

While assessing a large number of different parameters of a company's activity, it is feasible to group them thematically by areas of Customs control and in accordance with the objects of management within the company. The basis for choosing the parameters of diagnostics within each thematic group should be the qualitative characteristics of a company stated in the questionnaire of its self-assessment [5] as well as grounded on European best practices Authorized Economic Operators (AEO) [32].

As following from the analysis of laws and regulations developed to legally establish the procedure of assigning the AEO status and the methodology for assessing company's reports [33, 34], the authors of the paper propose to identify the main thematic blocks (*j1, j2, j3, j4, j5*), according to which an assessment procedure can be carried out (Fig. 1).

Each block has its own set of parameters (mj) used to analyze and assess the compliance of a company's business with Customs rules for assigning the AEO status. To make an objective evaluation of the given parameters, we have presented several types of characteristics of the degree of compliance according to each parameter, while the result of the assessment is selected from the options provided, which are measured in a certain number of points.

Evaluation points for each parameter are summed up within a separate thematic block (*j*), while the evaluation result for this block (*Bj*) is determined in accordance

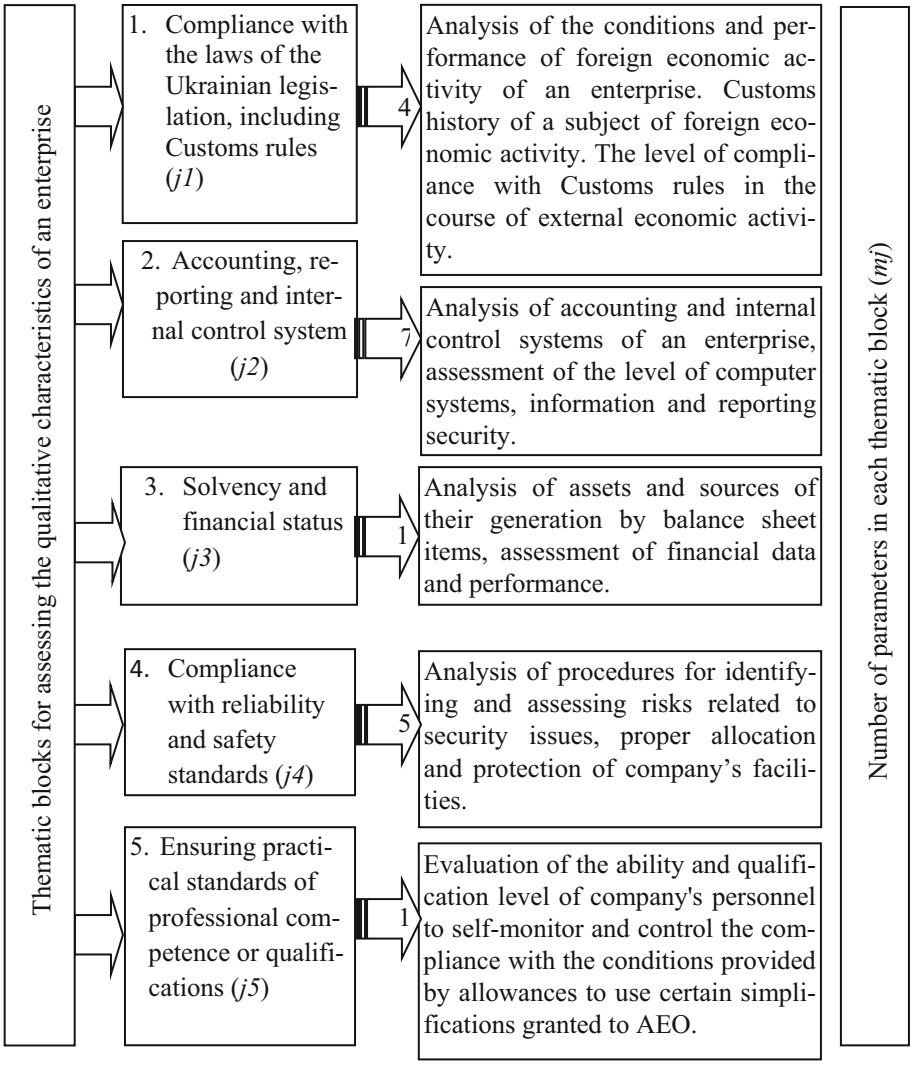

Fig. 1. Thematic blocks and their parameters for assessment and analysis of compliance of qualitative characteristics of an enterprise with Customs laws

with the number of parameters in it:

$$B_j = \frac{\sum_{i=1}^{m_j} \beta_c^{(j)}}{m_j}, \tag{1}$$

where β is the number of points, which assess the compliance of the parameter with Customs laws; j is a block of indicators; c is a parameter of block j; m_j is the number of parameters in block j, i is a parameter number.

The integral indicator of compliance of a company's qualitative characteristics with Customs laws (hereinafter - INT), which takes into account the result of the assessment of all 5 blocks, is equal to:

$$INT = \frac{\sum_{j=1}^{d} B_j}{d} \tag{2}$$

where d is the number of blocks (d = 5).

The quantitative assessment of the quality of each parameter is proposed to be made by using evaluation indicators ranging from 1 to 3, where indicator "1" corresponds to the lowest quality of the studied parameter within a company, and indicator "3" shows the highest quality (Table 1).

Table 1. The scale of assessment of a company's qualitative characteristics during Customs diagnostics

Number of points	Quality level of the parameter	Characteristic features of the parameter
1	Low	Presence of certain elements of compliance of the block parameters with Customs laws, which in general do not ensure the absence of risks
2	Middle	Partial compliance of the block parameters with Customs laws, but a risk of loss of trust remains
3	High	Full compliance of the block parameters with Customs rules

Further we will present the procedure for assessing the quality characteristics of machine building producers of Ukraine against each parameter of this thematic block. It will be done on the example of block 2 "Accounting, reporting and internal control system", which contains 7 separate parameters (Table 2, *compiled using data*: Official site Public Joint-Stock Company Dnipropetrovsk Turning Plant, Official site Public Joint-Stock Company Poltava turbomechanical plant, Official site Public Joint Stock Company Glukhovsky Plant "Electropanel", Official site Public Joint Stock Company "Scientific-Production Joint-Stock Company" VNIICompressormash") [35–41].

Below the assessment of a company's qualitative characteristics according to parameter 2.1 "Compliance of a company's accounting systems with the purpose of Customs control" of thematic block 2 "Accounting, reporting and internal control system" will be presented (Table 3).

Table 2. Quantitative assessment of compliance of a company's qualitative characteristics with Customs laws according to the parameters of block 2 "Accounting, reporting and internal control system"

Block parameter (*j*)	The number of points by means of which the degree of compliance of an enterprise's parameter with Customs laws is assessed											
	Public joint-stock company "Dnipropetrovsk Railway Switch Plant"			Private joint-stock scientific-production company "VNDICOMPRESSORMACH"			Private joint-stock company "Poltava Turbomechanical Plant"			Private joint-stock company Glukhiv Plant "Electropanel"		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
2.1. Compliance of accounting systems with the purpose of Customs control	2	2	2	2	2	2	2	2	3	2	3	3
2.2. Introduction of automated systems of accounting and reporting of foreign economic transactions	3	2	3	2	2	2	2	2	3	2	2	3
2.3. Implementation of an efficient logistics system	2	2	2	2	3	3	2	2	2	2	2	2
2.4. Incorporation of internal control (audit) procedures	1	2	2	1	1	2	1	2	2	2	2	2
2.5. Compliance of goods tracking management systems with the purposes of Customs control	2	2	2	2	2	2	2	2	2	2	2	2
2.6. Ensuring the protection and storage of documents, data and information (including those created electronically)	2	2	2	1	2	2	2	2	2	2	2	2
2.7. Protection of computer (information and telecommunication) systems from unauthorized access	3	3	3	1	2	2	1	2	2	2	2	2
Assessment result within the block (*j*2)	**2.14**	**2.14**	**2.29**	**1.57**	**2**	**2.14**	**1.71**	**2**	**2.29**	**2**	**2.14**	**2.29**

Table 3. Estimates according to parameter 2.1 "Compliance of a company's accounting systems with the purpose of Customs control" of thematic block 2 "Accounting, reporting and internal control system"

The number of points to assess the degree of compliance of a company's parameter with Customs laws		
3 (high level of quality)	**2** (middle level of quality)	**1** (low level of quality)
Compliance: The performance of the accounting system corresponds to a company's size and scale of its transactions There are no inconsistencies in the functional allocation of staff responsibilities for accounting of goods and vehicles The company meets the following conditions: - documented control procedures to detect suspicious transactions have been introduced; - computer programs used for accounting ensure a mutual correspondence of all types of accounting data; - the company plans operations with goods; - the company provides trainings for its staff on the use of accounting systems and related software	**Compliance:** The accounting system corresponds to a company's size and scale of its transactions There are no inconsistencies in the functional allocation of staff responsibilities for accounting of goods and vehicles **Noncompliance:** However, monitoring the use of the accounting system, staff work arrangement, quality of accounting management etc. pave the way for concealing illegal transactions	**Noncompliance:** The accounting system is incompatible with the generally accepted accounting rules adopted in Ukraine, or there is such evidence as: - incorrect and/or incomplete record of transactions in the accounting system; - insufficient consistency between the records of the accounting system; - the accounting system does not fully perform the functions and tasks of accounting in terms of ensuring integrity and continuity of the accounting process; - the accounting system does not allow Customs authorities to have access to the records to be checked; - Customs authorities can not audit the accounting system; - monitoring the use of the accounting system, staff work arrangement, quality of accounting management etc. pave the way for concealing illegal transactions

3 Defining a COMPAny's Rating While Assigning the AEO Status

For each block a quantitative assessment of qualitative parameters is carried out and on the basis of this estimate an integral indicator is determined, which defines a company's rating. An integral assessment complements and expands the scope of traditional analysis, since it allows comparing indicators with different dimensions and characteristics between each other (Table 4).

Table 4. Quantitative assessment of compliance of a company's qualitative characteristics with Customs laws within each thematic block (*compiled using data*: Official site Public Joint-Stock Company Dnipropetrovsk Turning Plant, Official site Public Joint-Stock Company Poltava turbomechanical plant, Official site Public Joint Stock Company Glukhovsky Plant "Electropanel", Official site Public Joint Stock Company "Scientific-Production Joint-Stock Company" VNIICompressormash")

		The number of points to assess the degree of compliance of a company's parameters within each thematic block with Customs laws			
Thematic block	Year	Public joint-stock company "Dniproptrovsk Railway Switch Plant"	Private joint-stock scientific-production company "VNDICOMPRESSORMACH"	Private joint-stock company "Poltava Turbomechanical Plant"	Private joint-stock company Glukhiv Plant "Electropanel"
1. Compliance with the provisions of the Ukrainian legislation, including Customs laws	2018	2,25	2,00	1,75	2,25
	2019	2,25	2,50	2,00	2,25
	2020	2,50	2,25	2,25	2,50
2. Accounting, reporting and internal control system	2018	2,14	1,57	1,71	2,00
	2019	2,14	2,00	2,00	2,14
	2020	2,29	2,14	2,29	2,29
3. Solvency and financial status	2018	2,80	1,20	1,90	1,80
	2019	2,40	1,20	2,70	1,70
	2020	2,90	1,40	2,30	2,00
4. Compliance with reliability and safety standards	2018	3,00	2,40	2,60	2,60
	2019	3,00	2,40	3,00	2,60
	2020	3,00	2,00	2,00	2,20
5. Ensuring practical standards of competence or professional qualifications	2018	2,00	2,00	3,00	2,00
	2019	3,00	3,00	2,00	2,00
	2020	3,00	3,00	3,00	3,00
INT	2018	2,44	1,83	2,19	2,13
	2019	2,56	2,22	2,34	2,14
	2020	2,74	2,16	2,37	2,40

The public joint-stock company "Dnipropetrovsk Railway Switch Plant" shows the greatest value of the integral indicator of Customs diagnostics. Moreover, this value is noticed to increase each and every year, which is explained by the enterprise's development in the analyzed period. The calculated indicators and tendency of their growth indicate that the company can qualify for AEO status. The integral indicators of Customs diagnostics of the private joint-stock company "Poltava Turbomechanical Plant" and the private joint-stock company Glukhiv Plant "Electropanel" vary almost to the same extent, as they belong to the same concern "Ukrrosmetal", while the private joint-stock scientific-production company "VNDICOMPRESSORMACH" shows the lowest level and pace of growth of INT indicator.

To make a decision whether to assign a company the AEO status or not, we propose to define its rating by means of the following gradation of INT indicator (Table 5).

Table 5. The scale of compliance of a company's rating with the conclusion on assigning the AEO status

Gradation of INT indicator	Company's rating	Conclusion on assigning the AEO status	Comments
3,00 – 2,60	R1	Unconditionally positive	Assign the AEO status with a subsequent audit in 3 years. Include in the Unified Register of AEOs
2,59 – 2,20	R2	Positive	Assign the AEO status. Include in the Unified Register of AEOs. Carry out a follow-up audit in a year in the areas where inconsistencies were found during Customs diagnostics
2,19 – 1,80	R3	Roughly positive	Assign the AEO status in case of the correction of identified inconsistencies within 3 months. Then include in the Unified Register of AEOs. Carry out a follow-up audit in a year, on the result of which to make a conclusion as to retaining the AEO status or depriving of it
1,79 – 1,40	R4	Negative	Refuse to assign the AEO status. Reconsider assigning the AEO status after another Customs diagnostics not earlier than in a year
1,39 – 1,00	R5	Refusal to assign the AEO status	Refuse to assign the AEO status. Reconsider assigning the AEO status after another Customs diagnostics not earlier than in 3 years

Based on the calculated value of the INT indicator and the proposed gradation scale, we have specified an integral-rating assessment of enterprises during Customs diagnostics for the assignment of the AEO status (Table 6).

Table 6. Integral-rating assessment of an enterprise when assigning the AEO status

Enterprise	2018		2019		2020	
	INT	Rating	INT	Rating	INT	Rating
Public joint-stock company "Dnipropetrovsk Railway Switch Plant"	2,438	R2	2,558	R2	2,737	R1
Private joint-stock company "Poltava Turbomechanical Plant"	2,192	R3	2,340	R2	2,367	R2
Private joint-stock company Glukhiv Plant "Electropanel"	2,130	R3	2,138	R2	2,397	R2
Private joint-stock scientific-production company "VNDICOMPRESSORMACH"	1,834	R3	2,220	R2	2,159	R3

The findings presented in Table 6 show that the public joint-stock company "Dnipropetrovsk Railway Switch Plant" is prepared best to obtain the AEO status. Every year the rating of this company rose and in 2019 reached the highest level R1. This enterprise, estimated by the scale of compliance invented by us (see Table 5), deserves to be given an "unconditionally positive" conclusion on assigning the AEO status. The private joint-stock company "Poltava Turbomechanical Plant" and the private joint-stock company Glukhiv Plant "Electropanel" can be provided with a "positive" conclusion on granting the AEO status. These companies succeeded in their rating increase. In particular, in 2018 they could only get a "conditionally positive" conclusion, while in 2019–2020 their quality characteristics improved to the level of "positive" conclusion on assigning the AEO status. The private joint-stock scientific-production company "VNDICOMPRESSORMACH" is also entitled to receive an AEO certificate based on a "conditionally positive" conclusion, but subject to elimination of inconsistencies within three months.

4 Conclusion

The presented methodological approach to the quantitative assessment of compliance of a company's qualitative characteristics with Customs laws through certain thematic blocks allows taking unbiased decision whether to assign the AEO status or not. In addition, the detailed information used to calculate the integral indicator facilitates identifying management and internal control weaknesses as well as other risk areas to create appropriate risk profiles that can be useful for effective Customs control further on.

The Customs policy of Ukraine stipulates that since the date of receipt of the AEO certificate it is a company's responsibility to self-monitor its own level of compliance of quality characteristics with Customs laws by means of the internal control system

adapted to the concept of Committee of Sponsoring Organizations of the Tread way Commission (COSO) [42, 43]. The internal audit of an enterprise's compliance with Customs laws should be carried out through the analysis of deviations from the integral indicator INT.

A separate stage is to develop and put forward a number of measures to ensure the effectiveness of an internal control system, which include making managerial solutions aimed at achieving such a level of a company's quality characteristics as compliant with Customs laws.

A prospective further direction of the research into Customs policy of Ukraine in the field of AEO implementation can be creating an algorithm for collecting, accumulating, arranging, summarizing and analyzing detailed information of a required type as to the transactions of enterprises participating in foreign economic activity in order to provide information for identifying the factors that affect the integral rating indicator of Customs diagnostics.

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