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CUSTOMS CONTROL AND RISK MANAGEMENT SYSTEM ON THE EXAMPLE OF THE UKRAINIAN CUSTOMS

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*Abstract*¹

Customs control and application of Risk Management System in the context of the Ukrainian Customs are outlined in this article.² In particular, it discloses the base principles and architecture of the Risk Management System and some practical aspects of its application.

Customs control, based on the application of the Risk Management System, may be automated, manual, or a combination of the two, with preference given to automated and combined customs control. On this basis, author's approach to understanding the essence of the Risk Management System and its place in Customs control is presented.

The scheme of Customs control implementation using Risk Management System is presented in the given research too. At the same time, this article deals with the matters of use of pre-arrival information to provide risk analysis and assessment.

The author recognizes the crucial role of the Risk Management System in the context of Customs violations prevention and ensuring national Customs security. A significant part of the research is devoted to an Automated Risk Analysis and Management System (ARAMS) and its role in Customs control.

The paper also provides an analytical review of key efficiency indicators of the Risk Management System and Customs control. Special attention is paid to the analysis of the selectivity indicators of ARAMS (electronic risk profiles) and their trends.

The analytical review presented also contains data on the structure of proceeding electronic risk profiles, their orientation depending on the direction of movement, as well as the orientation of the proceeding risk profiles towards the certain risk areas.

Finally, the author concludes that an urgent task and a vector of further institutional development of the Ukrainian Customs system in general involves a reasonable balance between the fiscal and law enforcement functions of Customs and Customs control.

Key words: risks in Customs, risk management system, risk profiles, risk indicators, trade liberalization, selectivity, Customs technologies.

Introduction

Together with the dynamic development of Customs control technologies, schemes designed to circumvent such controls have also become more complex as, however, vice versa since these processes are interdependent. The only proper way is to implement principles of risk management in Customs control.

¹ This article is a logical extension of the research which has been published in the World Customs Journal (Komarov 2016) and partially overlaps with it in order to ensure the integrity of perception of submitted information.

² The paper is prepared by the author in his capacity as an expert and does not necessarily reflect the position of his company.

The Risk Management System as any other system has its specific characteristics resulting from the area, goals and objectives of its application. In the field of Customs these are, first, an assurance of selectivity and adequacy of Customs control and second, a limitation to minimum of required Customs formalities.

So, in seeking to achieve an appropriate balance between trade facilitation and regulatory control, Customs must simultaneously manage two risks – the potential failure to facilitate international trade and the potential for noncompliance with Customs laws. The application of risk management principles provides the means of achieving this balance (Widdowson 2005).

Customs control, based on the application of the Risk Management System, may be automated, manual, or a combination of the two, with preference given to automated and combined Customs control (SFS 2012). Combined control includes automated and manual targeting, that is, analysing and estimating risks posed by foreign trade operations and identifying those that should be subjected to additional scrutiny.

Therefore, in our opinion, it is inappropriate to reduce the whole range of activities, carried out under the application of the Risk Management System, exclusively to the use of automated selection of risk situations or to limit Customs control by an outdated approach of total physical inspections.

Accordingly, the Risk Management System can be defined as integrity of managing risks tools through manual, automated and combined Customs control, based on the principle of selectivity within the inspections required to ensure compliance with Customs law.

Thus, there is a need for constant improvement of existing and development of new tools and techniques of risk management to improve the effectiveness and ensure the selectivity of Customs controls based on the application of the Risk Management System.

1. Key principles of Customs control implementation and application of the Risk Management System³

Risk management is the activities performed by the Customs authorities to analyze, identify and assess risks, develop and take actions aimed at mitigating risks, assess their efficiency and follow up their application. The Customs authorities shall apply the Risk Management System to identify goods, means of transport, documents and persons that are subject to Customs supervision.

The Risk Management System control shall comprise risk assessment by analysing, including through information technology, documents submitted when particular goods, means of transport for commercial use are moving across the Customs border of Ukraine to select the form and scope of Customs supervision, sufficient to ensure that the requirements of the Customs laws of Ukraine are met (Code 2012).

Customs control, based on the application of the Risk Management System, provides for the use of the Automated Risk Analysis and Management System (ARAMS), which is integrated into the Automated System of Customs Clearance (ASCC) "Inspector" (Figure 1). They both have been developed by the Ukrainian Customs.

However, ARAMS is not an artificial intellect, it is just one of the mechanisms for decision-making within Customs control. The ARAMS provides automated data comparison within particular cross border transactions, matching them with programmed algorithms of verifying (that is, electronic risk profiles).

³ Complex characteristic of the Risk Management System is contained in the research in Berezhnuk, I.G. (Ed.) 2014, *Risk management in Customs: Foreign Experience and Domestic Practice*, Khmelnytski: P.P. Mel'nik, pp. 228 (in Ukrainian)

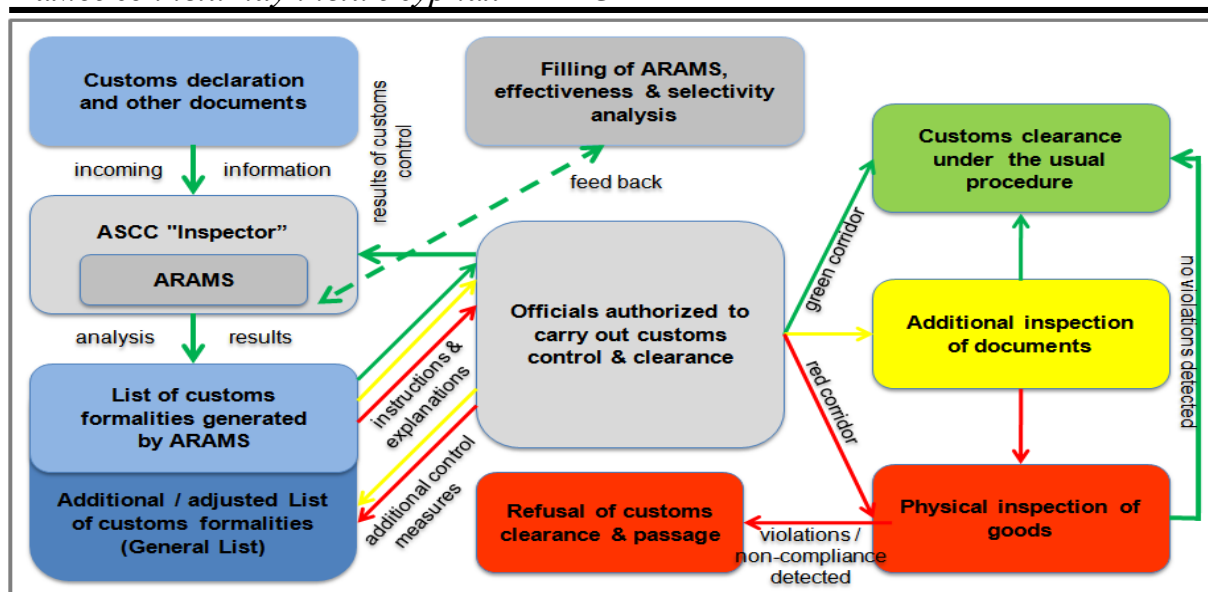


Figure.1. Scheme of Customs control implemented by the Ukrainian Customs administration⁴

Indicators of risk, their combinations and values are put in a particular risk profile to ensure its selectivity. As one of the tools of risk management, they play a key role in determining the degree of risk. The values of specific risk indicators and their processing algorithms are confidential information for official use only.

Moreover, the values of risk indicators and their processing algorithms of the central risk profiles are not known to officials of regional Customs authorities too. This has been done to prevent them from being disclosed by unscrupulous customs officials and also in order to eliminate any manipulation during customs declaring procedure.

Speaking of automated risk management systems, we should clearly understand that these systems are able to analyze the information only in electronic form. ARAMS signals about possible non-compliance of the Customs law according to the results of automated analysis and assessment of risk. ARAMS generates the list of Customs formalities (forms of Customs control), which contains explanatory notes for the inspector concerning the aim of each type of control.

In particular, there are the following types of Customs procedures: mandatory, mandatory upon condition and in case of necessity. In addition to specific forms of Customs control, the list of Customs formalities can also determine the required scope of such Customs control according to the results of the Risk Management System application.

Based on the results produced by the Risk Management System, the examination of goods, means of transport for commercial use may be: (i) identifiable, i.e. without opening shipping units or inspecting means of transport, (ii) partial, i.e. with opening 20% of shipping units, (iii) selective inspection of means of transport, and (iv) full-scope, i.e. with opening up to 100% of shipping units and thoroughly inspecting means of transport (Code 2012).

Also there is an opportunity of supplementation or adjustment of the list of Customs formalities formed by ARAMS. The system provides an opportunity to amend the list of

⁴ The scheme is prepared on the basis of information, prepared on the implementation of PRINEX Project, *Assessment of trade flows and smuggling of goods across Belarus-Ukraine border at the end of PRINEX Project implementation*

Customs formalities based on the use of other risk management tools such as lists of documentary risk indicators, alerts, and so on.

This approach is intended to provide more precise targeting at the risk both on the basis of the results produced by ARAMS and also on the basis of additional analysis and risk assessment directly by Customs officials. This does not mean that the Customs authorities are free to make decisions at their own discretion. The procedures for such decision-making are regulated in detail.

There is also a possibility that the list of Customs formalities may not contain specific Customs formalities that are to be performed. In some cases, risk profiles can generate only informational messages for a Customs official. These messages contain information about the potential risk and possible measures to identify it.

2. Analytical overview of the customs control and Risk Management System effectiveness

2.1. Analysis of ARAMS selectivity indicators and their evolution

Information about the completing of Customs formalities generated by ARAMS is passed to the feedback database. Feedback database of ARAMS is used to analyze the efficiency of application of this system by Customs, assess selectivity and make appropriate adjustments and modifications.

The key indicator here is the selectivity (Figure 2). Selectivity of the risk profile is its indicator, which quantifies its selective ability (the numerical value from 0 to 100 that indicates the percentage of Customs processing). The risk profile makes it possible to select this percentage from the total number of Customs processing (SFS 2015).

Thus, 100 per cent of Customs declarations undergo primary inspection using ARAMS and only those which present a certain degree of risk are required to be physically inspected. Ideally, it is assumed that this rate should fluctuate around 5 per cent (Figure 3).

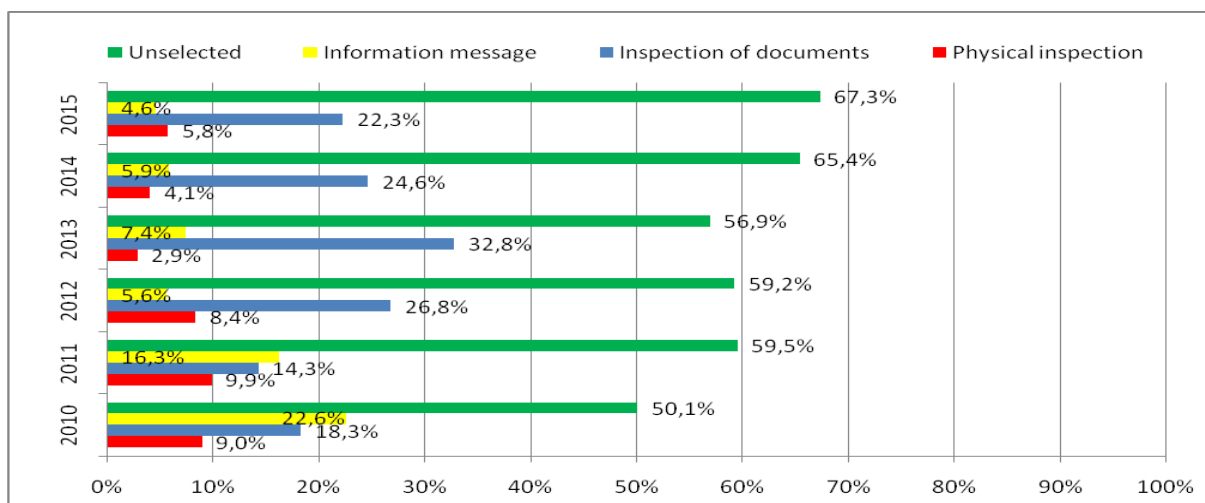


Figure 2. Selectivity of ARAMS (IM / EX / TR)

Accordingly, the hostile perception of the Risk Management System as a mechanism for stopping risky transactions by the individual entities engaged in foreign economic activities does not meet the purpose of its application, which is to ensure the selectivity of Customs controls.

We can see that there is a significant excess of the limit value of selectivity in 2010-2012. This may be due to the implementation of a number of new electronic risk profiles into ARAMS, including the frame risk profiles, as well as the introduction of new modules of ARAMS at the border crossing points (CBPs).

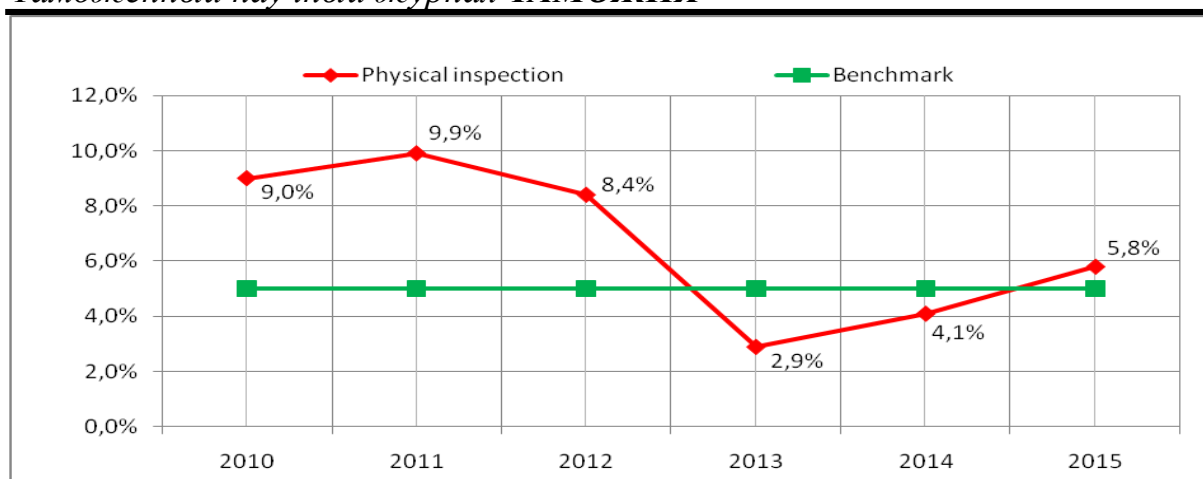


Figure 3. Selectivity of ARAMS in the part of Customs inspection generating

The precipitation of selectivity indicators of risk profiles in 2013 was the result of organizational changes in the structures of public authorities.⁵ During this period, the Risk Management System was to be adapted to the new Customs Code of Ukraine and to the laws of Customs regulation adopted to implement this Code.

As follows from the above data, the application of the Risk Management System today ensures compliance with benchmark selectivity. However, these figures are based on the joined data without regard to the direction of movement across the border. As reflected by the following data, this correcting factor changes significantly the indicators of selectivity (Figures 4-5).

When analysing the selectivity of ARAMS all three indicators (information message, inspection of documents and physical inspection) are analysed, which are generated by the electronic risk profiles. However, the general selectivity parameter does not include information messages (Figure 5).

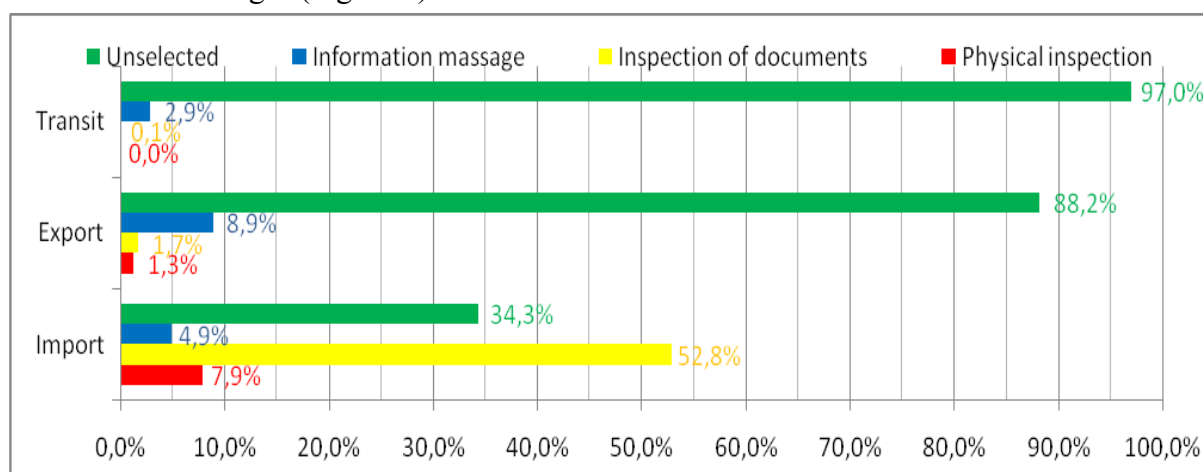


Figure 4. Selectivity of ARAMS (IM / EX / TR) in 2014

2.2. Analysis of foreign economic activity and fiscal paradox

The analysis showed a significant difference between the corresponding indicators depending on the direction of movement. What are the reasons of such discrepancy? We

⁵ Customs authorities and Taxation authorities were merged into a single Ministry of Revenues and Duties of Ukraine which was later reorganized into the State Fiscal Service of Ukraine.

assume that non-fiscal factors, namely, national security protection have a significant influence. Most of the risk profiles are targeted at import transactions accordingly (Figure 6).

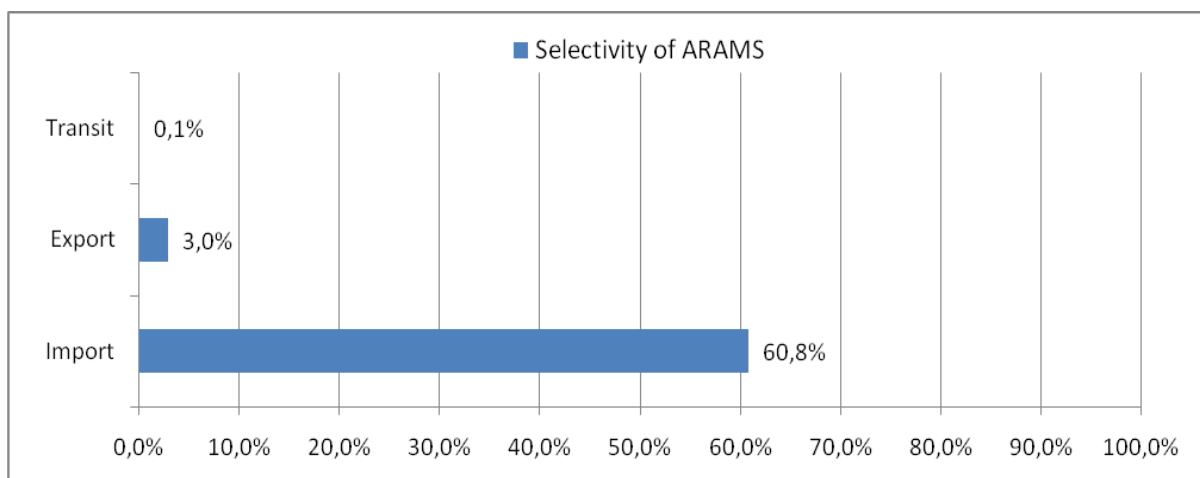


Figure 5. Selectivity of ARAMS (IM / EK/ TR) in 2014

However, we are far from thinking that it is non-fiscal factors that change fundamentally the structure of certain indicators. We suppose that discrepancy identified is attributable primarily to the fiscal factors, namely, the provision of revenue.

One of the State Fiscal Service of Ukraine priorities today is unconditional achievement of targets of the state budget filling as long as the State Fiscal Service of Ukraine provides the largest portion of revenues of the Consolidated Budget of Ukraine.

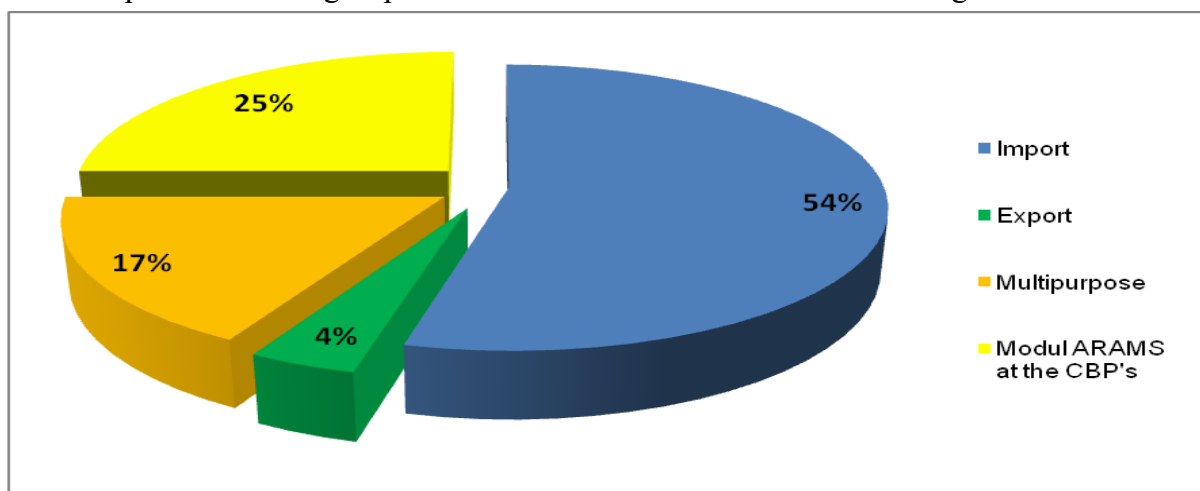


Figure 6. Direction of current risk profiles

At the same time, the payments provided by the State Fiscal Service of Ukraine in 2015 are 83.5% of the Consolidated Budget of Ukraine.⁶ The particularly notable and common feature of the financial system of Ukraine is the ratio of state budget revenues provided by the Customs authorities and tax authorities (Figure 7).

It should be noted that the State Fiscal Service of Ukraine claimed that in 2015 the amount of payments to the state budget has grown by 44.8% since 2014. At the same time, the number of payments to the state budget, provided by tax authorities and Customs

⁶ According to the figures from the report on implementation of the work-plan of the State Fiscal Service of Ukraine in 2015

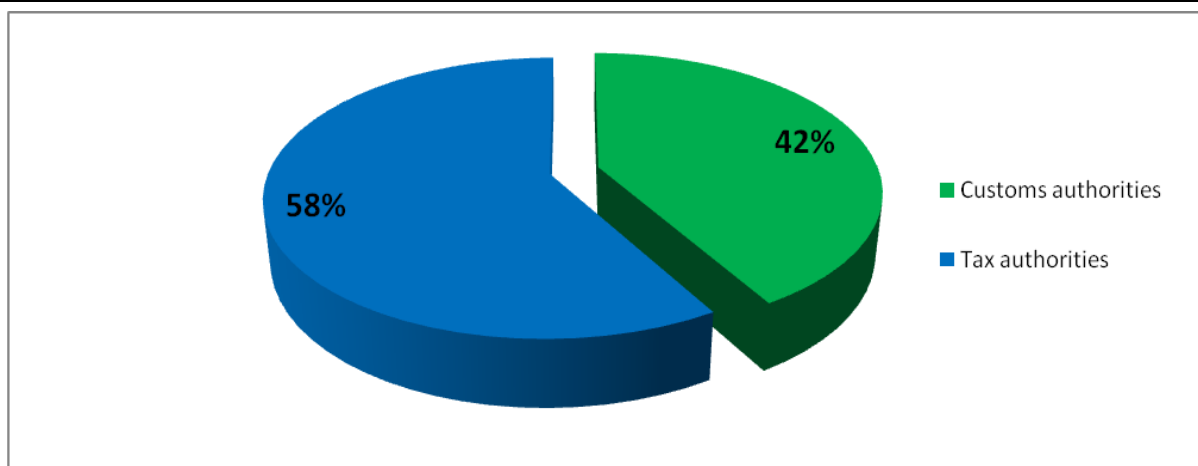


Figure 7. Sources of the State Fiscal Service payments to the state budget of Ukraine in 2015⁷

authorities during relative period of time, has increased by 46.1% and 68.1% respectively.⁸ It is a paradox, but all this happened against the background of downward trends in goods turnover of Ukraine and its decrease almost by one third in 2015 in comparison to 2014 (Figure 8).

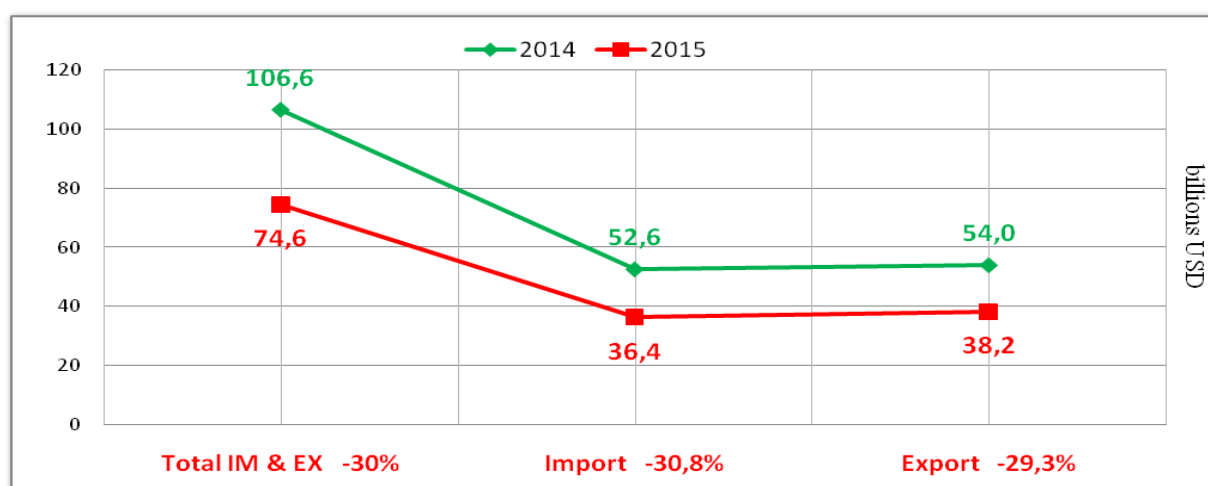


Figure 8. Goods turnover trends in Ukraine during 2014-2015⁹

Indeed, such a significant revenue growth against the background of goods turnover decline is partially related to the modernization of the Customs control technologies. However, it should be noted that it is only partially. The key factor is the devaluation of the national currency (Figure 9).

At the same time, Customs regulation and public administration in the field of Customs to a large extent is still performed manually with the predominant use of

⁷ Prepared by the author on the basis of figures from the Report on implementation of the working plan of the State Fiscal Service of Ukraine in 2015

⁸ According to figures from the Report on implementation of the working plan of the State Fiscal Service of Ukraine in 2015

⁹ Prepared by the author on the basis of figures from the Report on implementation of the working plan of the State Fiscal Service of Ukraine in 2015

administrative tools. There is a clear tendency towards an increase of the fiscal function of Customs (Figures 10 and 11).

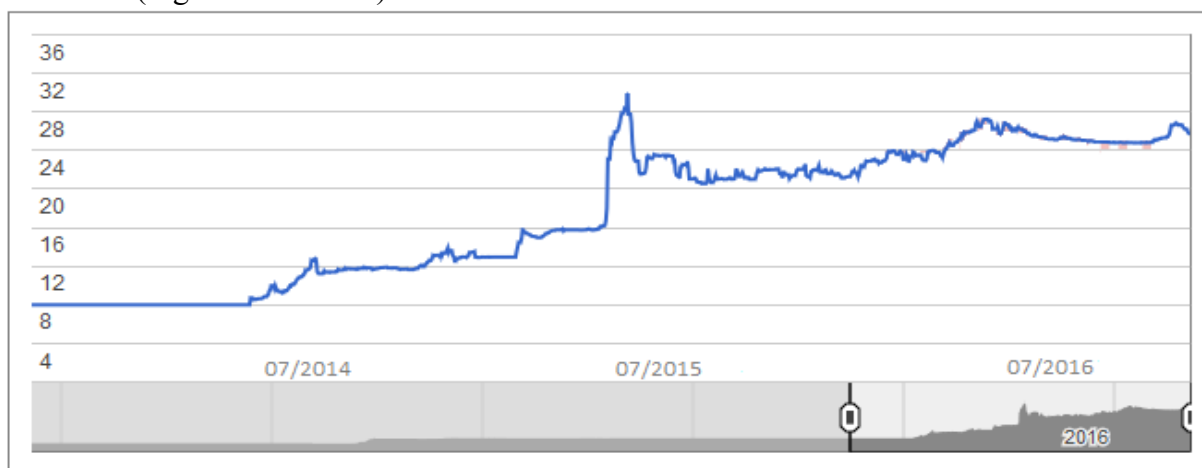


Figure 9. UAH / USD currency pair trends (National Bank of Ukraine)¹⁰

Based on the data represented, we can see that the number of Customs revenues to the state budget of Ukraine has increased for the first half of 2016 almost by 20% against the same period of 2015 and by 115% against that of 2014.

Unfortunately, Customs role in the national security system is reducing more and more.

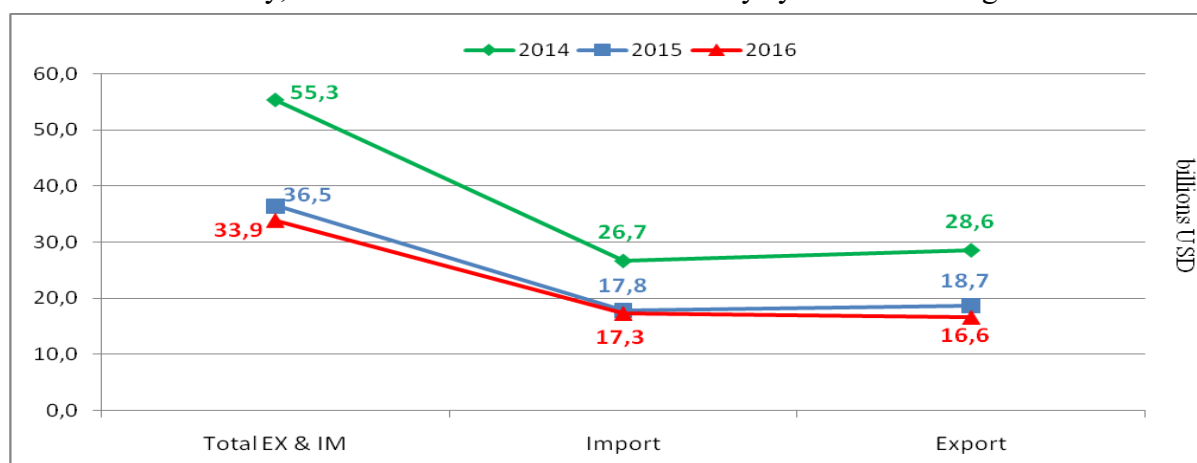


Figure 10. Goods turnover trends of Ukraine over 6 months within 2014-2016¹¹

It is inadequate that while providing almost a half of all budgetary revenues, Customs still increasingly resembles "a shadow that disappears at sunset".¹² The same applies to the functional autonomy of the Customs system.

Along with the most important task to ensure a reasonable balance between trade facilitation and regulatory control, one more issue becomes urgent. The essence of this issue lies in achievement of a reasonable balance between fiscal and law enforcement functions of Customs authorities and Customs control in general.

¹⁰ Source: <http://minfin.com.ua>

¹¹ Prepared by the author on the basis of the State Fiscal Service of Ukraine official data

¹² According to the official data, the number of Customs officers accounts for less than one quarter of the State Fiscal Service of Ukraine staff number. At the same time only three departments of the existing 23 within the Central Office of the State Fiscal Service of Ukraine are functionally in charge of Customs affairs

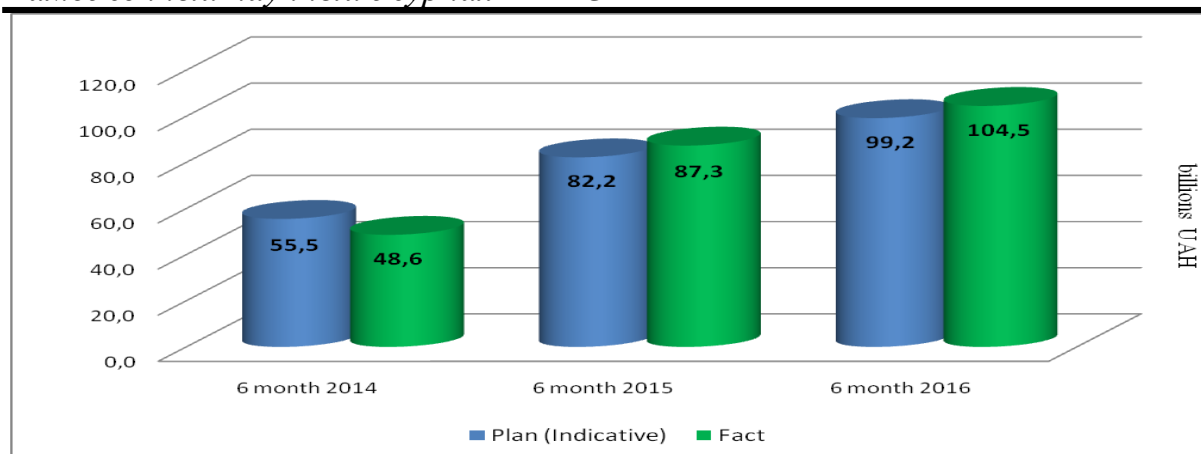


Figure 11. Trends in receipt of customs payments in the general fund of budget of UA¹³

3. Customs control and pre-arrival information

Today, the scope of ARAMS encompasses the key areas of risk (mainly of a fiscal nature), which include such elements as control over accuracy of determination of Customs value, classification, origin of goods, declaration authenticity, non-tariff regulation, etc (Figure 12).

We also believe that the fact that most of risk profiles are oriented exactly toward import transactions (Figure 6) is absolutely logical and natural. Under no circumstances we can consider this fact to be a Risk Management System disadvantage.

It should be noted that the number of risk profiles is rather conditional. Some profiles relate to a very narrow range of issues and are applied only to one or two type of goods, but the others focus on the whole control and risk areas and contain indicator values of thousands types of goods (in Berezhnuk (Ed.) 2014).

It should also be noted that the ARAMS modules provide monthly an automated risk assessment of approximately 200 thousand Customs declarations, 290 thousand commercial operations and 1.26 billion movements of passenger vehicles at the land border crossing points.

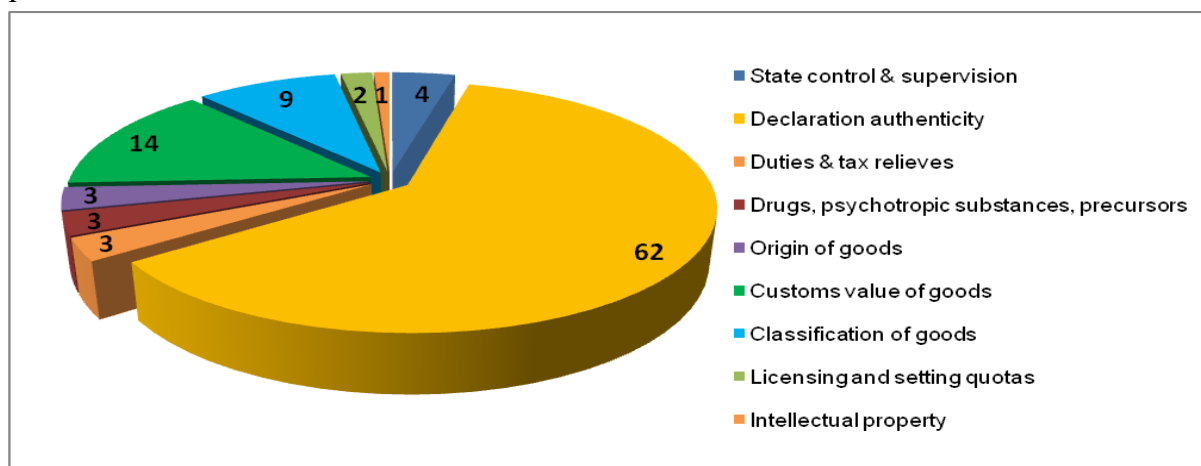


Figure 12. Structure of the risk profiles considering risk areas

¹³ Prepared by the author on the basis of the State Fiscal Service of Ukraine official data

Now more than 100 algorithms of risk assessment (risk profiles) and more than 400 subalgorithms within existing algorithms are applied to three operational modules of ARAMS. Also more than 80 000 combinations of risk indicators and a significant number of so-called “alerts”, made on the basis of operating data, are applied (Demchenko 2016).

One of the most important tasks is that ASARM should focus on risk that has not been covered by the system yet. The functionality of ASARM is supposed to expand in order to strengthen the institutional ability of the Risk Management System. In particular, this is the assurance of risk analysis and risk assessment based on the pre-arrival information.

In accordance with international practice, it is assumed that Customs at borders should mainly carry out safety risk analysis. Such risks include movement of prohibited or restricted goods. This also involves transactions with the risk of non-delivery of goods to the Customs office of destination (arrival), their loss, substitution, etc.

According to the Customs legislation, in case of importation of the goods into the Customs territory of Ukraine the declarant or the person authorised by him shall give a prior notice to the Customs authority, in whose operation area the goods are presented, of the intention to import those goods, in particular, by submitting an advance Customs declaration. An advance Customs declaration is submitted for the purpose of risk analysis and Customs procedures facilitation (Code 2012).

Today, the mechanism of information exchange between border and internal Customs authorities for mutual information exchange on the results of risk analysis and assessment is implemented technically. This is achieved also through the use of a special ARAMS modules designed for the analysis of the information contained in the advance Customs declaration.

In future, a mechanism allowing cross-border Customs authorities to generate additional Customs formalities for Customs clearance at the Customs offices of destination (arrival) is expected to be implemented. Such additional forms of control will be binding for the Customs they are delegated to.

At the same time, the implementation of the mirror mechanism should be provided too. This will enable internal Customs authorities, where advance Customs declarations are submitted, to generate additional Customs formalities to be completed at the crossing points of Customs authorities at the border within the scope of Customs control.

System of pre-arrival informing is also an essential tool, which provides for the submission of entry summary declaration (ENS) to Customs authorities before the arrival of goods into the state Customs territory.

ENS analysis is carried out primarily to ensure implementation of protection measures for national security, life and health, animals, plants, environment, consumer interests to guarantee the security risks identification. Implementation of an appropriate mechanism will allow unifying and harmonizing the national system of Customs control including risk management in accordance with the international and European practice.

Summary and concluding remarks

In trying to achieve the proper balance between trade facilitation and sufficient level of Customs control, customs authorities have to implement modern mechanisms to safeguard Customs interests and security. The Risk Management System is one of the most effective mechanisms to achieve the goals of Customs authorities.

The Risk Management System is an effective mechanism aimed at safeguarding the interests of all participants of Customs legal relations – both Customs authorities and the state in general and foreign-economic activity participants. This conforms to the general trends, principles and standards of modern Customs control technologies.

The Risk Management System replaces total control and becomes a new evolutionary stage in the development of Customs control technologies. Therefore, sometimes hostile

perception by individual entities engaged in foreign economic activity of the Risk Management System as a mechanism for prohibiting risk transactions does not correspond to the goals of its application.

The true objectives of the application of the Risk Management System are, firstly, to ensure the selectivity of Customs control and limitation of Customs formalities to the minimum, secondly, but not on a second-priority basis, to ensure the adequacy of Customs control in order to guarantee national security including economic one.

The research results indicate a growing takeover of the Customs by “the fiscal monster”. Existing status, competence and resources do not allow Customs to take its proper place in the national security system. In contrast to the law enforcement function as a priority one, Customs has a greater fiscal function to perform, which should be secondary one.

In this context, in the author’s opinion, it is reasonable to look back the history of Customs affairs. “Neither civil, nor military officials had never had authority in Customs affairs. Only people who worked in the field of Customs could serve as Customs officials since Customs service requires only experienced, loyal and reliable officials”.¹⁴

However, the author would like to finish on an optimistic note. The Risk Management System created and modernized by the Central Customs Office is equal to foreign analogues and often even exceeds them in many points. Despite the scarce resources, Customs technologies are being modernized according to challenges of the time and realities of commercial practice.

While being quite flexible and adaptive, the Risk Management System reacts to relevant challenges and changes priorities a little while focusing more on security risk that has not been covered by ARAMS. The author believes that the main task and further institutional development direction include achievement of a reasonable balance between fiscal and law enforcement functions of Customs authorities and Customs control on the whole.

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