

MODELS FOR ANALYSIS OF THE IMPORT OF GOODS BASED ON ACCOUNTING INFORMATION

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Abstract: Accounting information has an extremely important role in carrying out the analysis of the import activities of the enterprises in the contemporary global business environment. This analysis is a key prerequisite for effective management of import transactions and needs to be provided with detailed information through a rationally organized system for analytical accounting.

This scientific paper examines approaches for effective use of accounting information for the purposes of detailed analysis and overall management of the import activities of the enterprises engaged in international trade. It explores the problems of providing accounting information for detailed analysis of the import transactions. Specific models for improving the methodology and organization of analysis of import of goods based on accounting information are proposed. A special attention is paid to approaches for analyzing the final profit from transactions for supply of goods from abroad and their sales on domestic market in the country. They provide the opportunity for precise assessment of the profit from each import transaction, taking into account the influence of changes in exchange rates during its implementation.

The research of the problems in the scientific paper is based on the use of the systematic approach. In accordance with it, the detailed analysis of the import activities is considered as a composite element of the overall analysis system of the enterprise engaged in foreign trade. The methodology of research also involves the methods of comparison, analogy, induction and deduction, factor modelling method, method of detailing, etc.

Every enterprise engaged in import activities strives to minimize the costs for the supply of the goods from abroad. For this reason, one of the priority aspects of the analytical studies of the import activities is the analysis of the costs for import and the factors that influence them.

The forecast calculations for the profit from the import transactions are performed before the decisions are made for their realization. In the process of analysis, the predicted data is compared with the actual reported data for the import operations. The same approach can be applied in the analysis based on accounting information for import activities relating to two different reporting periods.

The profit from the sales of imported goods on the Bulgarian market is a significant criterion for assessing the import activities. Therefore, the detailed analysis of this indicator is particularly important for Bulgarian enterprises engaged in international trade. An essential prerequisite for achieving the effectiveness of analytical work is the proper determination of the direct factors affecting profit and the dependence between them.

When analyzing the final profit of transactions for supply of goods from abroad and their sales on domestic market in the country, the differences due to exchange rate fluctuation during the import must undoubtedly be taken into account.

Foreign exchange gains and losses have an enormous influence on the financial results of enterprises carrying out foreign trade operations, on the value of a number of significant indicators for business analysis. All this makes the problems related to accounting the effects of exchange rates fluctuation during import transactions extremely important and topical.

Keywords: import of goods, accounting information, analysis.

1. INTRODUCTION

Accounting information has an extremely important role in carrying out the analysis of the import activities of the enterprises in the contemporary global business environment. This analysis is a key prerequisite for effective management of import transactions and needs to be provided with detailed information through a rationally organized system for analytical accounting.

This scientific paper examines approaches for effective use of accounting information for the purposes of detailed analysis and overall management of the import activities of the enterprises engaged in international trade. It explores the problems of providing accounting information for detailed analysis of the import transactions. Specific models for improving the methodology and organization of analysis of import of goods based on accounting information are proposed. A special attention is paid to approaches for analyzing the final profit from transactions for supply of goods from abroad and their sales on domestic market in the country. They provide the opportunity for precise assessment of the profit from each import transaction, taking into account the influence of changes in exchange rates during its implementation.

2. MATERIALS AND METHODS

The research of the problems in the scientific paper is based on the use of the systematic approach. In accordance with it, the detailed analysis of the import activities is considered as a composite element of the overall analysis system of the enterprise engaged in foreign trade. The methodology of research also involves the methods of comparison, analogy, induction and deduction, factor modelling method, method of detailing, etc.

The method of detailing is used in parallel with the method of deduction in the analysis of the import activities of the enterprises. It is related to disaggregation of the complex indicators and the factors affecting them. Through the method of detailing “the single influence of the behavior of the individual components of the system on the behavior of the system as a whole is measured” (Timchev, 1999, p.20). The proposed concrete models for factor analysis allow the identification and evaluation of the impact of the individual direct factors on the dynamics of the profit from transactions for supply of goods from abroad and sales of these goods in the country. The direct factors “have immediate effect on the formation of profit dynamics as a resultative indicator and such effect may be quantified” (Chukov, 2019, p.33).

3. RESULTS AND DISCUSSIONS

The forecast calculations for the profit from the import transactions are performed before the decisions are made for their realization. In the process of analysis, the predicted data is compared with the actual reported data for the import operations. The same approach can be applied in the analysis based on accounting information for import activities relating to two different reporting periods. The technological cycle of the development of a foreign trade transaction “is essentially a process of managerial decision-making for concluding the transaction and its execution” (Karakasheva, 2009, p.35). The foreign trade transaction, considered from a management aspect, can be defined “as a type of management technology and a type of management decision” (Boeva, et al., 1991, p.230).

Every enterprise engaged in import activities strives to minimize the costs for the supply of the goods from abroad. For this reason, one of the priority aspects of the analytical studies of the import activities is the analysis of the costs for import and the factors that influence them. The level of business costs is “an important parameter of the company performance” (Danailov, 2012, p. 115) and it is “always analyzed and managed on the basis of certain criteria” (Danailov, 2012, p. 115).

From the position of accounting, the supply value of goods purchased from abroad includes their purchase value and costs directly related to the supply. The deliveries of imported goods “are a typical example of deliveries, which by rule are continuous processes and the supply value of the goods is formed by way of inclusion therein of a number of various constituent elements” (Staneva, Petrova, et al., 2018, p.288). Of essential importance is to analyze precisely the constituent elements of the supply value of the imported goods. In the process of analysis, it is necessary to achieve comparability of the numerical data for import transactions. This means that all data must be either in foreign currency units or in Bulgarian levs equivalent. The realization of import transactions is related not only to costs in foreign currency but also to those that are paid in Bulgarian levs. For analysis purposes, all data may be convert from foreign currency into Bulgarian levs equivalent or vice versa by using relevant exchange rates.

In order to analyze the relationship between the supply value of imported goods and the direct factors affecting it, we propose the following analytical model:

$$SVG = QG \cdot (PPG + SCG),$$

where:

SVG - supply value of imported goods;

QG - quantity of imported goods;

PPG - purchase price of imported goods (per unit);

SCG - supply costs of imported goods (per unit).

The dependence expressed through the presented model allows in the analysis to establish and evaluate the influence of the direct factors on the deviation between the actual and the forecast supply value of imported goods. The analysis of the supply costs can be detailed within the additional factors that form it - the different types of costs such as transport costs, insurance costs, etc.

In the implementation of the import transactions, there is usually a difference between the moment of accrual of the costs for import in currency and the moment of their actual payment in cash. For this reason, exchange rate differences occur, which are recorded in the account “Losses from foreign exchange operations” and account “Gains from foreign exchange operations”. To these accounts appropriate sub-accounts can be created - “Losses from foreign exchange operations upon import” and “Gains from foreign exchange operations upon import”. It is of particular significance to analyze the difference between the supply value of the goods in Bulgarian levs equivalent and the Bulgarian levs equivalent of the currency of the enterprise actually spent for its payment. The supply value of the imported goods in Bulgarian levs equivalent is recorded on the debit side of the sub-account “Imported

goods”. This Bulgarian levs equivalent is formed, as the central exchange rate of the Bulgarian National Bank for the day of import invoice is used to record the purchase price of the goods. For the supply costs is applied the central exchange rate of the Bulgarian National Bank valid for the day of their accrual. The Bulgarian levs equivalent of the used foreign currency funds is determined on the basis of the central exchange rates of the Bulgarian National Bank for the days of payment of the purchase price and other costs for import.

The following model for analysis can be applied in analyzing the effects of changes in exchange rates during supply of goods from abroad:

$$SVG = QG \cdot [(PPG \times ER_{PPG}) + (TCI \times ER_{TCI}) + (ICI \times ER_{ICI})],$$

where:

SVG - supply value of goods from abroad;

QG - quantity of goods from abroad;

PPG - purchase price of goods from abroad (per unit);

TCI - transport costs for import (per unit);

ICI - insurance costs for import (per unit);

ER_{PPG} - exchange rate for formation of the Bulgarian levs equivalent of purchase price;

ER_{TCI} - exchange rate for formation of the Bulgarian levs equivalent of the transport costs for import;

ER_{ICI} - exchange rate for formation of the Bulgarian levs equivalent of the insurance costs for import.

Applying this model enables important conclusions and assessments relating to the influence of exchange rate differences between the moments of accrual of the costs for import and the moments of their actual payment.

The account "Losses from foreign exchange operations" and the account "Gains from foreign exchange operations" are used to generate accounting information for exchange rate differences arising upon foreign currency transactions during the accounting period and upon restatement of foreign currency assets and liabilities at the date of preparation of financial statements of the enterprise. According to the criterion of information purpose and structure, these accounts are operational. Losses and gains reported with them are included in the financial result of the enterprise for the current year. The account "Losses from foreign exchange operations" is debited with the amount of the negative exchange rate differences. It is credited for closing against debiting the account "Profit and loss for the current year". The account "Gains from foreign exchange operations" is credited with the amount of the positive exchange rate differences and is debited for closing in correspondence with account "Profit and loss for the current year".

The accounting of business operations from which negative and positive exchange rate differences arise in Bulgarian enterprises is carried out in compliance with the requirements regulated by National Accounting Standard 21 - The Effects of Changes in Foreign Exchange Rates, resp. International Accounting Standard (IAS) 21 - The Effects of Changes in Foreign Exchange Rates. Particularly important in this case are the requirements relating to the valuation of cash items in foreign currency and the recognition of exchange rate differences. Cash items of an enterprise include cash in hand, as well as all other assets and liabilities to be received or paid in fixed or determinable cash amounts. Cash items are currently valued at the central exchange rate of the Bulgarian National Bank, and in the annual financial statements and in the interim financial statements - at the closing exchange rate. The closing exchange rate is the central exchange rate of the Bulgarian National Bank on the date as of which the financial statements have been prepared. The restatement of cash items must be performed as of the date of each preparation of financial statements. Exchange rate differences are recognized when there is a change in the foreign exchange rate between the date of the foreign currency transaction and the date of its payment, as well as when as of the date of the financial statements the cash items are measured at a foreign exchange rate different from the one at which they have been reported. Exchange rate differences arising upon settlement of cash items or upon accounting of cash items at foreign exchange rates different from those at which they have been originally recorded or reported in previous financial statements shall be reported as current financial costs or current financial revenues for the period of their occurrence (except in some cases involving net investment in a foreign enterprise). The rules for reporting foreign currency transactions, regulated by International Accounting Standard 21 and National Accounting Standard 21 correspond to the method applied according to Generally Accepted Accounting Principles (United States) for reporting these transactions, known as "the two-transaction method" (Choi&Meek, 2014, p.179). According to this method, the initial recognition of foreign currency transaction and the settlement of payments on it are treated as two separate transactions. As a result of the fact that "there is a difference between the transaction date and the date of settling the payments thereon, account relationships emerge - receivables and payables in foreign currencies" (Milanova, Petrova, et al., 2018, p.369).

In accordance with the above requirements, foreign exchange losses and gains may arise upon settlement of payments on foreign currency operations, i.e. upon receipt of amounts on foreign currency receivables and upon payment of existing foreign currency payables. The receivables and the payables arising from foreign currency

operations are recorded in the relevant accounts applying the central exchange rate of the Bulgarian National Bank on the date of documenting the transaction from which they have arisen.

Upon payment of an existing foreign currency payable, its Bulgarian levs equivalent at the reporting exchange rate is compared with the Bulgarian levs equivalent of the currency spent for this purpose, calculated at the central exchange rate of the Bulgarian National Bank on the date. The reporting exchange rate of the payable is the central exchange rate of the Bulgarian National Bank at the time of its occurrence or at the time of its latest restatement (if restated). When the exchange rate at which the currency spent is measured is higher than the reporting exchange rate of the payable, a negative exchange rate difference occurs. The account reflecting the foreign currency payable is debited, the account "Losses from foreign exchange operations" is debited, and the account "Current account in foreign currency" is credited. Upon payment of foreign currency payables, a positive exchange rate difference arises when the Bulgarian levs equivalent of the payable determined at its reporting exchange rate is greater than the Bulgarian levs equivalent of the currency used to pay it, determined at the central exchange rate of the Bulgarian National Bank on the date of payment. In such a foreign currency operation, the account for the respective foreign currency payable is debited, and the accounts "Current account in foreign currency" and "Gains from foreign exchange operations" are credited.

In case of restatement of foreign currency payables as of the date of the financial statements, a negative exchange rate difference is reported when the closing exchange rate is higher than their reporting exchange rate, as this leads to an increase in their Bulgarian levs equivalent. The amount of the restatement is debited to the account "Losses from foreign exchange operations" against crediting of the accounts for the respective foreign currency payables, which are restated. When the closing exchange rate is lower than the reporting exchange rate of the payables, a positive exchange rate difference arises, as this is associated with a decrease in their Bulgarian levs equivalent. Accounts reporting foreign currency payables are debited, and the account "Gains from foreign exchange operations" is credited.

Foreign exchange gains and losses have an enormous influence on the financial results of enterprises carrying out international trade transactions, on the value of a number of significant indicators for business analysis. All this makes the problems related to accounting the effects of exchange rates fluctuation during import transactions extremely important and topical. In the contemporary conditions "the international trade transactions, part of which is the import of goods, occupy an important place in the trade relations of the Republic of Bulgaria" (Pancheva, 2020, p.92).

The profit from the sales of imported goods on the Bulgarian market is a significant criterion for assessing the import activities. Therefore, the detailed analysis of this indicator is particularly important for the Bulgarian enterprises engaged in international trade. An essential prerequisite for achieving the effectiveness of analytical work is the proper determination of the direct factors affecting profit and the dependence between them. In order to ensure comparability of data it is necessary to use entirely the numerical data in Bulgarian levs equivalent for import transactions.

The direct factors that influence the formation of profit from transactions for supply of goods from abroad and their sales on domestic market in the country are:

- quantity of imported goods, sold on the domestic market;
- selling price of goods (per unit);
- supply price of goods (per unit);
- selling costs of goods (per unit).

The relationship between these direct factors can be determined by the following formula:

$$PSIG = QGS \cdot (SPG - SPIG - SCIG),$$

where:

PSIG - profit from sales of imported goods on the Bulgarian market;

QGS - quantity of imported goods, sold on the Bulgarian market;

SPG - selling price of goods (per unit);

SPIG - supply price of imported goods (per unit);

SCIG - selling costs for imported goods (per unit).

On the basis of this model the impact of direct factors on the dynamics of the profit from transactions for supply of goods from abroad and sales of these goods in the country can be assessed. The model can be used to make comparisons between the actual and the planned profit from import activities and in the analysis based on accounting information for import activities relating to two different reporting periods. The most significant accounting information for analysis of profit from the sales of goods purchased from abroad on the Bulgarian market is in sub-account "Revenue from sales of imported goods" and the analytical accounts related to it.

A key issue regarding organization of the analytical accounting system of enterprises engaged in import activities is to create information for a credible final financial result of the transactions for import of goods. "Particular attention in the modern organization of accounting is given to the formation of an actual financial result for the reporting period" (Nacheva, 2018, p. 204). When analyzing the final profit of the transactions for supply of goods from abroad and their sales on the Bulgarian market, the exchange rate differences during the import recorded in sub-accounts "Losses from foreign exchange operations upon import" and "Gains from foreign exchange operations upon import" must undoubtedly be taken into account. A sub-account "Profit and loss from sales of imported goods" may be opened to the synthetic account "Profit and loss for the current year", which is intended to provide information for the final financial result of the transactions for the supply of goods from abroad and the sales on domestic market. In addition to the financial result established under the sub-account "Revenue from sales of imported goods", the foreign exchange gains and losses upon import will also be reported. The sub-accounts "Losses from foreign exchange operations upon import" and "Gains from foreign exchange operations upon import" are closed with the sub-account "Profit and loss from sales of imported goods" and from the latter can be determine the overall impact of foreign exchange gains and losses related to import on the financial result. Such an organization of accounting makes it possible to determine the final profit of transactions for supply of goods from abroad and the sales of these goods on domestic market in the country, taking into account the impact of foreign exchange rate differences that have arisen during import. This is undoubtedly of utmost significance for the enterprises engaged in international trade operations.

Further detailing of the analysis of profit of the transactions for the supply of imported goods and their sale on the Bulgarian market in terms of the structure of goods, the constituent elements of the supply value of imported goods and the various costs for their sales, the territorial focus of imports and tracking the behavior of their main determinants can be done on the basis of the detailed information provided by the analytical accounting system.

4. CONCLUSIONS

The models proposed in this scientific paper make it possible to carry out analytical studies of import activities in the following important aspects:

- analyzing the supply value of the imported goods and its determining factors;
- analyzing the profit from transactions for the supply of goods from abroad and their sales on the domestic market in the country and the direct factors influencing this indicator;
- analyzing the effects of exchange rate fluctuation related to the implementation of import transactions.

Through the presented approaches for analysis the aim is to achieve a higher degree of adequacy between the models for creating accounting information and the models for analyzing the import activities. They can be used in the practice of enterprises in the processes of analysis and management of individual import transactions and of their overall import activities.

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