

## Role of Customs Duties in the Formation of Budget Revenues

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*Accession to the European Union, starting price and trade exchange liberalization, alongside a strong exchange rate reform, required a depth rethinking of the customs duty system and also influenced the role of this category of tax in establishing budgetary resources.*

*This study reviews the impact of customs duties on changing levels of revenues collected at the state budget. The analysis used is the econometric modeling based on a single-factor regression model.*

*But in Romania, customs duties do not have any major impact on budget revenues and the effects of their collection on the state budget revenues are felt within two months of collection.*

**Keywords:** *custom duties, budget revenues, tax revenues*

**Jel classification:** *B22; E62; F62; G01; H26.*

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### Introduction

Tax levies, as the main form of attracting financial resources available to the State cause large changes in the economic and social life and are under the form of micro and macroeconomic effects. More specifically, the effects of taxation reveal “repercussions and changes that the introduction of a new tax levy ( or an increase in the tax rate to an already existing compulsory levy) cause upon the economic balance of a single subject or upon the general

economic balance". Tax effects are numerous and very complex, their most important characteristics regarding: the nature of the effects, action extent, locating and evaluating acquired amplitudes, as well as use of consequences in the economic and social policies.

Determined by the constraint exerted by the direct and indirect taxes, tax effects are manifested not only in the economic domain, but also in the legal, psychological domain, as well as in the socio-ecological area, finally affecting all taxpayers, either natural persons or legal entities.

Customs duties of a fiscal nature generally have a lower level and have the sole purpose of attracting revenues to the state or local community budgets. Instead, customs duties of a defensive character are much more consistent and are intended primarily to encourage domestic production of goods (by discouraging the importation of similar foreign goods) and only subsidiarily the collection of some revenues to the budget<sup>1</sup>.

Description, features, forms of customs duties

**Customs policy** is an important component of trade policy and includes all rules and regulations issued by the government through its competent institutions aiming at entry or exit to / from the country of goods, the following being involved:

- control of goods and means of transport, when crossing the customs border;
- performing customs clearance;
- customs taxation by paying customs debts;
- other specific formalities regulated through legislation.

**Customs duties** are levied by the State both on imports and exports of goods and transit of goods. Currently, the most frequent customs duties are those upon imports of goods. Romania uses only import customs duties, which are imposed and levied under the Import Customs Duty.

Customs duties are levied when the goods and services cross the border of a country. Their establishment is justified by at least two requirements [Gherghina, Cretan, 2012]:

- to protect domestic industry against imports;
- to achieve certain levels of close prices between imported and domestic products.

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<sup>1</sup> A good example for our country is represented by the customs duties with defensive character at meat imports.

**Import customs duties** are levied on the value of imported goods, when crossing the border of the importing country. This tax has a role of an equalization tax, as it leads to the closeness of imported good level to the level of price for the domestic goods - in some cases, customs duties result in higher prices of imported goods in relation to domestic goods. In general, the import customs duty is determined by the supply and demand ratio of the importing country and coordinates of economic policy which it promotes.

**Export customs duties** are levied on domestic goods, at their export. They have a limited spread, being levied for a small number of goods and during a limited period of time in order to obtain additional budget revenues or limit the export of some primary goods for processing in-house.

**Transit customs duties** are levied on foreign goods crossing the customs territory of such country. Their importance is small and were abolished in most countries, the transit bringing other benefits for the transit country.

According to their **form of expression**, there may be three types of customs duties: ad-valorem, specific and compound.

**Ad-valorem customs duties** are expressed as a percentage of the value of imported goods.

**Specific customs duties** are set as a fixed amount per unit of imported goods.

**Compound (mixed) customs duties** appear as a combination of the two. Basically, the mixed ones are levied, in particular, as an addition to the specific ones.

Customs duties applied by a particular country, regardless of their kind, are listed in a table called a **customs tariff**.

Depending on their application and their level, customs duties may be:

- under the requirement of the most-favored-nation (MFN) clause;
- autonomous;
- preferential;
- retaliatory.

**Customs duties under the requirement of the MFN clause** applies to import of goods performed by a country which is a member state of the same body or in other countries with which they have bilateral agreements under which they grant each other the most-favored-nation clause.

**Autonomous customs duties** apply to imports that a country make from countries with which it does not have any relations based on the MFN

clause.

**Preferential customs duties** is practiced in the trade relations between countries belonging to different closed customs areas.

**Retaliatory customs duties** usually apply in response to discriminatory trade policy of another state. These duties take two forms:

- anti-dumping;
- countervailing.

**Anti-dumping customs duty** is an additional fee charged by the state over regular customs duties in order to annihilate the effects of dumping applied by certain countries in the international market.

**Countervailing customs duty** is levied by the State on imports originating from countries that subsidize exports of certain products or grant export premiums.

**Depending on the customs duties payers**, there are customs duties charged from:

- state organizations;
- natural persons;
- private legal entities.

According to the **taxation purpose**, we notice:

• **fiscal customs duties** that are usually lower, being charged for the sole purpose of collecting revenues to the state;

• **defensive customs duties**, with the purpose of creating barriers for foreign goods, aiming to eliminate foreign competition on the market of such country and implementing expansion into foreign markets.

## Impact of customs duties on budget revenues in romania

Econometric analysis of the impact of customs duties on the state budget revenues pursues the effects released by the customs duties on the level of revenues collected in the state budget. The analysis used is that of econometric modeling, using EViews 7.0 software package. For the analysis, monthly data series were used, on state budget revenues and annual customs duties in Romania between 2004-2011.

Therefore, we built a single-factor regression model, as follows:

$$Y = \alpha + \beta x X_t + \varepsilon_t \quad (3.1)$$

where:

Yt- represents dependent variable;  
 $\alpha$  - constant term coefficient;  
 $\beta$  - independent variable coefficients;  
Xt - independent variable;  
 $\epsilon$ t- random variable;  
t - period of time (2004-2011).

Specifically, it will be monitored the quantification of the link between customs duties (considered as independent variables) and state budget revenues (considered as dependent variables).

Modelling the impact of customs duties on state budget revenues is based on a single-factor regression model of the form:

$$Y = \alpha + \beta \times X_t + \epsilon_t \quad (3.2)$$

where represents dependent variable, VB (state budget revenues),  $\alpha$  constant term coefficient,  $\beta$  independent variable coefficient,  $X_t$  independent variable – TV (customs duties), between 2004 - 2011.

The model will be as follows:

$$VB = \alpha + \beta \times TV(-2) + \epsilon_t \quad (3.3)$$

The results obtained following modeling are presented in Table 1.

**Table 1:** Results related to modeling impact of customs duties on state budget revenues

|   |             |                     |             |          |
|---|-------------|---------------------|-------------|----------|
| Dependent Variable: VB                              |             |                     |             |          |
| Method: Least Squares                               |             |                     |             |          |
| Sample: 2004-2011                                   |             |                     |             |          |
| Included observations: 94 after adjusting endpoints |             |                     |             |          |
| $VB = C(1) + C(2) \times TV(-2)$                    |             |                     |             |          |
| All   |             |                     |             |          |
|   | Coefficient | Std. Error          | t-Statistic | Prob.    |
| C(1)  | 10112.01    | 1182.723            | 8.549766    | 0.0000   |
| C(2)  | 3.243046    | 1.325003            | 2.447576    | 0.0163   |
| R-squared   | 0.195210    | Mean dependent var. |             | 12927.07 |

|                    |           |                       |          |          |
|--------------------|-----------|-----------------------|----------|----------|
| Adjusted R-squared | 0.186463  | S.D. dependent var.   |          | 7896.772 |
| S.E. of regression | 7122.597  | Akaike info criterion |          | 20.60098 |
| Sum squared resid  | 4.67E+09  | Schwarz criterion     | 20.65509 |          |
| Log likelihood     | -966.2460 | Durbin-Watson stat    | 0.566644 |          |

Source: own processing

Analyzing the data presented in Table 1, the following result:

- Standard error values of the regression function coefficients are lower, in the module, to the coefficient values, which strengthens the veracity of their assessment, conclusion supported also by the low values of probability;
- correlation coefficient, with a value of 19.5210%, shows that the statistical relationship between the dependent variable VB and independent variable TV is weak, the changes of the customs duties being found in a small percentage in the changes of state budget revenues;
- probability shows the percentage in which coefficients are incorrectly estimated and, in our case being very low, it results that they are properly estimated;
- adjusted R-squared shows that, if TV increase by one unit, then VB increase by 18.6463%.

Therefore, it may be said that the built model can be considered representative to describe, at macroeconomic level, the link between customs duties and state budget revenues. As a result, the model can be written as follows:

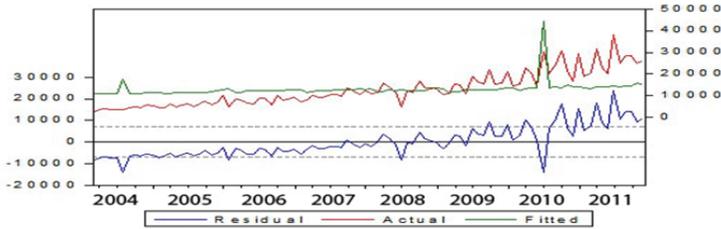
$$VB = C(1) + C(2) \times TV (-2) \tag{3.4}$$

The mathematical model will have the following formula:

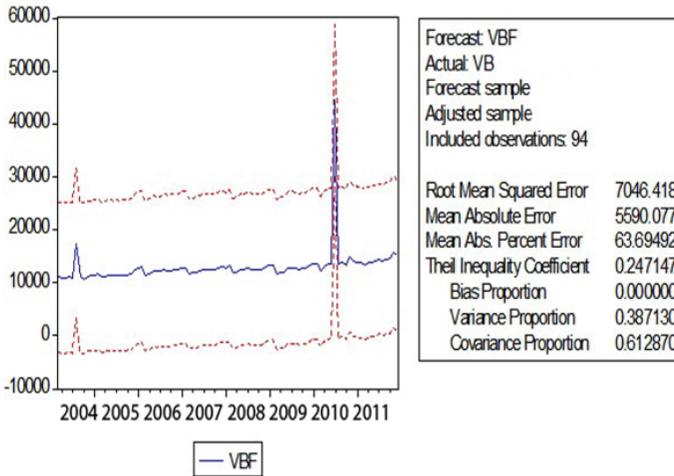
$$VB = 10112.00522 + 3.243046 \times TV(-2) \tag{3.5}$$

From the model it emerges that, in the case of Romania, the customs duties have no major impact on the state budget revenues and the effects of their collection upon state budget revenues are reflected within two months after collection. Furthermore, they also show a multiplier effect on budget revenues, in the idea that a monetary unit collected in the form of customs duties causes an increase of 3.243046 monetary units of state budget revenues.

Graph representation of the actual and estimated state budget revenues with the single-factor linear regression model are reflected in Figure 1 and 2.



**Figure 1:** Evolution of actual state budget revenues and estimated state budget revenues, by means of the model.



**Figure 2:** Evolution of actual state budget revenues and estimated state budget revenues, by means of the model.

## Conclusions

Taxation exerts effects both on the activity of the taxpayer, as well as on use of income for consumption and savings, often altering its financial behavior, reducing tax trim by evasion.

However, knowing the possible effects shows a great similarity, not just theoretical, but mostly practical. In relation to the taxpayer's predictable reactions, financial measures shall be designed either to activate or to inhibit certain actions or modify structures within the existing activities, as appropriate, to combat tax fraud temptation.

Entire fiscal policy of intervention in economic life is based on the research of the effects of levies.

In case of Romania, duties have a major impact on budget revenues and their effects on revenue collection of state budget are felt within two months of collection. Furthermore, they also show a multiplier effect on the state budget revenues, the idea that a monetary unit collected as customs duties causes an increase by 3.243046 monetary units of the state budget revenues.

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