COLLECTION COST. THE EFFICIENCY OF MEASURABLE TAX AUTHORITY ACTIONS

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Abstract

Modernization of the tax administration involves the development of modern tools and an efficient work process setup. Measurement of fiscal performance is made by utilizing 29 performance indicators and 4 efficiency indicators. New indicators attributable to collection costs can be created in order to measure the efficiency and effectiveness of the main activities. The newly proposed indicators can be implemented at the national level as well as at a regional and local level. This way an analytical and transparent measurement efficiency becomes possible, offering the tax authority the possibility for cost-cutting through the identification of clear steps to follow.

Keywords: revenues, tax authority efficiency, collection cost, tax inspection, tax enforcement

JEL Classification:

1. INTRODUCTION

The need to improve the rate of tax collection for the budget revenues represents a priority for every tax authority. This objective can be achieved as long as the tax authority undergoes a broad modernization process which involves creating modern tools and an efficient work process setup. We can therefore ensure the efficiency of internal processes which need to be tracked and measured periodically with the use of specific indicators. In this context it is necessary to introduce new performance management tools in the field of fiscality.

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Fiscal performance measurement is currently done by using a number of 20 performance indicators and a set of 4 efficiency and effectiveness indicators and, in our opinion, the current N.A.F.A. performance analysis system has experienced steady improvements since 2006.

2. PERFORMANCE INDICATORS SPECIFIC FOR THE TAX COLLECTION SYSTEM

The set of performance indicators measures the general performance of the tax collection system (degree of completion for the receivables target for the budget revenues), as well as the performance of the main activities specific to N.A.F.A.:
- for the recovery of arrears: degree of collection for recoverable arrears for legal persons;
- for the enforcement department: share of revenues collected through enforcement procedures compared to the total budget revenues collected;
- for the fiscal inspection activity: collection rate for additional payment obligations set as a result of tax inspections;
- for the anti-fraud activity: value of the claims resulted from criminal complaints;
- for customs activity: degree of the timely confirmation of transit operations.

When we consider the performance analysis of the tax collection process we need to evaluate the level of budget revenues. Thus, for the period 2010-2014 the level of net general consolidated budget revenues collected by N.A.F.A. has recorded a significant rise, from 133,462 mil. Lei collected in 2010 to 182,547 mil. Lei collected in 2014.

The evolution of the net general consolidated budget revenues collected in the period 2010-2014 is shown below:

**Figure no. 1 - The evolution of the net general consolidated budget revenues collected (mil. lei)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues (mil. lei)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>133,462</td>
</tr>
<tr>
<td>2011</td>
<td>157,451</td>
</tr>
<tr>
<td>2012</td>
<td>167,365</td>
</tr>
<tr>
<td>2013</td>
<td>172,538</td>
</tr>
<tr>
<td>2014</td>
<td>182,547</td>
</tr>
</tbody>
</table>

Source: created by the authors based on data published by N.A.F.A.
For the period 2010-2014 the net budget revenues collected have risen by 36.78% as highlighted by the figure.

Fiscal performance is evaluated in Romania by the National Agency for Fiscal Administration through a set of 10 performance indicators which, in our opinion, can be structured based on their objective in 10 categories as illustrated by table no. 1.

Table no.1

<table>
<thead>
<tr>
<th>Crt. no.</th>
<th>Objective</th>
<th>Main indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Receivables target</td>
<td>Degree of completion for the receivables target for the budget revenue: - gross values - net values - customs duties/revenues</td>
</tr>
<tr>
<td>2</td>
<td>Arrears</td>
<td>- dynamic of the recoverable arrears due at the end of the reporting period; - collection rate for the recoverable arrears</td>
</tr>
<tr>
<td>3</td>
<td>Enforcement</td>
<td>- share of revenues collected through enforcement procedures out of the total budget revenues collected; - degree of arrears collection settled by means of enforcement procedures.</td>
</tr>
<tr>
<td>4</td>
<td>Fiscal inspection</td>
<td>- additional amounts received per inspector, and per inspection respectively, distinctively reported for natural persons, legal persons and nonresidents</td>
</tr>
<tr>
<td>5</td>
<td>Degree of voluntary compliance to payment of tax obligations</td>
<td>Degree of voluntary compliance to payment of tax obligations reported for the entire tax administration and for the nonresident persons distinctively.</td>
</tr>
<tr>
<td>6</td>
<td>Degree of voluntary compliance to submitting the tax returns</td>
<td>Degree of voluntary compliance to submitting the tax returns, and the degree of timely processing of tax returns.</td>
</tr>
<tr>
<td>7</td>
<td>VAT returns with negative amounts with the option of refund, not processed on time</td>
<td>Evolution of stock for VAT returns with negative amounts with the option of refund not settled within 180 days from the legal deadline (at the time of reporting)</td>
</tr>
<tr>
<td>8</td>
<td>Contested tax cases</td>
<td>- rate of amounts admissible by the court compared the total contested amounts.</td>
</tr>
<tr>
<td>9</td>
<td>Anti-fraud activity</td>
<td>- value of the claims resulted from criminal complaints handled per inspector; - value of precautionary measures levied per inspector.</td>
</tr>
<tr>
<td>10</td>
<td>Customs department</td>
<td>- efficiency of subsequent customs check activity; -degree of timely confirmations of transit operations.</td>
</tr>
</tbody>
</table>

When evaluating the performance indicators set by N.A.F.A., analyzed from the point of view of their scope, aggregation mode and areas of responsibility one can conclude that they are structured on both a global level and activity-specific level,
encompassing the most important processes within N.A.F.A.: tax collection, tax enforcement procedures, tax inspection, customs and anti-fraud unit.

3. EFFICIENCY AND EFFECTIVENESS INDICATORS SPECIFIC TO THE TAX COLLECTION ACTIVITIES

In addition to the performance indicators, the National Agency for Fiscal Administration has developed a set of 4 indicators intended to measure the efficiency and effectiveness of the budget revenues collection. As a result, the efficiency and effectiveness of the budget revenues collection are measured using the concept of collection costs which is associated with the following indicators:

- amount of lei spent per 1 million lei in budget revenues collected;
- personnel expenditure per 1 million lei in budget revenues collected;
- net budget revenues collected correlated with the staff size;
- net budget revenues collected correlated with the number of tax payers.

By analyzing the methodology utilized to determine the efficiency and effectiveness indicators one can notice that, in comparison to the performance indicators, the National Agency for Fiscal Administration doesn’t measure the efficiency and effectiveness from the perspective of internal processes but from a global perspective.

In our opinion measuring the efficiency and effectiveness of main activities is required, as part of a systematic examination of the responsibilities fulfilled by the tax administration. In these circumstances it is necessary to undergo a critical analysis of the way the different components of the tax authority are achieving their goals. Such an approach tracks elements such as processing time, quality and costs, in order to get a global appraisal and at the same time carry out a detailed analysis of the individual values attributable to the main activities.

Following the same train of thought, the four efficiency and effectiveness indicators can be further developed. One can design new indicators to evaluate the collection costs and measure the efficiency and effectiveness of the main processes (e.g. collection of recoverable arrears, enforcement procedures or tax inspections).

Before implementing new indicators, one needs to take a closer look at whether the currently used indicators reflect the efficiency and effectiveness as stated by the target objective. As a result, we analyzed two out of the four indicators attributable to the collection cost:

- amount of lei spent per 1 million lei in budget revenues collected;
- personnel expenditure per 1 million lei in budget revenues collected.

Collection cost is evaluated based on the costs incurred per 1 million lei in net budget revenues collected using the following formula:

\[ a = \frac{b}{c} \times 1.000.000 \]
where
\[ a = \text{amount of lei spent per 1 million lei in budget revenues collected} \]
\[ b = \text{total costs incurred (excluding capital expenditure)} \]
\[ c = \text{net budget revenues collected} \]

When evaluating the collection cost based on the personnel cost per 1 million lei in net budget revenues the following formula is used:
\[ d = \frac{e}{c} \times 1,000,000 \]
\[ d = \text{personnel cost per 1 million lei in net budget revenues} \]
\[ e = \text{personnel costs incurred} \]
\[ c = \text{net budget revenues collected} \]

In order to make the analysis relevant, we followed the trend of the two variables/indicators influencing the collection costs for a period of 5 years (2010-2014). For this time frame the level of total costs incurred (excluding capital expenditures) recorded the following dynamic:

**Figura nr.2 – Dynamic of total costs incurred (excluding capital expenditures) for the net budget revenues collected to the General Consolidated Budget (million lei)**

![Graph showing the dynamic of total costs incurred](image)

**Source: created by the authors based on data published by N.A.F.A.**

As presented in the graph above, the total costs incurred (excluding capital expenditure) have recorded a 44.46% rise between 01.01.2010 – 31.12.2014, from 1,407,049,996 lei in 2010 to a value of 2,032,723,063 lei in 2014.

The personnel costs incurred for the same time period have recorded the following dynamic:
Figure no. 3 - Dynamic of the personnel costs incurred for the net budget revenues collected to the General Consolidated Budget (million lei)

Source: created by the authors based on data published by N.A.F.A.

By analyzing the data presented above, one can conclude that between 01.01.2010 – 31.12.2014 the personnel costs have increased by 44.13%, from 1,246,906,142 lei in 2010 to a value of 1,797,166,356 lei in 2014.

The costs incurred for collecting 1 million lei in net budget revenues had the following evolution:

Figure no. 4 – Level of costs incurred for collecting 1 million lei in net budget revenues (lei)

Source: created by the authors based on data published by N.A.F.A.

Based on the information presented we can determine the fact that between 01.01.2010 – 31.12.2014, the costs incurred for collecting 1 million lei in net budget revenues has risen by 5.62%, which represents an increase of 592 lei.
Moreover, the personnel costs incurred for collecting 1 million lei in net budget revenues has faced the following evolution:

**Figure no. 5 – Level of personnel costs incurred for collecting 1 million lei in net budget revenues**

<table>
<thead>
<tr>
<th>Year</th>
<th>Personnel Costs (million lei)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>9.343</td>
</tr>
<tr>
<td>2011</td>
<td>9.572</td>
</tr>
<tr>
<td>2012</td>
<td>9.790</td>
</tr>
<tr>
<td>2013</td>
<td>10.921</td>
</tr>
<tr>
<td>2014</td>
<td>9.945</td>
</tr>
</tbody>
</table>

Source: created by the authors based on data published by N.A.F.A.

By analyzing the data presented above, one can conclude that between 01.01.2010 – 31.12.2014 the personnel costs incurred for collecting 1 million lei in net budget revenues has increased by 502 lei, which represents a rise of 5.37%.

To conclude, whilst the budget revenues collected have increased by 36.78% for the time period 01.01.2010 – 31.12.2014, whilst the total costs incurred (excluding the capital expenditure) have risen by 44.46% and the personnel costs have risen by 44.13%.

4. PROPOSALS REGARDING THE IMPLEMENTATION OF THE NEW EFFICIENCY AND EFFECTIVENESS INDICATORS

In our opinion, the measurement of efficiency and effectiveness from the point of view of the collection process should be carried out with a set of indicators which should encompass the value chain.

According to the definition given by Nadia Albu and Catalin Albu in the book “Practical solutions to more efficient activities and growth in the organizational performance” - a process represents an ensemble of activities completed through a global objective. To this end, the evaluation of efficiency from the perspective of processes involves breaking down the main activities of the tax authority in order to determine the costs associated to them.
When inspecting the way in which the performance indicators set by the National Agency for Fiscal Administration where developed and implemented, as well it's responsibilities, the following main activities were identified:
- tax collection;
- fiscal inspection;
- customs and duties activities;
- anti-fraud activity.

An appropriate measuring of the collection cost involves evaluating the efficiency and effectiveness distinctively for each of the main activities stated above, which is the reason behind our proposal to create the following new indicators which meet these requirements:

**A. Collection costs incurred by the fiscal inspection activity**

- total costs of collecting the additional amounts set by the fiscal inspection (a1) : amount of lei spent for each million lei in budget revenues collected as a result of additional amounts set by the fiscal inspection
  
  \[
  a1 = \frac{b1}{c} \times 1 \text{ million}
  \]

  where
  
  \[
  b1 = \text{total costs (excluding capital expenditure) incurred by the fiscal inspection activity}
  \]

  \[
  c = \text{additional amounts set as a result of fiscal inspections}
  \]

- personnel costs incurred by the department of fiscal inspection for 1 million lei in additional amounts set (a2)
  
  \[
  a2 = \frac{b2}{c} \times 1 \text{ million}
  \]

  where
  
  \[
  b2 = \text{total personnel costs incurred by the department of fiscal inspection}
  \]

For example:

- \(c = 13,991,100,000\text{ lei}\)
- \(d1 = 2,032,723,063\text{ lei}\)
- \(e = 4,307\text{ persons}\)
- \(b = 24,911\text{ persons}\)

\[
b1 = \frac{2,032,723,063}{24,911} \times 4,307 = 351,448,687\text{ lei}
\]

\[
a1 = \frac{351,448,687}{13,991,100,000} \times 1,000,000 = 25,119,45\text{ lei}
\]
c = total additional amounts set by the fiscal inspections
and
\[ b_2 = \frac{d_2}{b} \times e \]
where
\[ d_2 = \text{total personnel costs incurred by N.A.F.A.} \]
\[ b = \text{total number of staff employed by N.A.F.A.} \]
\[ e = \text{total number of staff employed by N.A.F.A.'s fiscal inspection department} \]

For example:
\[ c = 13,991,100,000 \text{ lei} \]
\[ d_2 = 1,797,166,356 \text{ lei} \]
\[ e = 4,307 \text{ persons} \]
\[ b = 24,911 \text{ persons} \]
\[ b_2 = \frac{1,797,166,356}{24,911} \times 4,307 = 310,721,990 \]
\[ a_2 = \frac{310,721,990}{13,991,100,000} \times 1,000,000 = 22,208,55 \text{ lei} \]

B. Collection costs incurred by the tax enforcement unit (g1)
- costs incurred for collecting the amounts received through the enforcement procedure: amount of lei spent for each million lei in budget revenues collected as a result of additional enforcement procedures
\[ g_1 = \frac{h_1}{i} \times 1 \text{ million} \]
where
\[ h_1 = \text{total costs (excluding capital expenditure) incurred by the tax enforcement activity} \]
\[ i = \text{amounts received by the state budget through enforcement} \]
and
\[ h_1 = \frac{d_1}{f} \times j \]
\[ d_1 = \text{total costs incurred by N.A.F.A.} \]
\[ f = \text{total number of staff employed by N.A.F.A.} \]
\[ j = \text{total number of staff employed by N.A.F.A.'s enforcement unit} \]

For example:
\[ d_1 = 2,032,723,063 \text{ lei} \]
\[ f = 24,911 \text{ persons} \]
\[ i = 14,520,000,000 \text{ lei} \]
\[ j = 1,942 \text{ persons} \]
\[ h_1 = \frac{2,032,723,063}{24,911} \times 1,942 = 158,466,067 \]
\[ g_1 = \frac{158,466,067}{14,520,000,000} \times 1,000,000 = 10,913,64 \text{ lei} \]

- personnel costs incurred by the enforcement unit for each 1 million lei received by the state budget through enforcement procedures (g2)
\[ g_2 = \frac{h_2}{i} \times 1 \text{ million} \]
where
\[ h_2 = \text{total personnel costs incurred by the enforcement unit} \]
\[ i = \text{budget revenues received through enforcement procedures} \]
and
\[ h_2 = \frac{d_2}{f* j} \]
where
\[ d_2 = \text{total personnel costs incurred by N.A.F.A.} \]
\[ f = \text{total number of staff employed by N.A.F.A.} \]
\[ j = \text{total number of staff employed by N.A.F.A.'s enforcement unit} \]

For example:
\[ d_2 = 1.797.166.356 \text{ lei} \]
\[ f = 24.911 \text{ persons} \]
\[ i = 14.520.000.000 \text{ lei} \]
\[ j = 1.942 \text{ persons} \]
\[ h_2 = \frac{1.797.166.356}{24.911*1.942} = 140.102.648 \]
\[ g_2 = \frac{140.102.648}{14.520.000.000*1.000.000} = 9.648,94 \text{ lei} \]

CONCLUSIONS

An efficient and effective tax collection process is not solely connected to a rise in the absolute value of the general consolidated budget revenues. The efficiency of internal processes must be processed along the operational flow, which involves the development and implementation of a new set of indicators. These new indicators are built around the concept of collection costs for the tax authority activities which are highly important.

We have selected the components of fiscal inspection and enforcement to serve as the basis for the new indicators as they involve qualitative work, qualitative operations, based on inspection processes. These new indicators can be implemented at a national, regional and local level (county tax authorities, city tax authorities etc.)

By using these indicators we can ensure the analysis of the changes in the values recorded, as well as the possibility to compare the efficiency and effectiveness of specific departments and sub-departments of the tax authority, distinctively for the fiscal inspection department and the tax enforcement unit.

We think that apart from the variables used by our research team in constructing the new indicators, other influencing factors can be identified, which can further contribute to improving the proposed model for measuring the efficiency of the fiscal inspection activity and the tax enforcement task.

Therefore, by using these indicators we can provide a more analytical and transparent measuring of the efficiency and effectiveness, which will offer the tax
authority the opportunity to take cost-cutting actions by clearly identifying the steps to follow.

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