# THE ANALYSIS OF FISCAL RISK

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**Abstract**

*This article describes the fiscal risk analysis, with emphasis on environmental and organizational factors, which should be taking into account in the risk management process. A special attention was given to the role of the fiscal policy and voluntary compliance related issues.*

**Keywords: taxpayers, fiscal risk, optimization, economic effect, compliance.**

**The analysis of fiscal risks** is a major tool that allows tax administrations and policy makers to use available resources, in the most efficient way, in the light of its limited resources (financial and human), given that identifying optimal solutions to increase voluntary compliance or combat tax fraud requires complex approaches.

The main weaknesses identified in the risk analysis are the follows:
- o legislation gaps;
- o limited human and financial resources of the tax authority;
- o lack of political support for implementing regarding the development of specific changes in tax legislation;
- o insufficient expertise of lack of necessary skills of specialized employees.

There is a wide variety of environmental and organizational factors that could be taken into account in the risk management process, as:
- o external factors:
  - tax legislation
  - public opinion
  - economic conditions
- o internal factors:
  - organizational structure
  - changes in resources.

In an individual analysis, each of these factors could affect in different proportions the activity and results of a tax administration.

*a)* ___*The tax legislation*___ provides information regarding the tax base and sets the framework for the activity of the tax administration. For the proper enforcement of law, the necessary changes should take into account the existing context.

Special emphasis is required to be placed on fiscal policy, namely the set of measures initiated and implemented by the government through public budgets in order to achieve

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and maintain macroeconomic equilibrium in the real economy. The fiscal policy must take into account the attraction of all taxpayers, while low taxation is maintained and a strict control to determine the optimal level is exercised. This approach must be based on the fact that **there is an optimal setting of the tax level**, as "Laffer curve" actually shows (figure no. 1).

The Laffer curve is a theory built on the incentive effects of lower taxation which suggests that total tax revenue coming into the government may increase at a lower tax rate. As the tax rate further increases, the marginal revenue from lower taxes may tend to fall at an increasing rate up to optimal tax revenue. After this point, any increase in the tax rate prompts people to work less, or to do more to avoid the tax, thereby reducing total revenue as the opportunity cost of paying the tax rises. Hypothetically at a 100 percent tax rate, nobody would have any incentive to work at all, since the Government collects everything people earn. Laffer s ultimate prediction is if you cut taxes you can increase tax revenues and create a virtuous circle.
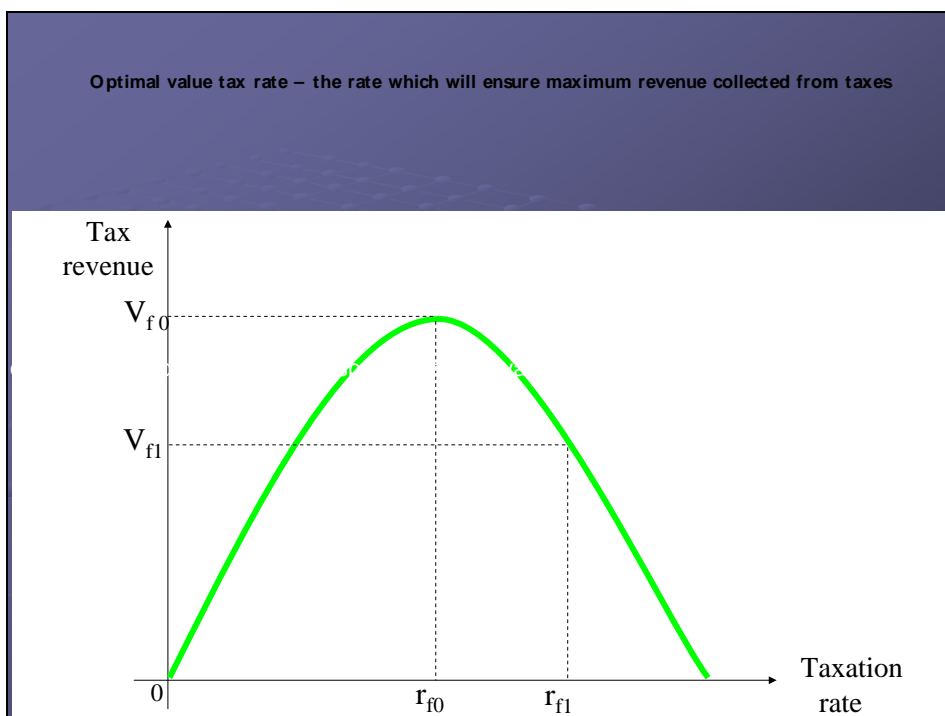
**Figure no. 1: Laffer curve**

Laffer considers that fluctuation of tax rates has two effects on tax revenues:
- arithmetic effect (if the tax rate decreases tax revenues fall);
- economic effect (lower tax rate results in stimulating economic activity and increase the tax base).

In reality, there is a combination of arithmetic and economic effect. The "Laffer curve" has the following coordinates:
- $OY$ axis - variable "Tax rate ", with values between 0 and 100%;

- $OX$ axis, - variable "Tax revenues" (revenues for the state, region, city etc.; revenues in the currency of interest to study);
- "Prohibitive Range" is the area where an increase of the tax rate determines a decrease of tax revenues due to lower tax base as a result of increased tax evasion, fall initiative etc.
- $rf_0$ and $rf_1$ – taxation rate at times $t_0$ and $t_1$;
- $Vf_0$, $Vf_1$ – tax revenues at moments $t_0$ and $t_1$.

Findings: if, $rf = 0\%$, $Vf = 0$; if, $rf = 100\%$, $Vf = 0$; if, $0\% < rf < 100\%$, $Vf > 0$; above a certain level of taxation, any increase of $rf$ will reduce incomes: if, $rf_1 > rf_0$ ➔ $Vf$ decreases ($Vf_1 < Vf_0$); $Vf_0 = Vf\ max$ for $rf_0 < rf$ max.

A progressive increase of tax rates (gradual) can influence the behavior of taxpayers, who, to remove a portion of the tax base to the underground economy and will seek other parallels sources of income trough "exit" from gradual taxation.
For example, the introducion of flat tax for taxation of incomes and profits, increased the revenues collected from the state budget of Romania (figure no. 2).
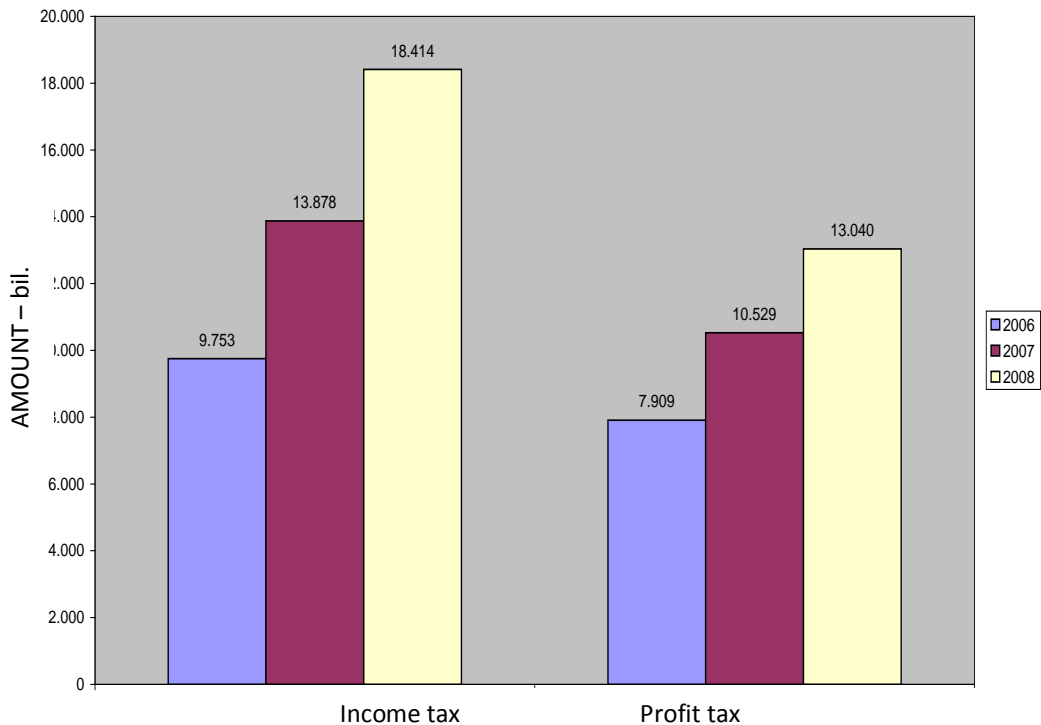


**Figure no. 2: The evolution of collections from the state budget (income tax and profit tax), in period 2006 – 2008 (source: The National Agency for Fiscal Administration)**

Also, Arthur Laffer argues that lowering tax rates is fully compatible with constant tax revenues or income higher than the initial.

Regardless of the nature and extent of fiscal decisions, they shall be controlled by public coercion, fact that will cause structural evolution of the tax system. This is the expression of fiscal policy decisions and, at the same time, the instrument by which these decisions can be translated into practice. Fiscal policy is one of the instrumental variables that government has, given that "*Fiscal policy is all fiscal decisions taken by public decision makers, to ensure financial resources to finance public needs and the final realization of economic and social nature, while the real economy works or objective factors, whose trend is not only cyclical*[2] ".

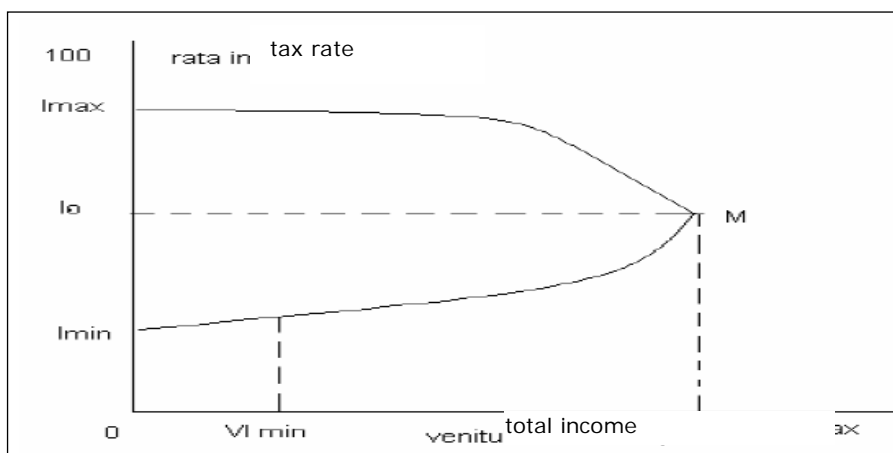"Laffer curve moved" (figure no. 3) describes known elements in another view.



**Figure no. 3. Laffer curve moved**

Thus, the minimum tax rate $I_{min}$ is an appropriate rate for a minimum budget to ensure minimum bureaucracy and efficiency for the proper functioning of the State.
The optimal tax rate $I_0$ is that rate to ensure for the public budget the largest amount of income tax. All possible tax rates between $I_{min}$ and $I_0$ are rates that the State - taxpayer may use in a market economy. The maximum tax rate $I_{max}$ is the tax rate that satisfies the relation:

$$I_{max} = V - \Sigma VPD/V = 100 - \Sigma VPD/V*100$$

- *V* represents the income of citizens of a country in an year;
- *VPD* is personal income if public power if governed by totalitarism.

Therefore, if between $I_{min}$ and $I_0$ the income raising activity is functional and equitable, reaching a maximum at the point *M*, not the same can be observed for the interval $I_0$ and

[2] Petre Brezeanu, – *Fiscality*, Economic publishing house, Bucharest, 2000. p. 87.

$I_{max}$, where the revenues collected for the state budget can increase suddenly, not in the sense of taxation, but in the sense of constraints dictated by the lack freedom of initiative.

**b)** ***Public opinion*** can be seen in terms of attitude on the tax payers and the government in general, because attitudes affect intentions and intentions affect behavior. Attitudes are formed in social context factors, among which we find: the perception of the evasion, the perception of fairness of tax structure, complexity and its stability, as given, the legitimacy of the government and its associated activities.

Tax administrations should encourage voluntary compliance of taxpayers, which means to facilitate compliance, monitor compliance and address non-compliance. Facilitating compliance includes actions to improve services for taxpayers by providing explicit and clear forms, coupled with assistance and information, as necessary. Also, particular attention should be given to monitoring compliance, implying the existence of information systems and adequate procedures to detect non-compliance.

Thus, to improve compliance, successful strategy that is necessary for an appropriate combination of all these approaches.

Increase voluntary compliance is possible when a tax administration adopted an approach that includes citizen participation through policies that encourage dialogue and mutual trust.

A strategy on how the operation could be established based on the following approaches:
- increasing the intent to comply by influencing attitudes taxpayers.
- facilitating compliance by a simplification, support and information. and
- adoption of measures to detect non-compliance, the application of penalties and rewards compliance.

The cause of non-compliance with tax laws may be subject to extensive research. Social values, public morality or the perception of impartiality of the individuals may be taken into account in shaping the attitudes towards the tax law.

Schematically illustrated as a pyramid, "compliance pyramid," according to the level of compliance is presented below image (figure no. 4).
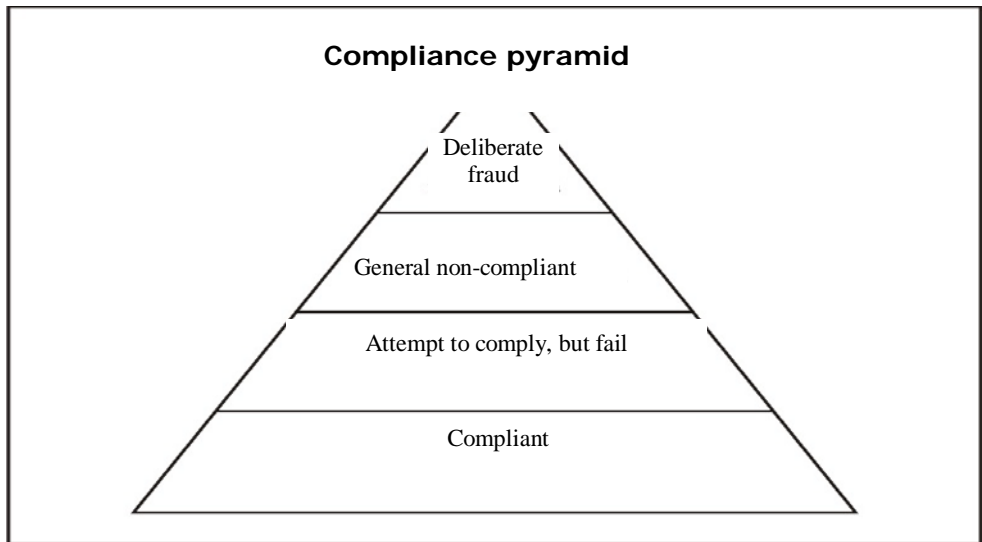
**Figure no. 4: The compliance pyramid**

Regarding the Romanian tax administration, it seems that for 2008 - 2010, the degree of voluntary compliance of taxpayers has been low, as can be seen from the following table:

| Voluntary compliance | Year | | | |
|---|---|---|---|---|
| | **2007** | **2008** | **2009** | **2010** |
| - in reporting | 81% | 83,2% | 83,9 % | 84,6 % |
| - to pay (value) | 71% | 79,4% | 77,4 % | 78,9 % |



Structure of revenues collected by NAFA, General budget components - 2010
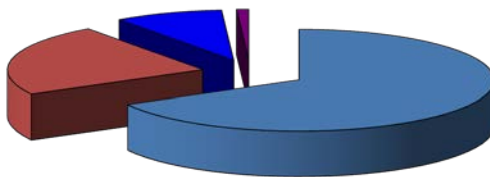
□ State budget 67%

■ Social Security Budget 23%

■ National Health Insurance Budget 9%

## Percentage of tax revenues in the State budget - 2010



- ◻ VAT 41%
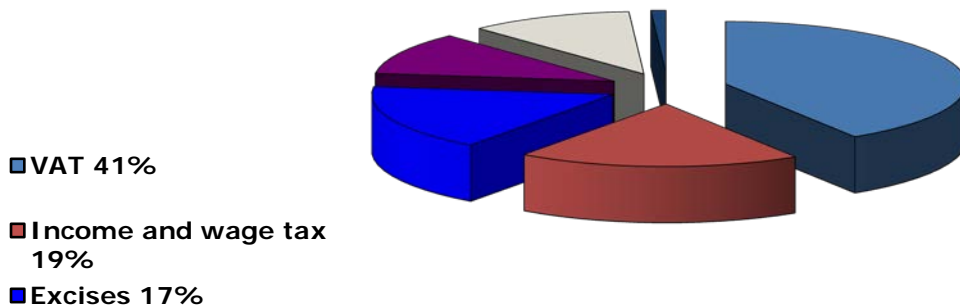- ◻ Income and wage tax 19%
- ◻ Excises 17%

**Figure no. 5: The evolution of the voluntary compliance,
in period 2008 – 2010 (source: The National Agency for Fiscal Administration)**

The economic conditions have a direct impact on the effectiveness of tax administration and therefore, several factors must be taken into account: economic size and its influence on trade relations, accessibility to and from other markets, competitive tax policies of major trading partners, nature of the economy. To avoid creating an undue tax burden on taxpayers is important to look at taxation and tax administration from taxpayer's point of view. Maurice Duverger, referring to the distribution of individual tasks, concluded that, although apparently it seem that poorest citizens receive more than they give to the state, in reality the situation is reversed.

The multitude of tax liability imposed on taxpayers and the burden of taxation have stimulated over time ingenuity to invent various means of circumventing the tax laws, aimed at payment of small amounts of state obligations in respect of taxes and contributions.

According to Nobel laureate economist Gary S. Becker, the function of fiscal policy should be addressed by human behavior, based on general function:
$E = f(u, x, y)$
- $u$ is degree of inclination to evasion;
- $x$ is representative size of fiscal policy;
- $y$ is a real economic variable (G.D.P.).

Compared to these, based on the following reasoning: given that the inclination to evasion (i.e., $u$) is inversely proportional to pressure or strict fiscal control field is deduced that $u = f(x)*(r1)$, having constant view of the average short $y$, it can be assumed that $y = y(x)*(r2)$ and thus is derived from $R1$ and $R2$ that $E = f(x)$.

This reasoning is valid taking into account the importance of human behavior in terms of evasion, given that:
- from the economic point of view: in case of money, unlike consumer goods, the law of decreasing marginal utility is not applicable;
- from the psychological point of view: some of the defining features of human character include: selfishness, the individual - has the feeling that some work is "confiscated" unfairly since he considers everything as his personal pleasure - related cost without perceiving the need of paying taxes for some collective utility.

In addition, globalization and internationalization affect the ability to collect taxes, as well as the control. For example, multinationals national borders are not a hindrance to their activities.

  b) ***Organizational structure*** is viewed in terms of complexity and stability over time, whereas an evaluation of the effectiveness of tax administration can not be achieved without taking into account these aspects (to effectively manage risk is necessary to identify and understanding at all levels administrative).

  c)

In Romania, the National Agency for Fiscal Administration (N.A.F.A.) is the specialized body of the central public administration, having competences in implementing the national policy for fiscal administration. The activities of the N.A.F.A. are carried out in the field of management of budgetary revenues, with specific procedures:
- ✓ management
- ✓ collection
- ✓ fiscal control
- ✓ development of partnerships with taxpayers

Starting with January 1, 2004, the N.A.F.A. has become operational as an institution with legal personality, the Directorates with main competences in the field of state revenues administration being taken over from the Ministry of Public Finance. At this moment, the N.A.F.A. operates under the Ministry of Public Finance (the Customs National Authority and the Financial Guard operate under the N.A.F.A.) and the President of the N.A.F.A. holds the rank of a Secretary of State and is designated by the Prime-Minister.

The main competences of the N.A.F.A. are:
- collecting
  - ✓ the state budget revenues, such as:
    - profit tax
    - income tax
    - value added tax
    - excises

- other revenues
  - ✓ the social insurance budget revenues
  - ✓ the unemployment insurance budget revenues
  - ✓ the sole national Fund of health social insurance budget revenues
- unitary enforcement of the legal provisions in the tax field
- exercising the fiscal and financial control regarding the observance of the financial and economic discipline
- providing assistance to the tax payers
- coordinating the procedures for revenues administration at territorial structures level
- applying the specific measures resulted from the legislation in the customs field
- elaborating the strategies for reform and development in the field of fiscal administration

The organizational structure of the N.A.F.A. are:
- ➡ central level: the N.A.F.A. (which includes the General Directorate for Large Tax payers Administration)
- ➡ county level: number of units - 42 (General Directorates for Public Finance at counties level – 41 and General Directorate for Public Finance of Bucharest – 1)
- ➡ local level: number of units: 404 Public Finance Administrations (Resident municipalities – 41, Municipality level – 54, City level– 182, Commune level– 79, Sectors of Bucharest – 6, for Middle-Size Tax Payers – 42).

*d) Changes in resources* directly affect the smooth running of the business of tax administration for which the allocation of personnel and other resources must be guided by risks. Allocation of equipment and access to various databases can lead to improved performance of tax administration.

However, the identification of possible risks is based on the established objectives, the objective being the starting point for management and risk analysis. In other words, between objective and risk management process is a direct relationship.

If from objectives risks can be derived, it is also possible that the risks to derive new goals. On the other hand, to address a risk, a specific goal can be set. For example, increasing voluntary compliance can be a high goal, and identified risk may be the lack of confidence in the tax payers. Based on the logic described above, we propose a new object, increasing confidence in tax administration for a new risk is identified, control of staff misconduct to the taxpayers, which in turn generates a new object, changing the attitude of staff control, etc.

Risk identification is an important step, because if this is not done at the right time, the chances that risks are identified in another time do not exist, which leads to the idea that when a risk is identified is crucial. If risk identification is done on time, its effects can be reduced or eliminated at an early stage. Therefore reduce the risk of revenue collection and increase the budget for prevention, since the time between the breach of the law and the application of the penalty prescribed for that purpose is shorter. Basically, the risk identification phase, it generates a list of possible risks, which can be grouped according to their specific characteristics, as follows:

- a risk non fulfillment declaration  statements required by law;
- a risk of non-registration;
- a risk of non-payment of tax liabilities;
- a risk of incorrectly declared so.

However, risks can be identified and described on different levels, namely:

- a general level (an overview in terms of overall risk on groups of taxpayers with different compliance levels);
- an average (risk areas / groups of taxpayers, for example, Joined area below its real or risks of a group of contributors with a specific level of compliance); a detailed level (identifying taxpayers and risk areas, in which, on the one hand we have a list of taxpayers with a relatively low level of compliance estimated, on the other hand an overview of risks).

Another essential element that should not be overlooked is the difference between risk activities and actors at risk. Some activities have a higher risk level than others. The same can be said about the taxpayers, with different levels of compliance. Therefore, identification of risk will always refer to these two elements. Not have missed the fact that taxpayers can be grouped in different ways: by sector, by legal form of organization, by level of compliance or a combination thereof. The level of compliance is evaluated roughly based on a number of criteria relating to a certain extent, the awareness of a taxpayer's tax behavior, targeting information such as:

- a regular filing tax returns;
- one occurrence of any additional payments;
- a quality tax and financial statements prepared;
- corrections appearance of tax returns filed in the past; a regularity with which the payments etc.

Risk identification includes an estimate (an approximation) the tax liability related to risk, the number of taxpayers / tax payers implications and possible relationships with other areas of risk.

If the starting point is the risk of declaring a lower actual turnover, the final stage, in this case is to identify sectors where the risk of incorrect declaration is (very) high. But if the starting point would be a group of taxpayers, the last level should contain a description of the area / areas of risk within the group defined.

If the starting point is represented by a high risk sectors, such as bars, the final stage is to identify areas at risk in this sector, for example, declaring a lower actual turnover. Stage grouping and risk analysis means systematic risk measurement and risk taxpayers identified under the above-mentioned, an important role at this stage it issues such as:

➢ a frequency (number of risk / risk taxpayers);
➢ a gravity (the possibility that the risk to materialize);
➢ a consequence (for example, what monetary value it).

However, to discover what is happening and who is responsible is not enough. Risk analysis also involves the question: what is the reason behind the non-compliance in

certain areas or certain taxpayers?. This is extremely important, as it helps to evaluate and choose the most effective forms of treatment. In other news, given the large volume of data, risk analysis generally requires the use of computer systems, but can not be completely excluded any option to manually carry out analysis and measurements, as appropriate.

Of course it is possible a combination of the two variants (the approximate volume measurement made with an instrument, followed by a specific measurement performed manually).

Regarding the extent to which risk analysis can be done, there are so uniform variations and combinations thereof, and resulting in tax administration that risk analysis can be performed either centrally or locally, or in combination. Risk analysis is based on data collected from various sources (currently, there are many possible sources of data, but only few of them are relevant to the process itself), sources that can be grouped into:
- an economic and fiscal data;
- one data provided by taxpayers (data from tax returns); a tax information obtained by the administration (within the last statement filed, the number of statements filed late);
- one data provided by third parties (banks, notaries, etc. auto register.)
- Information on the Internet.

It should be mentioned that the information and data that can be used for analysis are limited by:
- a capacity for information management structure;
- legal regulation on access to certain information;
- a value that offers information or new data in addition to what is already available;
- systems used a capability;
- a cost of obtaining new data.

The human resources of the N.A.F.A. in 2010 (number of job positions) were 30,428, out of which:
➢ *Fiscal Administratio - 25,240 (out of which: Headquarters - 1,007 and County and local offices - 24,233)*
➢ *National Customs Authority - 3,784*
➢ *Financial Guard - 1,404.*

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