

# The Hidden Effects of New Fiscal Frames

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Abstract

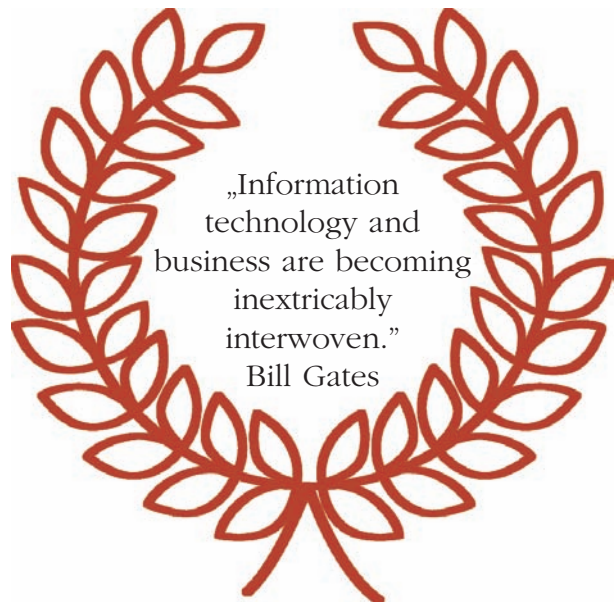
*It is known the fact that, in Romania, fiscal rules change for about ten times a year and there is obviously a direct perceived and quantifiable effect over business incentive. This article aims finding if there is a reasonable and quantifiable hidden effect of the fiscal frame changes over the entrepreneurial incentive. The business choice is based on the economic results. For this purpose, the forgotten effects model shall be utilized. This present paper iterates the importance of projecting an investment for a small enterprise in a changing tax frame. It also points to assessing economic profit given the fiscal frequent changes and such, investor's incentive. The author pilot tested a tool in order to be applied to other regions for finding relevant data in what regards the role of the fiscal changes on the way a business is conducted.*

**Keywords:** taxes, fees, SME, fiscal rules, business incentive

## Introduction

Law no. 227 from 8<sup>th</sup> September 2015, published in the Official Gazette on the 10<sup>th</sup> September 2015 represents the fiscal frame for Romania. It has been changed for 25 times up until now. The former law, 571/22.12.2003 suffered 105 changes during the validation period, starting from the 4<sup>th</sup> November 2015. The average figures reveal the fact that tax payer's, in Romania, have to deal with 9.12 law's changes each year. That is about 0.76 fiscal changes each month.

Europe's quest for fiscal discipline and national budgetary adjustments represent the main arguments of the legislator for



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this volatile context. On such uncertain regulatory environment the empirical evidence shows that the behavior of the firms is difficult to describe (Casault, 2017). Taking into consideration that some policies have an insignificant influence on economic figures (Pieroni, 2017), there are still hard empirical evidences that reveal the effect of fiscal policy on economic growth especially in transition and emerging countries (Fetai, 2017). On this macroeconomic scale the results depend on the instrument that has been used. In some cases, there has been revealed that a cut in personal income tax had no effect on the relative prices, the activity levels or the unemployment rate (Campoy-Munoz, 2017).

There are empirical evidences that proves the introduction of an extremely small tax does not affect the aggregate output in the economy, and increases the supply of labor and reduces wages, further increasing the tax rate leading to a growing negative impact on the total supply of the product (Achkasov, 2017). Other authors developed a calculation mechanism for differentiation of personal income tax revenues that would create additional incentives for development of the economy and encourage the implementation of justice concept in tax assessment (Yashina, 2017). Scientific literature provides various methods for identifying the impacts of different taxes and expenditures on economic

growth. Zimcik found that an increase in social contributions, property, production and personal income tax quotas has an adverse effect on economic growth (Zimcik, 2016).

Knowing that corporate income tax is one of the most important taxes in acquiring government revenue and fiscal regulation of economic activity there were identified existing problems and ways to improve the taxation of corporate income in the context of balancing the interests of taxpayers and the government (Paientko, 2016). There are also empirical evidences about the dependence of the effective taxation on the corporate income tax rate, given the variability around the world due to different view of governments and countries on corporate taxation (Kosturikova, 2016). Analyzing the discrepancies in the taxation of corporate income tax between different Eurozone countries locates the idea of the fiscal pressure on the companies results (Llopis, 2016) and, taking this idea further, discrepancies in the competitive advantages and possibilities to establish new policies to improve competitive development (Sotalin, 2016). There are also evidences of the corporate income tax rates on shadow economy activity as the efforts to reduce budget deficits with corporate tax rate increases may be offset by an increase in shadow economy activity (Duncan, 2014).

On the other hand, the Small and Medium Enterprises (SME) have to deal with a fuzzy business frame. The results of studying the application of tax methods of regulation and support for small business and their impact were that the more consistent and understandable tax system is, the larger number of small enterprises can be founded, resulting in steady economic development of the state (Gogol, 2017).



Other evidences state that taxes and contributions represent an obstacle in the growth of companies with significant share in total costs (Marques, 2016). There are many other consequences, including the taxpayer's wellbeing. There are results that reveal some stakeholders bear the tax incidence and others do not (Donohoe, 2015).

There are also temporary differences that appear because of different temporal imputation of incomes and expenses to the tax base and accounting result and there are literature evidences that support the statement that companies that practice more discretion apply less positive and more negative adjustments in order to postpone or defer the taxation (Fernandez-Rodriguez, 2015). Other studies reveal that companies take reactions before the new enterprise income tax law is adopted and the market has a positive reaction to the companies that avoid tax successfully through earning management (Wang, 2014). Other countries experience such as Estonia (Masso, 2013) or Latvia (Pule, 2014) are consistent with an increase in holdings of liquid assets and lower use of debt financing after fiscal reform. A positive relationship of post-reform's investment and productivity has

also been found with an emphasis on small and medium firms (Masso, 2013).

## Methodology

We state the hypothesis that, at least in Romania, business incentive is based more on previous experiences of economic results related to various tax rate factors that influenced the costs than of rational understanding and anticipation of fiscal policy goals.

The study presents a method of acknowledging the forgotten effects of fiscal changes on small business incentive in a fuzzy environment. It is based on the quantified relationship among various factors that influence the decision of further investing. The survey results were biased by the expert's opinion in this field.

The pilot test was applied to 78 business partners from 70 small firms as defined by the Romanian law (OMFP 1802/2014). The methodology used in interpreting data is a fuzzy logic approach (Gil-Lafuente, 2010). The forgotten effects method operates in accord with diffuse values. These values were calculated in this present paper as the means of the results of an opinion survey conducted on 78 business people in Bucharest. The respondents were coming from different fields of economic activity, all of them having more than ten years of professional and business experience. The results were biased by experts' opinion.

The meaning of each value that express the evaluation of the relationship causes to causes, causes to effects and effects to effects: 0 – no impact; 0.1 – virtually no effect; 0.2 – almost no effect; 0.3 – very low effect; 0.4 – low effect; 0.5 – medium effect; 0.6 – significant effect; 0.7 – very significant effect; 0.8 – strong effect; 0.9 – very strong effect; 1 – the highest effect.

We further present the **causes** of the proposed model of analysis.

**1. The change in the subject of taxation** for worker's social security contribution is probably the most important change in the law 227/2015. Before its implementation through Emergency Ordinance No. 79/08.11.2017 published in Official Gazette No. 885/10.11.2017, that changed Paragraph (2), Article 2, Chapter I with Point 1, Article I, contributions were collected from the employee through the employer. This change refers to the type of contributions, fewer now, the subject of the contribution to the state budget and the quantum of contribution. Collecting and paying the contribution remains on the firm. What changed, was given the fact that personal contributions are subject to criminal law if not paid on time, the perception on the urgency of this payments. Up to that modification, there existed some possibility of delaying the payment of the debt up to a year or to postpone any debt less than 10.000 lei through fiscal credit (paying only the penalties and interests to the state budget). This was a short liquidity instrument cheaper than a commercial credit. On the other side, we find a managerial extra burden, that of renegotiating the individual contracts and of making all the additional changes in various registers as „REVISAL”, „D112”, etc. All this facts create justifiable influences over the expected economic and accounting results, over the incentive to maintain the legal form, to avoid taxation or to leave the market.

**2. The change of the income tax contribution**, considered to be of ease for the fiscal burden of employees, at least perceived as such is, in fact, a very small ease in his total fiscal burden as he is the main fiscal subject starting the 1<sup>st</sup> of the January.

The employer has to retain this obligation and make the changes in legal documents and registers.

**3. The change of various taxes for the Authorized Physical Persons** represents an incentive to change the current form of legal enterprise to other form of conducting a business, if results are relevant. There was an important change regarding the fixed taxation under a certain amount of total earnings in the fiscal year (that is 22.800 lei of any source of income). A small entity, according to the commercial field it operates (that is the NCAE codes) and according to the results (that is in particular valid when we consider small results), may change if considered proper, the legal form, from Limited Liability Company to Authorized Physical Entity according to Romanian law. The vice-versa is also valid. This decision is also based on expected economic and accounting results and to avoid taxation and further may leave to the incentive to leave the market in order to become an employee.

**4. The change of the Value Added Tax (VAT)** from 21% to 19% from the 1<sup>st</sup> of January 2017 represents an ease on business taxation, especially for the small ones registered as VAT contributors. This is the



second reduction of the main VAT quota in the last five years, declining from 24%. It is considered that the perceived effects are: a growth in economic and accounting results, the incentive to maintain the legal form, a decrease in the incentive to avoid taxation and to leave the market.

**5. The frequency of changes in taxations** has a psychological effect on the

business people that naturally complain over. There are perceived uncertainties of the results, the possibility to remain in business and a growth in the incentive to avoid taxation.

The results of the survey conducted in Bucharest, in February 2018, on 78 entities, with a rate of responses of 89.7%, are presented in Table 1.

**Table 1** – *Causes to causes matrix*

The change in the subject of taxation	The change of the income tax contribution	The change of various taxes for the APF	The change of the VAT	The frequency of changes in taxations
<b>The change in the subject of taxation</b>				
1.0	0.3	0.4	0.1	0.2
<b>The change of the income tax contribution</b>				
0.4	1.0	0.6	0.2	0.1
<b>The change of various taxes for the Authorized Physical Persons</b>				
0.1	0.8	1.0	0.2	0.0
<b>The change of the VAT</b>				
0.0	0.3	0.6	1.0	0.2
<b>The frequency of changes in taxations</b>				
0.0	0.3	0.1	0.4	1.0

(Source: Own work based on the survey's results)

Except factor on factor level 1 scoring, given by default, the most important influences are considered to be the change of various taxes for the Authorized Physical Person over the change on the income tax contribution. The change of the income tax contribution over the change of various taxes for Authorized Physical Person has the same influence as the change of the VAT over the same cause. There is virtually no influence in what regards the change of the VAT and the frequency of changes in

taxations over the changes in the subject of taxation.

The **effects** form the decision to further invest in a small firm and may be summarize as such:

**1. Expected economic result** represents the anticipation of the economic profit. This is the anticipation of the net income biased by the inflation, the risk and the opportunity cost of the decision of having a business instead of working as an employee, for example.

**2. Expected accounting results** are the gross and net figures from the financial situations at the end of the fiscal year, that represent the base for the remuneration of the owners of the economic enterprise.

**3. Incentive to maintain the legal form** is having the same juridical form or changing to a different one, more proper according to the new fiscal rules. That implies additional costs of legal forms, management, etc.

**4. Incentive to avoid taxation** is possibly one of the most important effects derived from the fiscal volatility.

**5. Incentive to leave the market** implies the most negative effect over the business decision but is subdued to the rationality of maintaining the results over the costs.

The effects to effects matrix subjective evaluation is presented in Table 2.

**Table 2** – *Effects to effects matrix*

Expected economic result	Expected accounting results	Incentive to maintain the legal form	Incentive to avoid taxation	Incentive to leave the market
<b>Expected economic result</b>				
1.0	0.6	0.9	0.9	0.5
<b>Expected accounting results</b>				
0.8	1.0	0.5	0.9	0.6
<b>Incentive to maintain the legal form</b>				
0.6	0.7	1.0	0.2	0.0
<b>Incentive to avoid taxation</b>				
0.2	0.8	0.8	1.0	0.5
<b>Incentive to leave the market</b>				
0.5	0.9	0.2	0.3	1.0

(Source: Own work based on the survey's results)

Expected economic results have the most influence of 0.9, over the incentive to maintain the legal form and over the incentive to avoid taxation. The same is evaluated the expected accounting results over the incentive to avoid taxation and a slightly lower influence over the expected economic results. The incentive to avoid taxation has a strong influence over the expected accounting results and over the incentive to maintain the legal form. The

incentive to leave the market has the peak influence over the expected accounting results. There is no influence what so ever in what regards the incentive to maintain the legal form over the incentive to leave the market. That is considered an odd case and the author will further test this matter. The incentive to leave the market has also a very small influence (almost no effect) over the incentive to maintain the legal form.

Further we present the average **results of causes to effects** evaluations evident relationship, in Table 3.

**Table 3** – *Causes to effects matrix evident relationship*

Expected economic result	Expected accounting results	Incentive to maintain the legal form	Incentive to avoid taxation	Incentive to leave the market
<b>The change in the subject of taxation</b>				
0.4	0.8	0.3	0.4	0.1
<b>The change of the income tax contribution</b>				
0.8	0.9	0.7	0.4	0.5
<b>The change of various taxes for the Authorized Physical Persons</b>				
0.1	0.1	0.4	0.3	0.2
<b>The change of the VAT</b>				
0.9	0.9	0.3	0.6	0.6
<b>The frequency of changes in taxations</b>				
0.7	0.8	0.3	0.4	0.9

(Source: Own work based on the survey's results)

The change of the income tax contribution and the change of the VAT have a very strong effect over the expected accounting results while the VAT has the same effect over the expected economic result. The frequency of changes in taxation has a very strong effect over the incentive to leave the market. On the other hand, the change of various taxes for the Authorized Physical Persons has virtually no effect over the expected economic results and the expected accounting results the same as the change in the subject of taxation has over the incentive to leave the market.

We'll further introduce an instrument of work in order to find out which is the

non-evident relationship between causes and effects. Table 4 represents a transitory function that will further be used in order to reveal the forgotten effects relationships. It was calculated as composition using the maximum of minimum function of causes to causes and causes to effects matrices.

Applying the method of maximum of minimum function by composing the causes to causes matrix with the causes to effects and then with the effects to effects matrix, we obtain, in Table 5, the accumulated causes to effects matrix. It reveals the **non-evident relationship** that further represents the support for calculating the forgotten effects matrix.

**Table 4** – *The max-min matrix*

Expected economic result	Expected accounting results	Incentive to maintain the legal form	Incentive to avoid taxation	Incentive to leave the market
<b>The change in the subject of taxation</b>				
0.4	0.8	0.4	0.4	0.3
<b>The change of the income tax contribution</b>				
0.8	0.9	0.7	0.4	0.5
<b>The change of various taxes for the Authorized Physical Persons</b>				
0.8	0.8	0.7	0.4	0.5
<b>The change of the VAT</b>				
0.9	0.9	0.4	0.6	0.6
<b>The frequency of changes in taxations</b>				
0.7	0.8	0.3	0.4	0.9

(Source: Author's own work)

**Table 5** – *The non evident relationship causes to effects matrix*

Expected economic result	Expected accounting results	Incentive to maintain the legal form	Incentive to avoid taxation	Incentive to leave the market
<b>The change in the subject of taxation</b>				
0.8	0.8	0.5	0.8	0.6
<b>The change of the income tax contribution</b>				
0.8	0.9	0.8	0.9	0.6
<b>The change of various taxes for the Authorized Physical Persons</b>				
0.8	0.8	0.8	0.8	0.6
<b>The change of the VAT</b>				
0.9	0.9	0.9	0.9	0.6
<b>The frequency of changes in taxations</b>				
0.8	0.9	0.7	0.8	0.9

(Source: Author's own work)



There is now revealed a strong effect in what regards the change in the subject of taxation over the expected economic results and over the incentive to avoid taxation. There is a very strong effect in the change of the income tax contribution over the incentive to avoid taxation. The change of various taxes for the Authorized Physical Persons has important hidden effects over the expected economic result and the expected accounting results, as the

non-evident relationship reveals a strong effect. The same is valid for the change of the VAT over the incentive to maintain the legal form. The frequency of changes in taxations has a very significant effect over the incentive to maintain the legal form and a strong effect over the incentive to avoid taxation. The differences between the evident relationship and the non-evident one are presented in Table 6.

**Table 6** – *The forgotten effects matrix*

Expected economic result	Expected accounting results	Incentive to maintain the legal form	Incentive to avoid taxation	Incentive to leave the market
<b>The change in the subject of taxation</b>				
0.4	0.0	0.2	0.4	0.5
<b>The change of the income tax contribution</b>				
0.0	0.0	0.1	0.5	0.1
<b>The change of various taxes for the Authorized Physical Persons</b>				
0.7	0.7	0.4	0.5	0.4
<b>The change of the VAT</b>				
0.0	0.0	0.6	0.3	0.0
<b>The frequency of changes in taxations</b>				
0.1	0.1	0.4	0.4	0.0

(Source: Author's own work)

We determined the most relevant hidden aspects on the change in the subject of taxation over the incentive to leave the market, the change of the income tax contribution and the change of various taxes for the Authorized Physical Persons over the incentive

to avoid taxation. There are also non-evident relations between the change for various taxes for the Authorized Physical Persons and expected economic result and expected accounting results.



## Conclusions

By using the fuzzy logic and the forgotten effects model, it could be proven that fiscal changes represent a very important aspect that influences the business incentive. The forgotten effects model is a very useful tool in order to find out if there is a more efficient way to support the business incentive stated in the hypothesis. For example, the direct effect of the change of the subject of taxation on the incentive to leave the market is only 0.1 but, as the non-evident relationship causes-effects matrix shows, there is an effect of 0.6 which means that the chain that induced this forgotten effects of 0.5 has to be revealed.

We'll take into consideration any hidden effect that is more or equal to 0.5 and study the causes to causes, causes to effects and effects to effects matrices in order to find out a better fine-tuned chain of the propagation of causes to the effects. This allows the quantification of the extent to which a cause is influencing a lever that will induce another lever or an effect.

Analyzing the hidden effects for various causes over the incentive to leave the

market, we determined there is a direct effect of 0.1 and a non-evident relationship of 0.6 that leads to searching the lever for the forgotten effect of 0.5. Following the evident relationships in the causes and causes to effects and effects to effects matrices we determine a non direct influence through the expected accounting results (0.8) that leads to a 0.6 incentive to leave the market. The change of the income tax contribution has a 0.6 influence over the change for various taxes for the Authorized Physical Persons and a 0.8 influence over the expected accounting result but has an insignificant effect on the incentive to leave the market. The change of various taxes for the Authorized Physical Persons has a 0.8 influence through the change of the income tax contribution that leads to a 0.5 influence over the incentive to leave the market. The change of the VAT leads to a 0.9 change in the subject of taxation that has a 0.8 influence over the expected accounting results.

The change in the VAT also leads to a 0.9 change of the income tax contribution that influences by 0.8 expected economic result,



by 0.9 the expected accounting result and by 0.7 the incentive to maintain the legal form of activity. It also has a 0.5 influence over the incentive to leave the market. This change also directly influences by 0.9 the expected economic and accounting results, by 0.6 the incentive to avoid taxation and by 0.6 the incentive to leave the market. The VAT change has an important influence over the frequency of changes in taxation, by 0.6 that leads to a 0.7 influence over the expected economic result, 0.8 over the expected accounting results and a 0.9 influence over the incentive to leave the market.

The change of the income tax contribution has a direct and a hidden important effect over the incentive to avoid taxation. Evidence reveal the same is valid for the change of various taxes for the Authorized Physical Persons over the expected economic result, the change for various taxes for the Authorized Physical Persons over the expected accounting result, the change for various taxes for the Authorized Physical Persons over the incentive to avoid taxation and, the most important part of the fiscal deal, the change of the VAT over the incentive to maintain the legal form.

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