Abstract: In this paper we try to realize a study on the interdependencies and correlation between the fiscal policy and financial and economic crisis in Romania. First, we analyze the taxation system in Romania before and after the start of economic crisis to establish the correlation between the level of taxation and the economic growth rate. The sense of correlation is important for analysis the direction of the government fiscal policy in the present context. It is important to follow the major changes of fiscal system after economic crisis beginning to anticipate the opportunity of these fiscal measures in the new economic climate.

JEL classification: E62, G01, H3, H6

Key words: fiscal policy, financial turmoil, budget deficit, Romanian economy, tax burden.

1. Introduction

In this paper we try to realize a study on the interdependencies and correlation between the fiscal policy and financial and economic crisis in Romania. Starting with 2008 in Romania appears the first signals that precede a potential financial crisis like: a large expanding of credit (however, such a phenomenon was slowing down in Romania due to National Bank of Romania measures), a significant increase in profit rate especially on the real market, a macroeconomic government policy aiming to maintain optimistic expectations, a lax fiscal policy with a low degree of redistribution.

First, we analyze the taxation system in Romania before and after the start of economic crisis to establish the correlation between the level of taxation and the economic growth rate. The sense of correlation is important for analysis the direction of the government fiscal policy in the present context. It is important to follow the major changes of fiscal system after economic crisis beginning to anticipate the opportunity of these fiscal measures in the new economic climate.
2. Objectives

The start point of this analysis is the budget deficit increasing in 2009 and the major difficulties in financing the public expenditure for the Romanian Government. This lack of financing sources is not only the result of the economic crisis, the causes are more complex and more deeply. Romania's budget deficit climbed to 4.5% of the Gross Domestic Product (GDP) in the first eight months of 2009, up by around one percentage point against the end of July. The deficit widened amid a decline in revenues and an increase in current expenditures. Capital expenditures (investment expenditures) fell by around six per cent compared with January-August 2008.

Concerning forecasting signals of recession, interesting especially from with a view to avoid in advance similar situations, according to economic theory, there are certain trends that we can find in Romania such as: a major increase in house and house-lot prices associated to a decrease in interest rates; increasing the salary more than labour productivity, rising personal and public expenditure.

In Romania house prices and house-lot prices have increased in certain areas of economic importance especially between 2007 and 2008. Another emergency signal was given by NBR as a preventive measure, namely the increase in the reference rate on the basis of a limited growth of credits. Other main macroeconomic indicators (inflation, interest rate of credit institutions, exports, industrial output and, partially, monthly average wage and exchange rate) have continued their positive trends throughout 2006, 2007 and 2008 (except for the last quarter of 2008), in spite of bad news about the economic crisis in the USA and many EU countries.

In this paper we try to realize a study on the interdependencies and correlation between the fiscal policy and financial and economic crisis in Romania. First, we analyze the taxation system in Romania before and after the start of economic crisis to establish the correlation between the level of taxation and the economic growth rate. The sense of correlation is important for analysis the direction of the government fiscal policy in the present context. It is important to follow the major changes of fiscal system after economic crisis beginning to anticipate the opportunity of these fiscal measures in the new economic climate.

For attaining these objectives our analysis is based on data provided by Eurostat, Statistical Year-Book of Romania and from other data published by the National Institute of Statistics, the last amendments to the Romanian Fiscal Code and current legislation, as well as different data about the strategies of the Romanian Government regarding the development of the Romanian business environment.

3. Methodology

Patterns of government financing are important for the economic growth. Taxes that distort incentives for productive investment or employment can impede growth, and analysis in this study concludes that such effect is likely to be compounded when governance is weak. In contrast, taxes that create fewer economic distortions, such as taxes on consumption, are less likely to have a negative effect on growth. Higher indirect taxes may even be associated with faster growth if the benefits of increasing expenditures outweigh the effects of increased taxation — and this is most
likely to happen in countries where strong governance leads to growth-enhancing public spending. In sum, higher taxes are most likely to be harmful to growth (a) when their design is distortionary and (b) in settings where overall governance is weak [1].

The tax burden measured by the overall tax-to-GDP ratio of Romania is, at 29.0 % in 2007, more than eight percentage points lower than the EU-27 average. The level of taxation in Romania is the lowest in the EU and markedly lowers than in neighbouring countries Bulgaria (34.2 %) and Hungary (39.8 %).

The characteristics of the Romanian taxation system before and after crisis are quite similar but there are some changes imposed by the new context of the global economy. Even if there are no data for the 2009 we can appreciate that the fiscal burden is increasing, based on the fiscal measure adopted from the end of 2008 until now. The taxation Romanian system is based on indirect taxation, which is almost 12% of GDP. The most important indirect tax is VAT, followed by the excises. Starting with 2000 the role of direct taxation in financing the public budget is continuously decreasing from 7.0 % of GDP to 6.7 % in 2008.

<table>
<thead>
<tr>
<th>% GDP</th>
<th>2000</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect taxes</td>
<td>12.2</td>
<td>11.7</td>
<td>12.9</td>
<td>12.8</td>
<td>12.6</td>
<td>12.0</td>
</tr>
<tr>
<td>VAT</td>
<td>6.5</td>
<td>6.7</td>
<td>8.1</td>
<td>7.9</td>
<td>8.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Excise duties</td>
<td>3.0</td>
<td>3.6</td>
<td>3.3</td>
<td>3.2</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Other taxes on products (incl. import duties)</td>
<td>2.2</td>
<td>1.0</td>
<td>1.0</td>
<td>1.2</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Other taxes on production</td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Direct taxes</td>
<td>7.0</td>
<td>6.4</td>
<td>5.3</td>
<td>6.0</td>
<td>6.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Personal income</td>
<td>3.5</td>
<td>2.9</td>
<td>2.3</td>
<td>2.8</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Corporate income</td>
<td>3.0</td>
<td>3.2</td>
<td>2.70</td>
<td>2.8</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Other</td>
<td>0.6</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>Social contributions</td>
<td>11.1</td>
<td>9.1</td>
<td>9.6</td>
<td>9.70</td>
<td>9.70</td>
<td>9.3</td>
</tr>
<tr>
<td>Employers’</td>
<td>8.1</td>
<td>5.9</td>
<td>6.4</td>
<td>6.3</td>
<td>6.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Employees’</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.3</td>
<td>3.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Self- and non-employed</td>
<td>0.0</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Total taxation % of GDP</td>
<td>30.2</td>
<td>27.2</td>
<td>27.8</td>
<td>28.5</td>
<td>29.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Real GDP growth (annual rate)</td>
<td>2.4</td>
<td>8.5</td>
<td>4.2</td>
<td>7.9</td>
<td>6.3</td>
<td>7.3</td>
</tr>
</tbody>
</table>

*Source: Eurostat*

The tax-to-GDP ratio declined continuously in the 2000–2004 period by overall more than three percentage points, mainly due to a reduction in revenues from direct taxes and social security contributions paid by employers. The latter went down by more than one quarter. This development was partly reversed up to 2007. Higher revenues in all three major tax categories lead to an increase in the tax-to-GDP ratio from 27.4 % (in 2004) to 29.0 % in 2007.
Romania has the fourth highest reliance on indirect taxes in the EU after Bulgaria, Cyprus, and Malta. Indirect taxes supply 42.7% of total tax revenue compared to a 37.6% EU-27 average, while the share of social contributions accounts for 33.3% (EU-27 30.2%) and direct taxes only for 24.0% (EU-27 32.4%). Because of this structure, the share of VAT on total tax (including social contributions) revenue in 2008 (28.2%) was the third highest in the Union. The low level of direct taxes is mainly due to low personal income taxes (merely 3.4% of GDP), amounting to around 42% of the EU-27 average.

![Figure no. 1 Structure of taxation in Romania](image)

The fiscal system has an important impact on the economic growth, because it is the mirror of the state intervention in the economy and also reveal the economic and social role of the government. In the next figure is revealed the tax burden and the rate of economic growth. Not only is the taxation system important for economic growth. There are many factors with different degree of influence like investment, exports, budget deficit, public debt. The economic growth rate can be included in a system of equation:

\[
EGR = c_1+c_2I+c_3BD+c_4PD \quad (1)
\]

\[
I= c_1+ c_2TB+c3IR \quad (2)
\]

\[
BD= c_1+ c_2TB+ c_3PE \quad (3)
\]

\[
PD= c_1+ c_2BD+ c_3E \quad (4)
\]

Where: EGR=Economic growth rate  
I=Investments  
BD=Budget deficit  
PD=Public Debt  
TB=Tax burden  
PE=Public expenses  
E=Exports
From these relations results the indirect role played by the taxation for the economic growth. The degree of correlation is not as relevant as the sense of the correlation. For Romanian economy the correlation is indirect as we can see below in the next figure. This means that a lower tax burden was favorable for GDP increasing. An important moment in the Romanian taxation system was 16% flat tax introduction in 2005.

This measure had a significant impact in attracting the foreign direct investments in our economy and based on the equation (2) ad (3) the effect is transmitted on the economic growth.

![Figure no. 2 Evolution of tax burden and economic growth](image)

Indirect correlation is establish through the equation from the next figure, if the tax burden is reduced with 1.27% the GDP will increase with 1% if all other factors and conditions are constant. The degree of correlation is very high but it is not so relevant thus no considering other independent variables.

![Figure no. 3 Correlation between economic growth and fiscal burden](image)
As from 2005, a flat rate tax system has replaced the previous four-bracket system, with tax rates ranging from 18% to 40%. The flat tax rate has been set at 16%, the same applied on taxable corporate profits. This rate in general applies to income from independent work activity, royalties, income from movable and immovable property (such as rents), but also to short-term capital gains on listed shares. Interest income, too, is subject to a final withholding tax of 16%.

Romanian corporate income tax follows the classical system: corporate profits are taxed at the company level and distributed profits are taxed again at the level of both corporate and individual shareholders. The standard flat-tax rate is 16% (before 2005 it was 25%). Dividends received from other Romanian resident companies are exempt from taxation. Capital gains are generally treated as ordinary business income and subject to the same rate. Expenses incurred for business purposes are generally deductible, except when used to supply benefits to shareholders or employees or when related to damaged or lost goods. Depreciation over periods fixed by the law applies to assets with a value above RON 1 800 (€ 425); depreciation may follow the straight-line, degressive or accelerated method.

The EC Parent-Subsidiary Directive applies from 1 January 2007. The transitional period relating to implementation of the Interest and Royalties Directive, foresees that a 10% withholding tax will apply to interest and royalties if the non-resident is registered as a legal entity (or has a permanent establishment) in an EU Member State. In other circumstances, the standard withholding tax rate of 16% applies to interest and royalties.

For businesses such as gambling, nightclubs and casinos, there is a minimum tax equal to 5% of the turnover. Microenterprises (having between one and nine employees, a turnover of less than € 100 000 and not deriving more than 50% of their income from consultancy and management) may opt for taxation at a rate of 2% of the turnover instead of the general corporate income tax (the rate will be 2.5% in 2008 and 3% as of 2009).

The standard VAT rate is 19%; a reduced rate of 9% applies to several goods like pharmaceutical products, medical equipment for disabled persons, books, newspapers, admission to cultural services and hotel accommodation. Starting with 2009, a 5% reduced rate applies to the supply of social and some private dwellings. VAT exemptions without right of deduction apply to, among others, medical treatments; educational and cultural activities (with some exceptions), public postal services, certain banking and financial transactions, insurance and reinsurance, and buildings and land (this exemption does not apply to a delivery made by a taxable person who is entitled to deduct the respective tax).

Social security contributions are payable at a combined rate for the employer and the employee. As of 1 February 2009, employees with normal working conditions must contribute for social security at 10.5% calculated on the gross income earned without any ceiling. Employers contribute at a rate of 20.8%. In the case of particular and special working conditions, higher rates for the employers apply.

The health insurance contribution rates applicable for 2009 remain at the level applicable for December 2008: employee’s contribution – 5.5%; employer’s contribution - 5.2%. The rates for the employer’s and employee’s unemployment fund
contribution applicable for 2009 is 0.5% (the same as for December 2008). All social contributions are deductible for income tax purposes.

The most important fiscal measures adopted in the new context of financial and economic crisis in Romania from the end of 2008 are:

1. Minimum corporate tax rate: the amount of the lump-sum tax depends on companies’ turnover, between 500 and 10000 Euros.
2. VAT rate reduction (from 19 % to 5 %) for the construction of social dwellings and, subject to conditions, private dwellings not exceeding 120 m2 and a value of RON 380 000 (about € 90 000) and VAT rate increase to 24%.
3. Taxpayers who derive income from agricultural activities will be required to pay a 2 % tax on their gross income.
4. Increase in employee's and employers' SSC rates decrease in employers' contributions for work accidents and professional diseases by 0.5 %.
5. Increase in level of deductibility of voluntary health insurance (from € 200 to € 250) and threshold of deduction for employees' contribution to facultative pension schemes (€ 200 to € 400).
6. Increase in the cap for the deductibility for voluntary pension and health contributions from corporate and personal income.
7. Increase in excise duties on alcohol beverages, cigarettes and fuel as from April 2009.
8. Introduction of an employee tax credit as a form of negative income tax in the maximum amount of € 181.03 per year.
9. Temporary tax exemptions on capital gains from trading securities on the Romanian stock market.
10. Specific types of capital gains realized by non-residents are now subject to permanent tax exemption.
11. Reduction in the car pollution tax.

4. Results

It is too early to evaluate the impact of these measures but from the analysis of economic growth rate we can see that the economy is in recession and the decreasing in 2009 is very high. The most distortionary measures with a negative impact on economic growth are introducing the minimum corporate tax and increasing the labor force cost through social contribution. First measure has reduced the number of companies and the second stimulate employer to tax evasion.
Figure no. 4 The economic growth rate in Romania

From our analysis we can appreciate as a good measure VAT reduction for stimulating the imobiliar sector, but the result after almost one year is not significant. But the opportunity of introduction of the new minimum corporate tax rate together with the flat tax rate and increasing the labor cost force through social contributions tax rate increasing is more or less questionable. The necessity of financing the public deficit determined these measures but the impact is reducing the tax base and for this reason we consider that the financing sources for the budget are not assured and also economic growth is not stimulated.

REFERENCES

3. * * * Law no. 19/2009, published in Official Gazette no.122 /27 February 2009
4. * * * Fiscal Romanian Code, 2010
5. * * * Eurostat Database