African Journal of Business Management Vol.3 (11), pp. 781-785, November, 2009 Available online at http://www.academicjournals.org/ajbm DOI: 10.5897/AJBM09.192 ISSN 1993-8233 © 2009 Academic Journals

## Full Length Research

# Traps of the flat tax in emerging countries

Cristian Socol<sup>1</sup>, Aura Socol<sup>2\*</sup> and Marinas Marius<sup>1</sup>

<sup>1</sup>Academy of Economic Studies, Bucharest. <sup>2</sup>Expert, Macroeconomic Analysis and Financial Policy Department, Ministry of Finance, Romania.

Accepted 5 October 2009

Adopting a flat tax regime continues to be of interest for the policy makers in the emerging countries. The decreasing of the fiscal administration costs and the potential increase of the FDIs (Foreign Direct Investments) are the main attractions of this system. This paper states that adopting the flat tax cannot be but a "hit and run" type strategy, because this measure can be applied on a short term only. We will prove, with theoretical and practical arguments, that the emerging countries will face severe economic and social disequilibriums in the absence of a measures-mix accompanying the implementation of the flat tax. We propose solutions in order to avoid the traps of the flat tax set for the emerging countries.

**Key words:** Flat tax, tax reform, twin deficits, finance sustainability.

#### INTRODUCTION

The implementation of the flat tax must not be perceived by the emerging countries as a measure which will solve the economic problems only by itself. The experience of countries such as Romania and the Baltic states (Estonia, Lithuania, Latvia) proves that adopting the flat tax has deepened the macroeconomic imbalances and it emphasized the social polarization (Keen et al., 2006 for details regarding the implementation of the flat tax in emerging countries and Socol et al., 2009 for the analysis related to implementing the flat tax in the case of Romania).

This study is analyzing the extent to which the theoretical implications of applying the flat tax are validated within the economies which have already implemented this tax regime. In order to emphasize the impact of the flat tax upon the national public budget, we have used the following indicators: the budget revenues as a share in the GDP and the budget balance expressed as a share in the GDP. Moreover, in order to catch the macroeconomic impact of this measure, the GDP and its components were used, especially the consumption and the investments. One of the arguments for introducing the flat tax

is represented by the increase of the economic potentialities. To validate or not this hypothesis, we have drawn upon the indicators which are correlated with the potential GDP, and also the employment, the rate of unemployment and the underground economy's share in the GDP. To establish the correlation between this tax regime and the macroeconomic disequilibriums, the output gap and the balance of the current account, expressed as a share in the GDP was used.

The flat tax (or the proportional tax) is not an innovation in the field of the tax policy, it only has reappeared and extended after more than a century of progressive taxation of revenues. The progressive taxation has been adopted in most of the world's economies since 1848, subsequent to the arguments brought by Karl Marx within his Communist Manifesto. In the 20th Century, it has been put into prcatice only in a few small countries or fiscal jurisdictions, such as Hong Kong, Guersney or Jersey. The idea of the flat tax has been relaunched after World War II, when Hayek (1956) denied that the progressive taxation would be essential for decreasing the social inequities, and Milton Friedman (1962) proposed a 23.5% federal tax for USA. In 1980, Milton and Rose Friedman supported the necessity to introduce a maximum 20% federal income tax of natural persons, as the economic resources will be assigned, to a greater extent, to the private economic agents. In 1985, Hall and Rabushka published the book "The Flat Tax" at the Hoover Institute, in which they brought arguments that the

JEL Classification: E 62, H 62

<sup>\*</sup>Corresponding author. E-mail auragabriela.socol@gmail.com. Tel: 0040 723542981.

introduction of this tax regime will crucially influence the productive potentiality of the American economy and the citizens' living standard, by improving the work incentives, by developing the enterprise capacity and by increasing the capital formation. Another argument for the flat tax has been the avoidance of the distortions induced by the differentiated taxation of the two production factors, labour and capital.

The empirical evidences show that the regime based on the flat tax is strongly pro-cyclic. When the emerging economies are in expansion and the consumption gets increased, the flat tax helps to the increase of the budgetary revenues, of the investments and of the employment degree, etc. When the economy goes in recession, the flat tax deepens this process, as a result of the consumption decrease and implicitly of the strong decrease of the budgetary revenues. Moreover, the modification in the structure of the budgetary revenues by increasing the share of the indirect taxes (VAT, excises, and customs duties) is not sustainable. The practice of the countries which adopted the flat tax at lower extends in order to attract foreign direct investments proves that, if in expansion, the budgetary revenues from direct taxes (on profit, on salaries, etc.) get increased at a slow pace and those from indirect taxes get increased at more rapid paces, in recession both the revenues from direct taxes and those from indirect taxes get decreased at rapid paces.

The positive effects of the flat tax are at least ambiguous. There are no Laffer curve signals, a correlation proved between the fiscal relaxation through the flat tax and the increase in the budgetary revenues (Keen et al, 2006). Moreover, the budgetary revenues do not automatically get increased as a result of this measure. For example, in the case of Estonia, even under the terms of a high rate of economic growth, the share of the returns from the direct taxes got decreased from 12% (in 1994) to 7.5% in 2008. Also, in the case of Slovakia, there have been made estimates that the revenues from the income taxes and from the taxes on profit were up to 1% lower than under the terms of not introducing the tax reform (Odor, 2007).

The above mentioned emerging countries, which have adopted the flat tax during the periods when they were in an expansionary gap (the increase of the potential GDP > the increase of the effective GDP) have overheated the economy (the Baltic countries had a 6.5% average increase per year after adopting the flat tax and Romania with 6.4% per year). When other conditions, which increased consumption (the raise of the wages over the productivity growth, the relaxation of credits, etc.), stopped, the flat tax stopped showing its positive effects, too. At present, when these economies have gone into recession, the decrease of the GDP is as strong as its previous increase (Latvia - 4.6% in 2008 and -13.1% in 2009, Estonia -3.6% in 2008 and -10.3% in 2009, Lithuania -11% in 2009, etc). The flat tax made the evolution of economies disappear from these countries.

There are no empirical studies which can prove that the simple introducing of the flat tax will lead to the increase in the employment degree and to the bringing to surface of the jobs from the underground economy. In the absence of some appropriate social policies, the implementation of the flat tax has as a result the deepening of the social polarization and the emphasizing of poverty (Socol et al., 2009, for the Romania's case).

The European countries which are not EU members have been differently influenced by the introduction of the flat tax relative to other countries. After the year when the taxation regime changed (2003), Serbia has recorded more than 5.6% economic growth rates each year, compared to an average below 4% between 2000 and 2003, and also the emphasize of the external disequilibrium from 8.2% of the GDP in 2002 to 12.1% in 2004 and to 18.6% of the GDP in 2008. But the flat tax has not improved the labour market functioning, and this could negatively affect the long-term potential economic growth. Thus, according to the European Commission (2008), the rate of employment has decreased from 68.4% in 2002 to approximately 63% in 2008, and the rate of unemployment has increased from 14.5% in 2002 to 18.3% in 2007. In Ukraine, the flat tax regime (in 2004) has resulted in the increase of the aggregate demand which has generated the increase of the macroeconomic disequilibriums, in the absence of the serious structural transformations and of the significant improvement in the quality of the business environment: the inflation rate has increased from less than 10% in 2003 to more than 10% during the 2004-2008 period, with a maximum of 22% during the last year; the budget deficit has increased from 0.2% in 2003 to 3% in 2004, being approximately 1.5% in 2007 and 2008; the balance of the current account has deteriorated from an excess of 5.8% of the GDP in 2003 to a deficit of 6.9% in 2008.

As a result of the 2005 fiscal reform and of other measures for the improvement of infrastructure and of business environment, until August 2008 (the conflict with Russia) Georgia recorded an average economic growth rate of 10%, compared to 5% in 2004. Most of the aggregate demand in economy has generated, as in most of the countries which have implemented the flat tax system, an emphasis of the current account deficit from 6.9% of the GDP in 2004 to 22.3% of the GDP in 2008 and of the average inflation rate, from 5.7% in 2004 to more than 8% between 2005 and 2008. Beginning with the year when the flat tax has been introduced (2007), Macedonia has recorded an improvement of the perception upon the business environment (according to World Bank Doing Business Survey and Transparency International, 2008). This perspective contributed to the increase in the FDI flows, which resulted in the increase of the aggregate demand and of the economic growth rate from 4% in 2006 to 6% in 2007 and in the first three guarters of 2008 (according to world Bank, 2009). But most of the aggregate demand in economy has reflected in the pronounced deterioration of the current account balance from an excess of 0.9% of the GDP in 2007 to current accounts deficits of 7.5% of the GDP in 2007 and 12.7% of the GDP in 2008. Moreover, the economic inflationary pressures have been increased, being materialized in the increase of the annualized inflation rate from 3% in January 2006 to 10.5% in August 2008. In 2008 (the year of the new taxation regime), Albania recorded an increase in the budget revenues from taxes with 1.7% of the GDP, under the circumstances of the decreasing of the returns coming from the corporate tax from 2.2% of the GDP in 2007 to 1.7% of the GDP in 2008, and the returns coming from the income tax increased with 0.6% of the GDP.

As for the EU member countries, which adopted the flat tax in 2008, its impact is more difficult to assess due to those economies being afected by the global economic crisis, this being reflected in the decrease of the budget returns, in the decrease of the GDP and in the increase of the unemployment rate. Moreover, in the case of the Czech Republic, the rate of unemployment was decreased from 5.3% in 2007 to 4.4% in 2008 (the year when the flat tax was introduced), and for 2010 the European Commission foresees a level which is lower than the one recorded in 2005. Also, in 2008, the Czech Republic was characterized by a 10.5% increase of the investments made in production equipments, which is double if compared to the one in 2007, as a result of the corporate tax decrease. Favourable evolutions were also recorded in Bulgaria with reference to the rate of unemployment (decreasing from 7% in 2007 to 5.6% in 2008), to employment (3.3% increase in 2008, superior to the 3% average recorded during the 2005-2007 period) and to the budget balance (budget excess of 1,5% of the GDP in 2008, compared to 0.1% in 2007).

Introducing the flat tax constitutes an argument for the improvement of the workers' incentives in order to improve their professional training (thus, they could obtain a higher salary which, under the terms of a flat tax, would generate a superior available income). But the empirical evidences for the group of the countries which adopted such a measure do not prove the confirmation of the previous hypothesis. Surprisingly, there can be noticed an increase of the working time for those having low wages, these ones being the least influenced by such a reform (CESIFO Report, 2007).

The supporters of applying the flat tax (such as Hall and Rabushka, 1985) considered that this system was decreasing the taxation pressure applied to the economic agents and, consequently, it will decrease their inclination towards tax evasion. More recently, Sklenár and Burger (2006) showed that the introduction of the flat tax is not automatically generating the decrease of the tax evasion. Moreover, based on a panel, Peter (2009) estimated that the flat tax system decreases the tax evasion on a short term, but this effect may disappear in the absence of some other measures taken for the improvement of the

business environment.

We consider it another myth that it is the flat tax that decreases the tax evasion. But, on the conditions of some weak institutional constraints, it is possible that this measure could generate a contrary effect. Thus, there have been made estimates that, in the case of Russia, the introducing of the flat tax determined a 12% increase in the tax evasion, while the impact upon the increase of the labour productivity was only 0.4% (Gorodnichenko et al., 2007). Similarly, in the case of Romania, the high economic growth during the period between 2005 and 2008 was accompanied by an increase of the activities in the unobserved economy, as well as by the expansion of the tax evasion. The unobserved economy's share in the GDP increased from 14.5% in 2004 to over 21% in 2008. The gross added value in nominal terms from the unobserved economy tripled during the period between 2005 and 2008. The undeclared work constitutes the most important part of the unobserved economy. During the first 9 months of 2008, the undeclared work represented 50.8% of the unobserved economy and the tax evasion at the VAT's payment reached almost 24 billions lei in 2008, compared to 7.4 billions lei in 2004 (Ministry of Public Finance, 2009).

In the case of the Baltic countries, the introducing of this taxation regime has not also generated a decrease of the rate of unemployment; for example, in the case of Estonia, the rate of unemployment decreased under the level from 1994 (the year when the flat tax was adopted) only in 2006, when it was 5.9%. Lithuania had a similar evolution, as it recorded a decrease in the rate of unemployment only after 10 years since the implementation of the flat tax system. On the contrary, in the case of Slovakia, the rate of unemployment reduced to a half after four years since the adoption of the flat tax.

Through the expansionary effect upon the domestic demand, the flat tax determined the deepening of the current account deficit in the Baltic countries and in Romania and its decrease in the case of Slovakia. In Estonia, the deficit tripled as a share of the GDP during the period between 1994 and 2007, in Latvia it increased from 0.4% in 1995 to 22.4% in 2007, and in Romania the deficit increased from 8.9% in 2005 to 13.9% in 2007. Moreover, the flat tax influenced the consumption to a greater extent and the private savings to a lesser extent, this being reflected in the occurrence of some inflationary pressures in economy and the economy's stimulation only on a short term. Considering the period between the moment when the flat tax was introduced and 2008, we can assert that the rate of the private savings maintained at the same level as in Estonia and Latvia and it significantly increased in the case of Romania (from 10.4% of the GDP to 16.4%), but at a pace which was inferior to the increase of the consumption (Ministry of Finance of the Czech Republic Fiscal Outlook, 2008).

Nevertheless, there are successful examples related to the introducing of the flat tax – Slovakia. It stimulated the

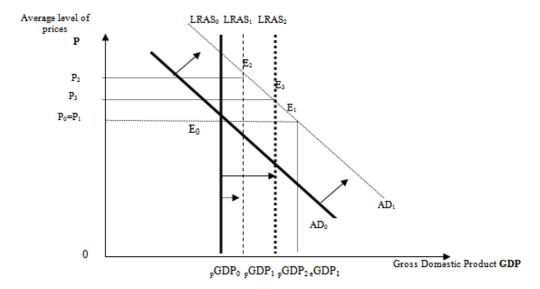


Figure 1. Effects of introducing the flat tax (without / with accompanying measures).

pGDP – potential GDP, eGDP – effective GDP, AD aggregate demand, LRAS long run aggregate supply,  $P_0=P_1$  on a short term, according to the Keynesien's vision. At the level  $E_0$ , pGDP $_0=eGDP_0$ , the economy is in equilibrium, both on a short and on a long term

investments to a greater extent (they increased with 17% during the immediately following year) than that of the consumption (with a 6.5% increase), also generating the increase in the efficiency rate of the production factors from 3.8% in 2004 to 6% in 2007. Even if, beginning with 2005, Slovakia has produced over its potential level, this has not also generated the inflammation of the inflation; the explanation consists in attracting some high streams of FDIs, which determined the long-term increase of the aggregate demand (Konuki, 2008). Moreover, the rapid increase of the labour productivity has been superior to wages increase (Slovakia Convergence Programme, 2007-2010)

#### **METHODOLOGY**

With the AD (aggregate demand) – AS (aggregate supply) model, we can prove the fact that, in the absence of some measures which are complementary to the flat tax, which could strongly stimulate the aggregate supply on a medium and long term (LRAS), the emerging economies will face the deepening of the twin deficits – the budget deficit and current account deficit – and the prices increase.

In order to understand these effects, we must make the distinction between the short-term and the long-term effects of the flat tax (Figure 1).

On a short term, the taxation decrease by introducing the flat tax and by expanding the crediting determines a strong increase of the aggregate demand and a lesser increase of the aggregate supply. In Figure 1, the aggregate demand increased (from  $AD_0$  to  $AD_1$ ) so that the economy moved from  $E_0$  to  $E_1$ . The effective GDP strongly increases on a short term from  ${}_{e}GDP_0$  = potential  $GDP_0$  to  ${}_{e}GDP_1$ , the loss of the budgetary revenues from the direct taxes and from the duties being exceeded by the increase of the revenues returned to

the budget from the VAT, based on the consumption's explosion.

On a medium term (and the trend will also continue on a long term), without adopting some accompanying measures complementary to the flat tax, the economy will tend to the point  $E_2$  (as a result of the aggregate supply's movement from LRAS $_0$  to LRAS $_1$ ). The increase of the  $_p\mbox{GDP}$  is much less than that of the GDP on a short term, obtained by stimulating the aggregate demand. The taxation revenues collected at the state budget will raise with a much less rate compared to the rate of decreasing the returns to the budget, as a result of applying the flat tax, the budget deficit increases and strong inflationary pressures occur. By analyzing Figure 1, it can be noticed that the inflation gets increased (from  $P_0$  to  $P_2$ ). The excess of aggregate demand (especially of imported goods) leads to more rapid paces of economic growth (yet unsustainable) and to the increase in the current account deficits.

In order to solve the disequilibriums caused by adopting the flat tax in economy, we propose complementary measures to be implemented together with the flat tax: the decrease of the contributions and of the taxes paid for labour, in order to increase the degree of employment and bringing the jobs from the underground economy to the surface; the non-taxation of the re-invested profit and offering taxation facilities to the major foreign investments, in order to stimulate the businesses and to avoid that the multi-national companies export their profits and nationalize the losses; taxation facilities for the technology imports, in order to increase the labour productivity; increasing the personal deductions, in order not to emphasize the polarization between the rich households (plainly beneficiaries of the flat tax system) and the poor households (plainly losers of the system based on the flat tax).

The complementary measures of stimulating the aggregate supply on a medium and long term (proposed above) will be able to determine a higher increase of the pGDP (from pGDP0 to pGDP2) compared to the increase of the pGDP in the initial model. The aggregate supply LRAS will get increased by one unit, so that it will move more to the right (compared to the initial situation) (from LRAS0 to LRAS2). The budget deficits will be lower, the inflationary pressures will be less stressing (from P0 to P2), and the magnitude of

the current account deficit will be lower. Thus, a virtuous circle will be created.

The analysis is similar to that performed by Keen et al. (2006), who studied the relationship between the returns from the taxes and the level of the national revenues in the case of progressive taxation and of flat tax, as well as the impact of the latter upon the social equity and upon the economic incentives. Moreover, Odor (2006) analyzed the macroeconomic impact of the flat tax, insisting on the short and on the long term (the latter one is based on a scenario refering to the evolutions of the real GDP and of the process of economic convergence).

The methodology used within our study represents the basis when elaborating the scenarios for the taxation policy impact (including the introduction of the flat tax) upon the macroeconomic variables. These scenarios are elaborated by each Ministry of Finance, being found in all the Stability and Convergence Programmes of the EU countries, as well as in the sudies elaborated by the World Bank or by IMF (e.g. The study elaborated by Allard and Muñoz, 2008).

#### **RESULTS AND DISCUSSIONS**

The emerging countries must think twice before introducing the flat tax. If the economy is not strongly competitive, the temptation of the fiscal dumping to dislocate investments from the developed countries must be impeded by the possible deepening of the economic and social disequilibriums. Without applying complementary measures which stimulate the aggregate supply on a medium and long term, the implementation of the flat tax will generate net costs. The increase of the GDP's volatility involves strong budget deficits and the worrying deepening of the current account deficit, accompanied by the rise of prices. The need for money at the budget will generate, on a medium term, the necessity to introduce new taxes and duties, as it happened in all the emerging countries which have introduced the flat tax. Moreover, the Ricardian equivalence (the fact that the future generations will pay higher taxes, in order to cover the high debts generated by the payment of low taxes at present) will also be felt.

The medium and the long terms do not confirm the positive effects of adopting the flat tax.

### Suggestions for future research

In order to catch the real impact of this taxation regime, we consider that the influence of the economy's cyclic variations must be eliminated from the analyses made in the future. As the economies which have introduced the flat tax are in the structural adjustment stage, the response to the internal and external shocks is stronger, and this could result in super- / under-estimating certain economic effects. For example, for a country which is experiencing an economic expansion, the increase of the budget revenues, the increase of investments, the decrease of the rate of unemployment or the decrease of the underground economy share are absolutely normal. But these evolutions also constitute potential effects of the flat tax. As a consequence, there must be made the

distinction between the temporary and the permanent (such as those induced by the flat tax) influences upon economy.

#### **REFERENCES**

- Allard C, Muñoz S (2008). Challenges to Monetary Policy in the Czech Republic—An Integrated Monetary and Fiscal Analysis, International Monetary Fund, WP/08/72, Washington
- CESIFO (2007). Flat Tax Experiments, available on www.cesifo-group.de, Munchen
- European Commission (2008). Statistical data available on www.eurostat.org, Bruxelles
- European Commission (2008). EU forecasting 2008-2010, available on www.europa.eu, Bruxelles
- European Commmission (2007). Convergence Programme of the Slovak Republic for 2007-2010, available on ec.europa.eu/economy finance, Bruxelles
- European Commission (2008). Serbia 2008 Report, available at http://ec.europa.eu/enlargement/pdf, Bruxelles
- Eurostat (2009). Statistical databases, Bruxelles
- Evans A (2006). The spread of economic theology: The flat tax in Romania, Romanian Econ. Bus. Rev. 1(1).
- Friedman M(1962). Capitalism and Freedom, University of Chicago Press
- Friedman M, Friedman RD (1980). Free to Choose: A Personal statement, New York, Harcourt Brace Jovanovich
- Gorodnichenko Y, Martin-Vasquez J, Sabrianova K (2007). Myth and reality of flat tax reform: Micro Estimates of Tax Evasion Response and Welfare Effects in Russia, available on www.nber.org
- Hall R, Rabushka A (1985). The Flat Tax, Hoover Institute
- Hayek FA(1956). Progressive Taxation Reconsidered, in Sennholz (Ed.) On Freedom and Free Enterprise, Princeton
- Keen M, Kim Y, Varsano R (2006). The "Flat Tax(es)": Principles and Evidence, IMF working paper, available on www.imf.org, Washington
- Konuky T (2008). Estimating Potential Output and the Output Gap in Slovakia, IMF working paper, 08/275, available on www.imf.org, Washington
- Ministry of Finance of the Romania (2009). Public Budget Report, Bucharest, Romania, available on the site www.mfinante.ro, Bucharest p. 15.
- Ministry of Finance of the Czech Republic (2008). "Flat tax in practice" in the study Fiscal Outlook of the Czech Reublic. Available on mfcr.cz/cps, Praga
- Odor L (2006). The Flat Tax Lessons from Tax Reform in Slovakia, Annual Julian Hodge Lecture on Applied Macroeconomics, available on www.julianhodgebank.com/group, Bratislava
- Peter, K.S. (2009). Income Tax Flattening: Does It Help to Reduce the Shadow Economy, IZA Discussion Papers, no. 4223, Bonn
- Sklenár P, Burger I (2006). Impact of the Slovak Tax Reform on Firms' Tax Evasion:A Comparative Study of the Czech and Slovak Republics, CERGE, available at http://www.cerge.cuni.cz/pdf/gdn/RRCV 33 paper 01.pdf
- Socol C, Socol A, Marinas M (2009). Emerging Topics in Macroeconomics (collective volume), R. O'Bailly (Coord.), contribu-tion: Adopting the Flat Tax in Romania: From Oratory to Evidence, Nova Publishers Publishing House, New York
- Stiglitz J, Walsh C (2005) Economics, The Economic Publishing House, Bucharest
- Transparency International (2008). Corruption Perceptions Index 2008, available at http://www.transparency.org/policy\_research/surveys\_indices/cpi, Berlin
- World Bank (2009). Country Brief 2009 (FYR Macedonia, Georgia, Albania, Serbia, Ukraine), Washington.
- World Bank (2008). Country Profile for Macedonia, available at www.doingbusiness.org/documents/.../MKD, Washington