

# Flat rate taxation in Bulgaria

Anastasia Stoyanova

## Abstract:

In 2008, the Bulgarian government introduced a 10% flat tax on all income and corporate profits, with the main purpose of attracting investment. Through indifference analysis and references to the theory of choice, we analyze the effects that the change in the taxation system had on the budget constraint of the three income groups, and its relative success. For middle and high profile earners, the policy leads to a decrease in the tax payable by 12% and 14% respectively, shifting their budget constraints outwards and leaving them with more consumption choices. For minimum wage workers, it constitutes an increase in the rate by 10%, as under the old system incomes of this level were not liable for taxation. In terms of investment, we conclude that the measure is effectively failing, as the complexity of the Bulgarian bureaucracy stifles internal investment, despite the increase in disposable income for higher income groups. At the same time, the worldwide crisis and resulting low confidence halved FDI in the period 2008-2009. As for minimum wage earners, the measure pushes many below the poverty line, increasing the income disparities in a country with a persisting problem with unequitable distribution of income.

## Introduction

In 2008, the socialist-dominated Bulgarian government lead by Prime Minister Sergei Stanishev pushed forward the introduction of a ten percent flat tax on all income and corporate profits (Nikolova 2012), to replace the existing system of progressive taxation. The new tax law removed the benchmark income below which no tax is levied, and increased the minimum social insurance installments<sup>1</sup> (Ninov 2012). These changes represented the final stage of a ten-year long battle, initiated after the 1997 “winter of hunger and rallies” (Novinite.com 2007) to cut taxation on private income. Though Bulgarian politicians highlight the resulting increase in tax revenues, fiscal stability and low debt, the average Bulgarian consumer remains largely unobserved. In the following essay, we will consider the three income groups – the minimum wage (poverty line), middle class and high profile earners - and illustrate the effects of the aforementioned change in taxation.

## Economic Principles

The economic principles, which will be applied to the discussion, include theory of choice, indifference analysis and the implications that taxes have on the consumer’s budget constraint. In the discussion on poverty line (minimum wage) consumers, we will take into consideration that while under the previous system minimum wage earners were exempt from tax liability (Omega-Tim 2007), this relief was removed under the new structure. Furthermore, it must be kept in mind the following arguments will build upon the assumption of monotonicity of preferences (Mochrie 2012), or that “more is always better”.

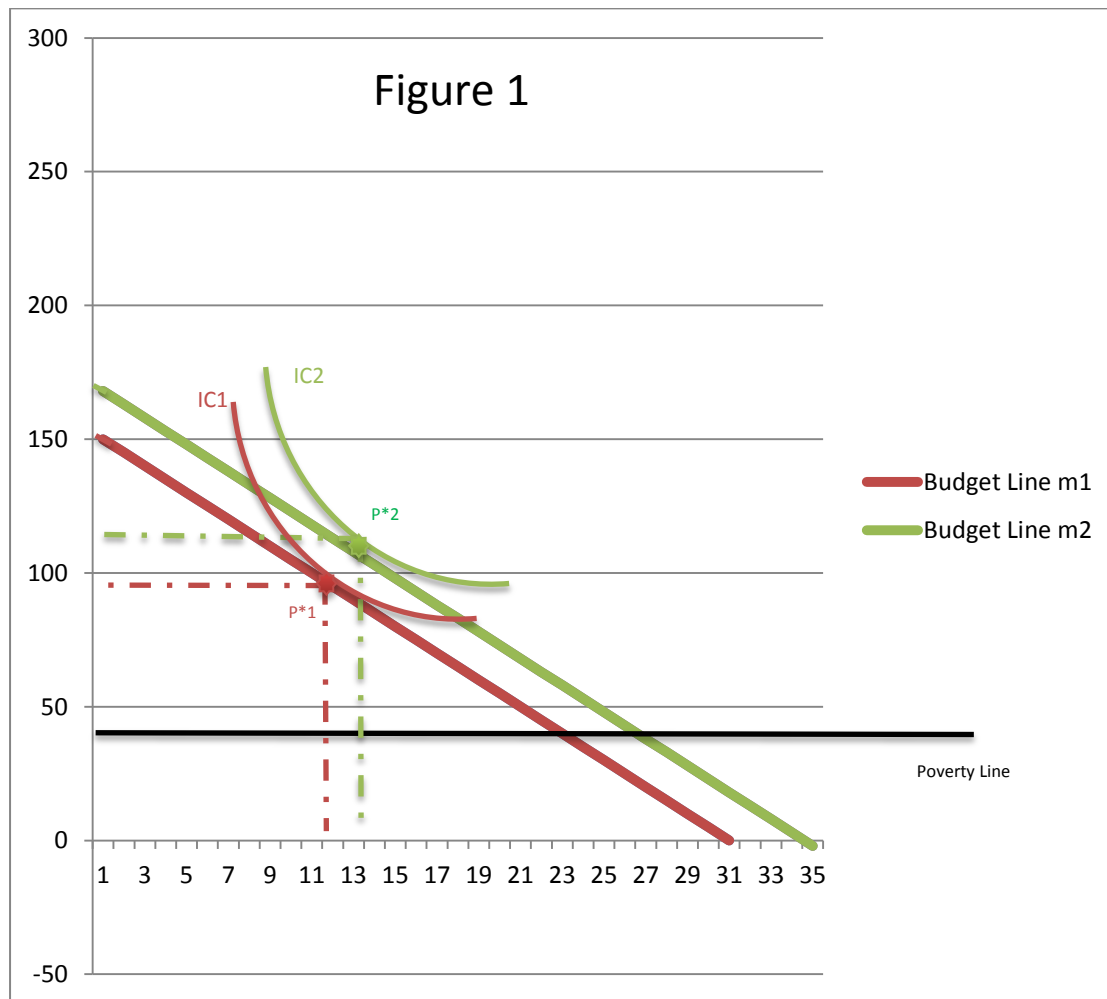
---

<sup>1</sup> Public pension schemes in Bulgaria are set up through installments paid along with taxes.

## Discussion

In order to begin our analysis, let us refer to a model. We assume that the middle class consumer spends their income on two categories of goods – luxuries and necessities (in Figure 1, the x and y axis respectively). What mix of the two they will choose to consume depends on (i) their income (Budget Lines in Figure 1), and (ii) their indifference map, marked as separate indifference curves (IC, IC1). According to the Theory of Choice, the consumer will always choose the most preferred affordable bundle, at the point where the highest possible indifference curve is tangential to the budget line (Mochrie 2010). Let us assume that in Bulgaria in 2008, a poverty line at just over 40 units of necessities defined the minimum required for survival. Before the introduction of the flat tax, the middle class consumer was facing an average taxation rate of 22% (The Sofia Echo, 2006), and in Figure 1, a budget line  $m_1$  and most preferred affordable bundle  $P^*_1$ . This allowed them to consume approximately 100 units of necessities and 11.5 units of luxuries, placing them well above the poverty line. After the 10% flat tax was introduced, middle class income effectively increased by 12%, causing a shift of the budget line to  $m_2$ . The most preferred affordable bundle became  $P^*_2$ , with respective 120 units of necessities and 12.5 units of luxuries being consumed, placing the consumer in an even more favorable position than before. This increase in disposable income, along with the low taxation on corporate profits, was a clear prompt for investment. This occurred because only a small portion of the increase will go towards consuming more necessities, while the rest will be left for luxuries, savings and investment. However, the unreformed, post-communist Bulgarian bureaucracy acted, and still acts, as a strong disincentive for the development of small and medium enterprise. In addition, the widespread investor panic of 2009 lead FDI to halve in

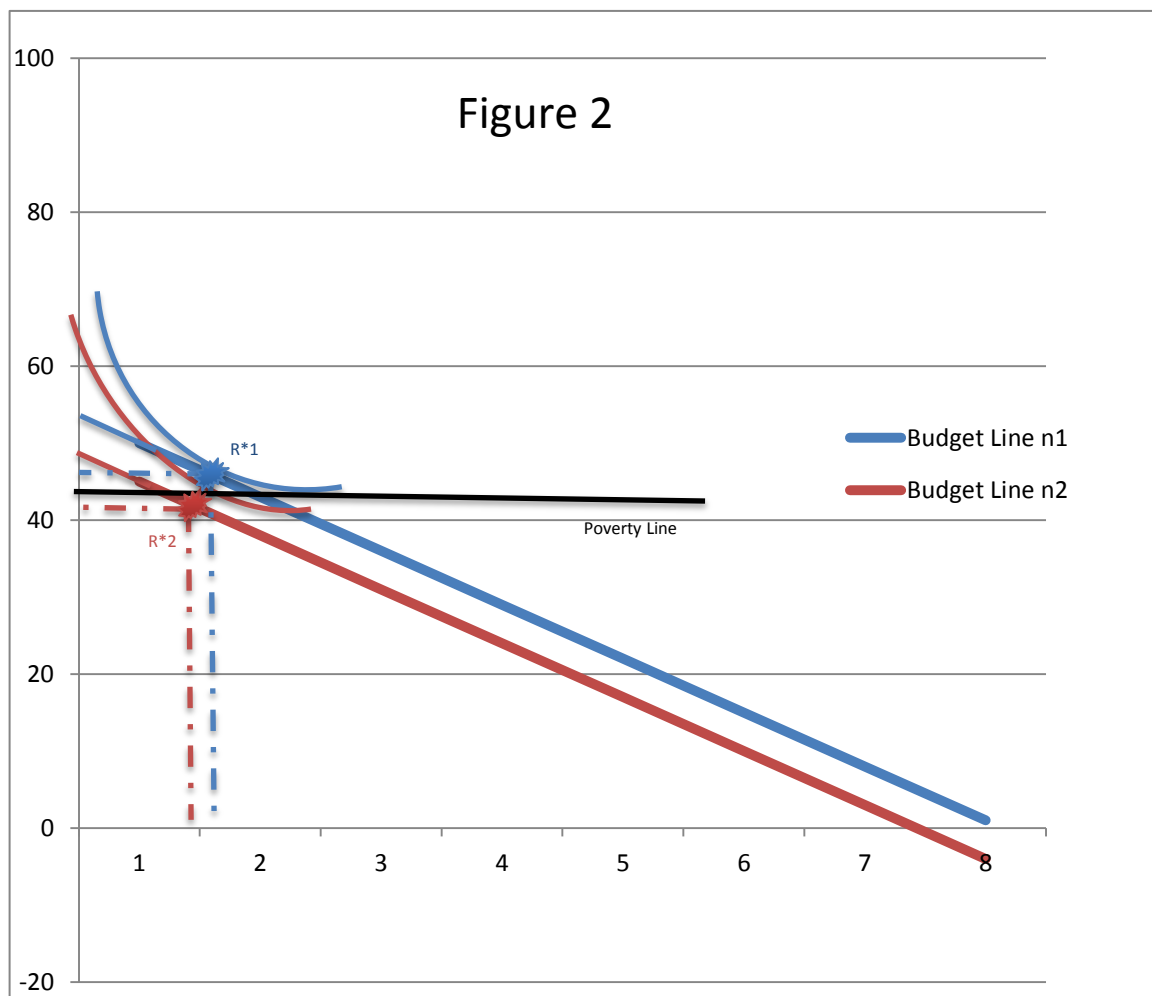
comparison to the previous year, severely undermining the government's attempts to attract investment.



In terms of the highest profile earners, the effects of the flat tax would be similar to those for the middle class. Before 2008, these consumers faced a 24% tax rate on their income (Omega-Tim Plc 2007), but even so were placed well above the poverty line. The change in the system decreased the tax rate faced by the highest paid workers by 14%, increasing their consumption of both necessities and luxuries, and henceforth bringing higher satisfaction and quality of life.

Let us now consider the minimum wage consumers. They also spend all their income on necessities and luxuries, consuming the most preferred affordable bundle. Under the old

system, income at the minimum wage was exempt from taxation (Ninov 2012). In Figure 2, the budget line faced by this consumer is  $n_1$ , with most preferred affordable bundle  $R^*_1$ . This allows them to consume approximately 45 units of necessities and 1.6 units of luxuries, placing them just above the poverty line. In 2008, the new system lifted the tax exemption, stripping 10% off the poorest. This caused the budget line to shift to  $n_2$ , changing the most preferred bundle to  $R^*_2$ . The minimum wage worker was now below the poverty line, consuming 41 units of necessities and 1.4 units of luxuries. At the time, the minimum monthly wage in Bulgaria was the equivalent of €92, with approximately 15% of the



population working at that level (EFILWC 2007). In a country where income inequality has been a persisting problem since the collapse of communism in 1989, the government has at

instances chosen to push the poorest just a little bit further for the sake of investment, instead of introducing a functioning anti-corruption scheme or undergoing internalized reform.

## Limitations

Having completed the theoretical analysis, it is important to question its validity. Firstly, we need to consider that the models and assumptions used are simplifications, and consequently do not carry full accuracy. Secondly, the mathematical calculations that were conducted are compromised by the fact that the indifference curves and the poverty line are theoretical. Furthermore, we were unable to examine in detail the positive effects that the new tax had on governmental revenues.

## Conclusion

An appropriate way of describing the change of 2008, along with its consequences would be through the proverb "the road to hell is paved with good intention". Sergei Stanishev and his cabinet took a decision, which in the long run was meant to attract considerable investment, both through higher disposable income for the investment-capable groups, and through a very low tax rate on corporate profits. Theoretically, the effects of this change would have increased the living standard in the country considerably. However, two obstacles presented themselves, significantly undermining the success of the project. The monstrous Bulgarian bureaucracy stifled internal investment, while the worldwide economic crisis and the uncertainty it brought halved FDI. At the same time, in

the short run, the flat tax system exacerbated the already severe problem of income inequality in the country, by burdening the poorest segment of Bulgarian society for the benefit of the richest. Despite the fact that the Bulgarian government could not have anticipated the full effect of the economic crash and did mark an increase in tax revenues, it can be concluded that this project was ultimately unsuccessful in attracting the expected level of investment, at the cost of pushing many into poverty.

## Bibliography

### Websites

Nikolova, D. (2012) 'Flat tax: facts against political babble' (Плосък данък – факти срещу политическо говорене)[online], available: [http://viewpoint.actualno.com/news\\_404221.html](http://viewpoint.actualno.com/news_404221.html), [accessed 27/10/2012]

Novinite.com (2007) 'Bulgarians split on 1997 riots' [online], available: [http://www.novinite.com/view\\_news.php?id=76267](http://www.novinite.com/view_news.php?id=76267) , [accessed 26/10/2012]

The Sofia Echo (2006) 'Bulgaria's tax policy 2007 – a rationale for tax level cuts' [online], available: [http://sofiaecho.com/2006/09/25/645351\\_bulgarias-tax-policy-2007-a-rationale-for-tax-levels-cut](http://sofiaecho.com/2006/09/25/645351_bulgarias-tax-policy-2007-a-rationale-for-tax-levels-cut) , [accessed 27/10/2012]

### Blogs

Ninov, D. (2012) 'Social aspects of the flat rate (proportional) taxation system – for and against'(Социални аспекти на плоското (пропорционално) данъчно облагане – „За” и „Против”), 20 February, available: [http://dninov.blogspot.co.uk/2012/02/blog-post\\_4048.html#!/2012/02/blog-post\\_4048.html](http://dninov.blogspot.co.uk/2012/02/blog-post_4048.html#!/2012/02/blog-post_4048.html) , [accessed 27/10/2012]

### PDFs

Omega – Tim Plc (2007)'State insurance installments and taxes 2007'(ОСИГУРОВКИ И ДАНЪЦИ 2007 г.)[online], Sofia, available: <http://omegatim.com/downfree/osigurovki/osig20070101.pdf>, [accessed 28/10/2012]

European Foundation for the Improvement of Living and Working Conditions [EFILWC](2007) 'Minimum Wages in Europe' [online]. Dublin, available: <http://www.eurofound.europa.eu/pubdocs/2007/83/en/1/ef0783en.pdf> , [accessed 26/10/2012]

### Lectures

Mochrie, R. (2012) 'Lecture 3 – Preferences', Lecture/Class, Heriot-Watt University, unpublished

Mochrie, R. (2010) 'The Most Preferred Bundle', Lecture/Class, Heriot-Watt University, unpublished

For use with Mochrie, *Intermediate Microeconomics*, Palgrave 2016