

Title: How did the tax reform in Slovakia affect its growth and development?

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RQ: How did the tax reform in Slovakia affect its growth and development?

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### 1. Abstract

In order to answer the question: "How did the tax reform in Slovakia affect its growth and development?" the tax reform is defined in the beginning. It is stated that the main components of the reform are the implementation of the flat tax on all types of incomes at 19%, broadening of the tax base, canceling double taxation and transferring the tax burden from direct to indirect taxes.

Subsequently growth is defined as an increase in real GDP. It is stated that growth can take place either through increasing aggregate demand or aggregate supply. First the tax-reform's impact, as a fiscal policy, on aggregate demand is evaluated and subsequently its effect on productivity as a means of increasing aggregate supply is analyzed.

Development is then defined as a reduction of poverty, unemployment and inequality. The impacts of the tax reform on the aforementioned components are evaluated. Progressivity of the new tax system is examined.

Consequently the relationship between growth and development is assessed based on findings from the earlier parts of the essay.

It is acknowledged that as the tax reform has only been implemented for 2 years and all other factors have not remained constant (other reforms were/undertaken), it is hard to assign the tax reform a quantitative role in changing the various macroeconomic indicators under examination and therefore this essay rather focuses on picking up the direction of change brought up by the reform itself.

The overall impact of the reform on growth is found to be beneficial as it created a positive entrepreneurial environment motivating for increasing productivity and investment. Economic development has also been found to have taken place with unemployment at a minimum since the creation of the Slovak Republic and the reforms' positive effects on overall progressivity as measured by the kakwani index.

300 words

## 2. Introduction

The last tax reform in Slovakia happened soon after the transition from a centrally planned economy to a free market. The tax legislation from the year 1993 was novelized many times in an attempt to correct its shortcomings. These changes were sometimes influenced by political goals, which introduced many nonsystematic laws – either favorising certain groups or handicapping others.

As a result of this process the tax legislation became increasingly complex; countless exceptions made it vague and ambiguous. Furthermore, different types of incomes and areas of the industry were taxed differently. Many people started to view the whole system as unjust. This led to a greater tendency in society for tax avoidance and evasion.

The urgent need for a tax reform became more than obvious. The flat tax was found to be the simplest and most effective solution. It was adopted in January 2004 taxing all incomes at the exactly same rate and keeping the Marginal tax rate (MTR) constant for all types of incomes independent of their amount. Its main objective was to help the economy by increasing domestic investment and FDI<sup>1</sup>, simplifying the tax system, transferring the tax burden from direct to indirect taxes and broadening the tax base. It was not designed to redistribute income.<sup>2</sup>

Although there is a number of countries in the world which have adopted the flat tax, Slovakia's tax system is unique in the world as its VAT, personal income tax and corporate income tax all have the same rate of 19%.

This reform soon became the most controversial topic in Slovak politics. The opposition talked about it as being made for the rich and increasing income inequality. And this is where my interest in the topic came from. I wanted to find out where the truth lies. Henceforth my research question: "How did the tax reform in Slovakia affect its growth and development?"

I started my quest for answers started by familiarizing myself with the concepts of this reform and by studying further publications on the flat tax. Then I conducted interviews with the author of the tax reform, the chief advisor of our ex-minister of finance and economic directors of two companies.

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<sup>1</sup> Foreign direct investment

<sup>2</sup> See appendix Item 1. for details of the changes brought by the tax reform

### 3. Analysis of the effects of the tax reform on growth

Economic growth is defined as an annual percentage change in real GDP<sup>3</sup>.

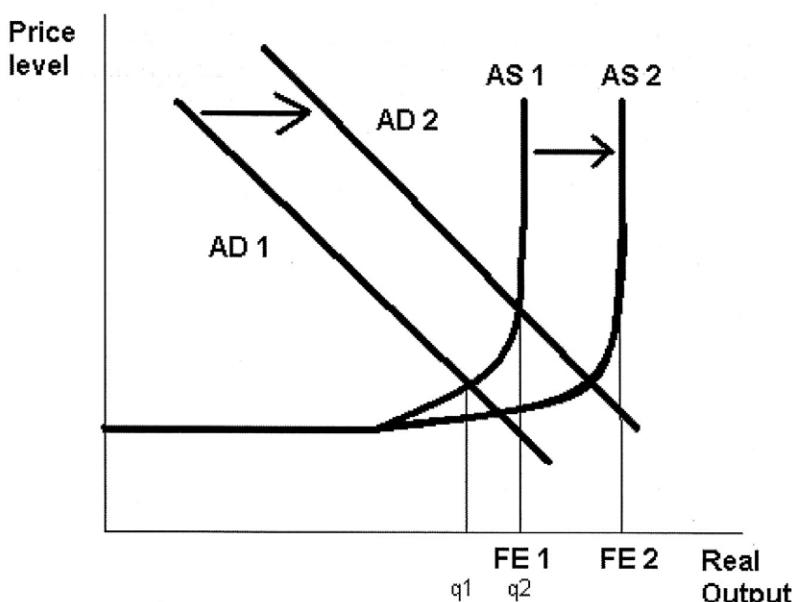
Aggregate demand (AD) equals  $GDP = C+I+G+(X-M)^4$  as measured by the expenditure method. This implies that GDP will rise if any of the components of GDP or net exports increase. As real GDP rises economic growth will take place.

Through changing taxation politics the government can increase GDP by increasing:

- a) AD using fiscal policy
- b) AS(Aggregate supply) using supply side policies

A country's GDP is determined by the intersection of AD and AS (fig#1)

Fig #1



Shifting out the AD using fiscal policy is only desirable when a country is below full employment, otherwise it would lead to inflation instead of growth. A shift from AD 1 to AD 2 as shown in the graph will lead to an increase in GDP and the economy will be at its productive potential<sup>5</sup>. This policy takes effect relatively quickly and is suitable for Slovakia, which experienced 17.8 % unemployment in 2002 prior to the reform.

Shifting out of the AS will increase the productive potential of the economy. It will; however, only have effect in the long term.

The effect of the tax reform on components of the AD will be assessed in the following section.

<sup>3</sup> the value of final goods and services produced by factors of production within a country during a period of time adjusted for inflation

<sup>4</sup> C=consumption

I=investment

G=government spending

(X-M)=net exports

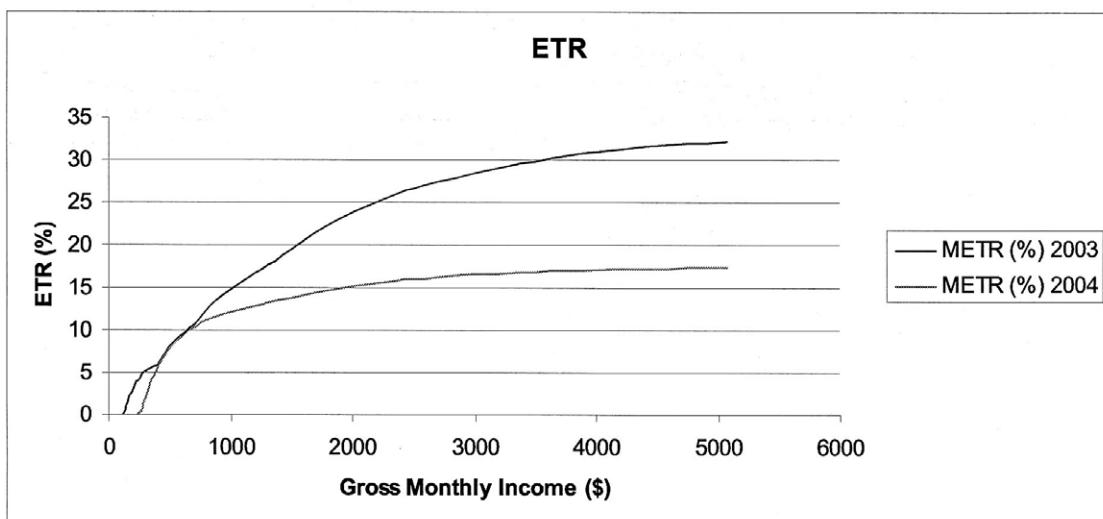
<sup>5</sup> The productive potential of a country is given by its current level of productivity, technology and factors of production

### 3.1. Effects of the tax reform on components of AD

#### 3.1.1. Effects on Consumption (C)

Consumption generally accounts for about 50% of AD which makes it its most important factor. Household consumption has been the main driving force of the Slovak economy in the past years. So an increase in consumption will have a significant effect on the overall AD. The tax reform decreased the amount of direct taxes paid for most taxpayers as shown in fig #2.

Fig #2



Gig #2 compares the Effective tax rate (ETR) in 2003 and 2004. ETR= tax paid / gross monthly income. It shows that the ETR in 2004 is lower for most incomes; the two curves touch at \$ 400<sup>6</sup>. To achieve this, the tax exemption was set at 19.2 times the minimum wage, increasing exemption from \$ 1311 in 2003 to \$ 2734 in 2004. As levy has been increased from 12.8% in 2003 to 13.4% in 2004, the tax reform negatively affected disposable income<sup>7</sup> for people earning \$400 - \$500. However, this was offset by the increase in real wages by 2.5% in 2004 and 6.3% in 2005. Thus most taxpayers experienced an increase in their disposable income.

This should:

- a) Increase the amount of money people have to spend
- b) Increase the average propensity to consume<sup>8</sup> because people will pay less tax on their income

And consequently the AD should increase by the multiplier effect<sup>9</sup>

<sup>6</sup> Coverstion rate: 1 USD=29,57 SK ([www.nb.sk](http://www.nb.sk))

<sup>7</sup> Income after taxation

<sup>8</sup> the amount consumed out of each \$ earned (Gillespie, Andrew, *AS & A Level Economics through diagrams*. Oxford: Oxford University Press, 1998)

<sup>9</sup> The multiplier effect is based on the fact that one person's spending is another person's income. Thus an initial boost in demand will lead to rounds of spending and a bigger overall increase in the income of the economy (Gillespie, Andrew, *AS & A Level Economics through diagrams*. Oxford: Oxford University Press, 1998)

Fig #3 represents % growth in household consumption over the past five years.

**Fig #3**

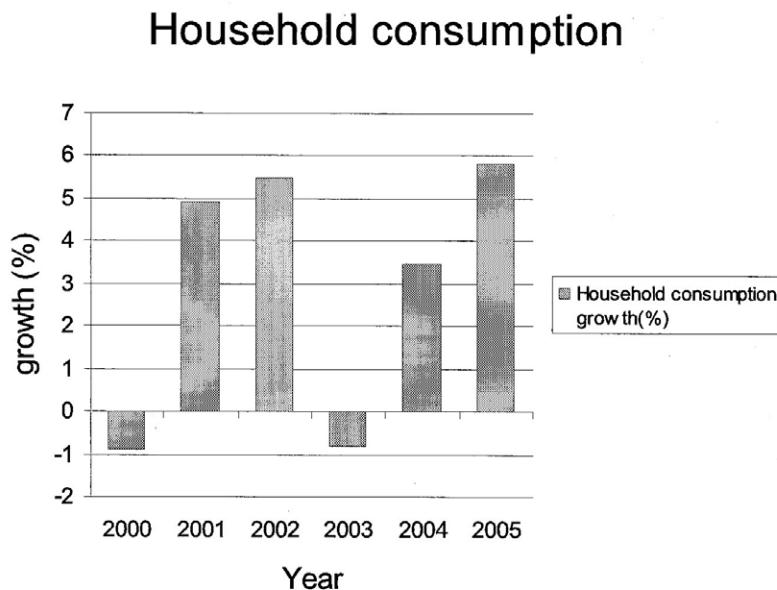


Fig #3 illustrates the sharp increase in C after 2003. The estimated increase in C due to the tax reform is 1.3% in 2004 and 1.6% in 2005<sup>10</sup>.

#### 3.1.2. Effects on investment (I)

##### 3.1.2.1. Effect on domestic I:

Economic theory states that firms will invest in projects for which the expected return on investment (ROI) is greater than interest rates (i).  $ROI = \frac{TR - VC}{FC}$ <sup>11</sup>.

Prior to the tax reform the effective tax burden for corporate entities was 36.3%. Now, after completely canceling the tax on dividends as a form of double taxation and decreasing the corporate tax from 25% to 19% this has fallen by almost a half to 19% (fig #4). So TC<sup>12</sup> for firms went down. Now Slovakia has a very low composite taxation of capital compared to other countries; before the reform it ranked in the middle of fig #4. This decreased both variable and fixed costs. Combined with an increase in consumption (higher TR) and productivity (lower VC) due to a shift in tax burden from direct to indirect taxes, which will be discussed later, it significantly

<sup>10</sup>( Krajčír, Zdenko; Ódor, Ľudovít, *Prvý rok daňovej reformy alebo 19% v akcii*. Bratislava: IFP, 2005)

<sup>11</sup>TR=total revenue

VC=variable costs

FC=fixed costs

<sup>12</sup>Total cost

increased ROI and thus, at stable interest rates, also the amount of investment in Slovakia.

**Fig #4**

### Composite taxation of capital

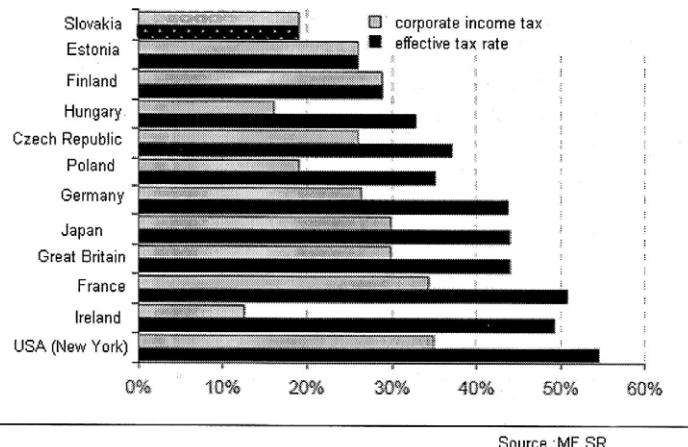
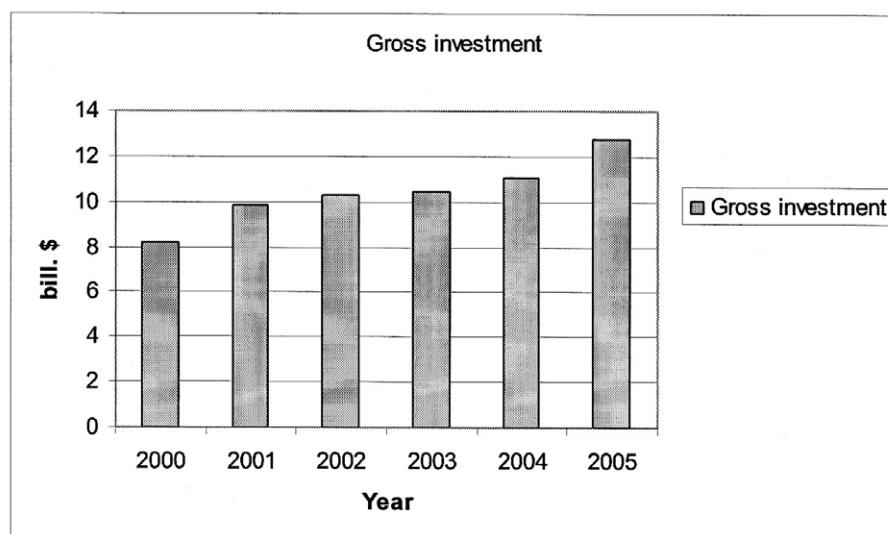


Fig #5 shows gross investment in Slovakia during the past five years.



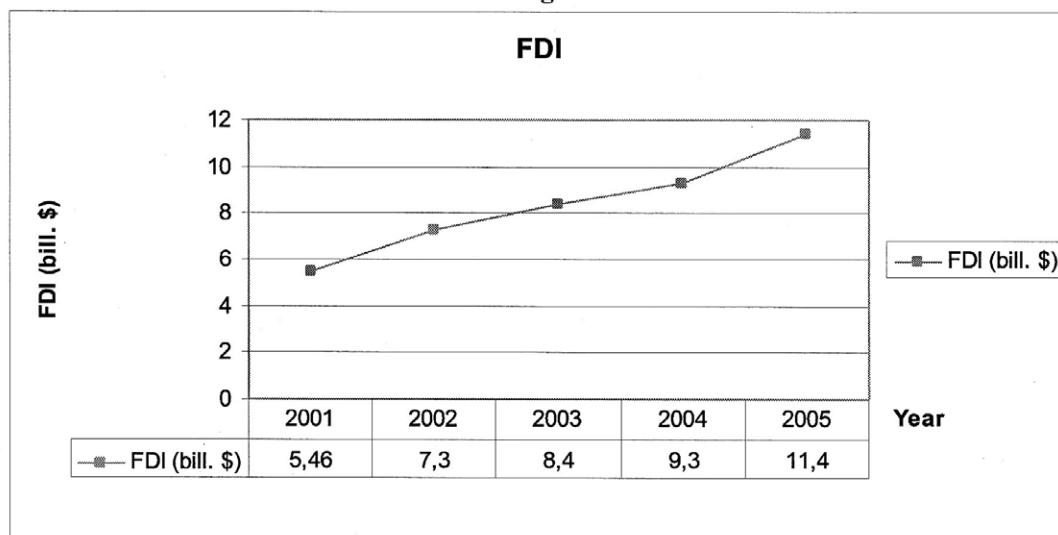
Notice the sharp increase in gross I in 2004 and 2005: as ROI increases, the industry becomes more profitable and investment increases. Fig #5 illustrates correlation with economic theory.

### 3.1.2.2. Effects on Foreign Direct Investment (FDI)

Increasing domestic ROI should induce an even greater increase in FDI as foreign investors borrow money for foreign  $i$ , which is usually lower than domestic  $i$  in a newly industrialized economy. Apart from that, FDI is also affected by the marketing effect. "Prior to the reform Slovakia was unknown. Now when investors hear Slovakia, "Flat tax" jumps into their minds. Due to a lack of trustworthy information, investors tend to act jointly - if one comes to a country, many will. KIA, one of the two major automobile firms coming to Slovakia, cited the flat tax as one of the incentives of coming to Slovakia."<sup>13</sup>

"When companies invest heavily in a small country like Slovakia, they usually appoint their own managers who have to be motivated to come there mainly by higher wages."<sup>14</sup> Now, with the highest tax bracket halved, they have 19% more percent of their income without a wage increase. This is more than in most countries as Slovakia has a comparatively low highest tax bracket. Fig #6 supports the theory with a sharp increase in FDI trend in 2005.

Fig #6<sup>15</sup>



### 3.1.3. Effects on G

Government spending is generally believed to be approximately equal to the tax revenue of the government. The overall amount of tax collected in 2004 represented 17,9% GDP which represents a decrease of 0,5 % compared to the scenario without the tax reform.

<sup>13</sup> MR. Bruncko, chief counselor of the Slovak ex-minister of finance, in an interview for me (see appendix)

<sup>14</sup> MR. Bruncko, chief counselor of the Slovak ex-minister of finance, in an interview for me (see appendix)

<sup>15</sup> values in fig #6 are cumulative

### 3.1.3.1. Effects on tax collection

#### 3.1.3.1.1 Effects on simplicity

The new tax legislation is much simpler with 195 exemptions out of 212 cancelled, 1 tax bracket replacing 21 and the word count of the legislation reduced by 40%. This helps investors through diminishing their time and money input for making their tax declarations and facilitates entry of new businesses. A big decrease in costs for the government is expected after the reorganization of tax collection and administration. Already the paper-cut costs for producing the tax forms have fallen from \$ 777815 to \$ 338180.<sup>16</sup>

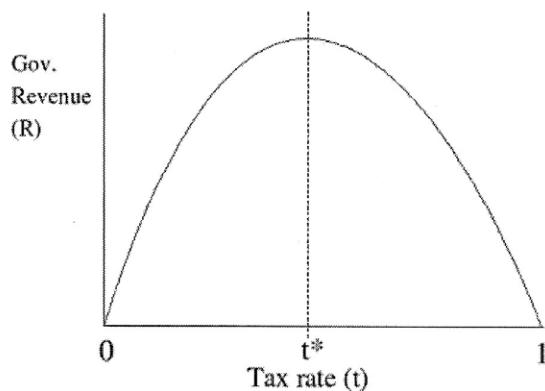
#### 3.1.3.1.2. Effects on tax arbitrage, avoidance and evasion

Tax arbitrage was made practically obsolete by taxing all incomes at the same rate and removing double taxation. Thus people have no motivation to try to fit into lower tax brackets, declare their incomes as ones belonging to a lower tax bracket or spread them over a longer time. Tax evasion<sup>17</sup> should be reduced by decreasing the overall tax burden which now approaches the 15% rate, which individuals trying to go around the legislation have to pay illegally. "As the legal way now costs only 19%, most individuals decide to declare their taxes as they will thus have proof of paying the tax and avoid the risk of being put to trial."<sup>18</sup> This broadens the tax base, allowing for others to be ultimately charged less taxes. An indication of the tax extension<sup>19</sup> is an estimate provided by the Slovak Ministry of Finance by evaluating the expected and real tax collection for the year 2004. It states that out of the unexplained increases in tax income about \$ 68 million come out of a greater willingness to pay taxes.<sup>20</sup>

#### 3.1.3.2. Effects on direct and indirect taxes

The Laffer curve (fig #7) illustrates that higher tax rates (TR) will eventually lead to a decline in taxation revenue due to lower motivation to work and declare taxes as the TR rises. It illustrates that you can raise more tax revenue by either collecting more money from fewer people or less money from more people i.e. broadening the tax base.

**Fig #7**



<sup>16</sup> XXX in an interview for me

<sup>17</sup> Illegally avoiding one's obligation to declare taxes.

<sup>18</sup> Mr. Bruncko, Mr. Major in interviews for me (see appendix)

<sup>19</sup> Increase in number of taxpayers willing to pay taxes

<sup>20</sup> (Krajčír, Zdenko; Ódor, Ľudovít, *Prvý rok daňovej reformy alebo 19% v akcii*. Bratislava: IFP, 2005)

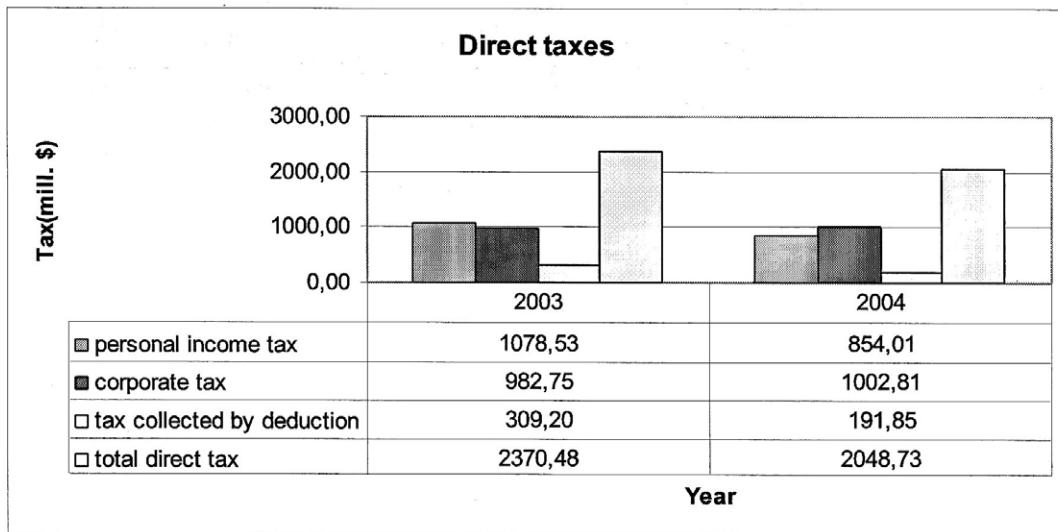
In Slovakia this is most evident on corporate taxes (CT). When the effective tax burden declined from 36.3% to 19% for corporate entities the CT revenue actually rose by 42% between 2004 and 2005 (fig #8).

Fig #8

Year	Corporate tax revenue (mill. \$)
2000	849,68
2001	683,56
2002	943,79
2003	982,75
2004	1002,80
2005	1422,69

However, fig #9 shows that the total revenue from direct taxes declined after the reform.

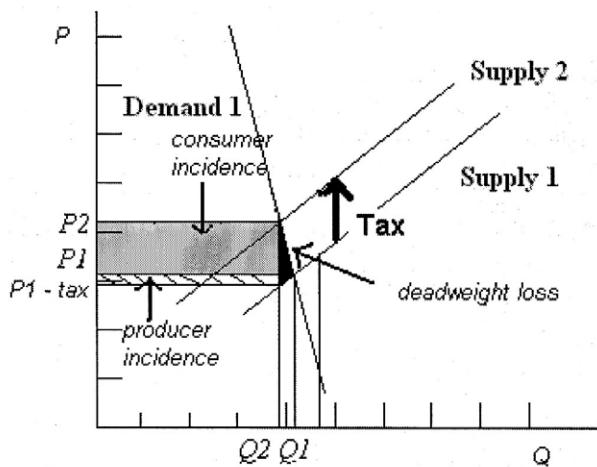
Fig #9



As the tax reform was designed to be fiscally neutral i.e. not to introduce a loss of revenue for the government, the dropout in tax revenues from the direct taxes had to be somehow compensated. The VAT was chosen for this purpose. The VAT tax rate was unified from the previous tax brackets at 14% and 20% to one single bracket of 19%. As mainly products with a low price elasticity of demand<sup>21</sup> like food and medicals were subject to the increase of VAT, it was expected to produce relatively small distortions and deadweight loss<sup>22</sup> and achieve high efficiency.

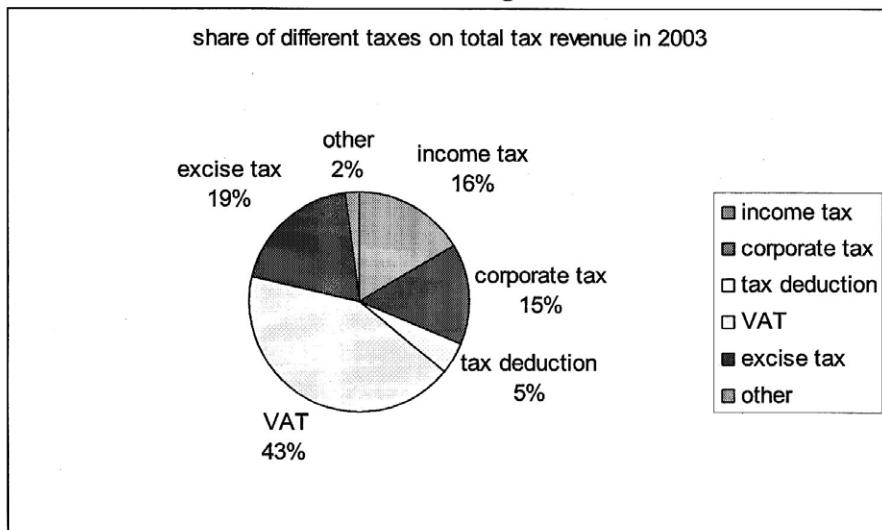
<sup>21</sup> Sensitivity of demand to a change in price (Gillespie, Andrew, *AS & A Level Economics through diagrams*. Oxford: Oxford University Press, 1998)

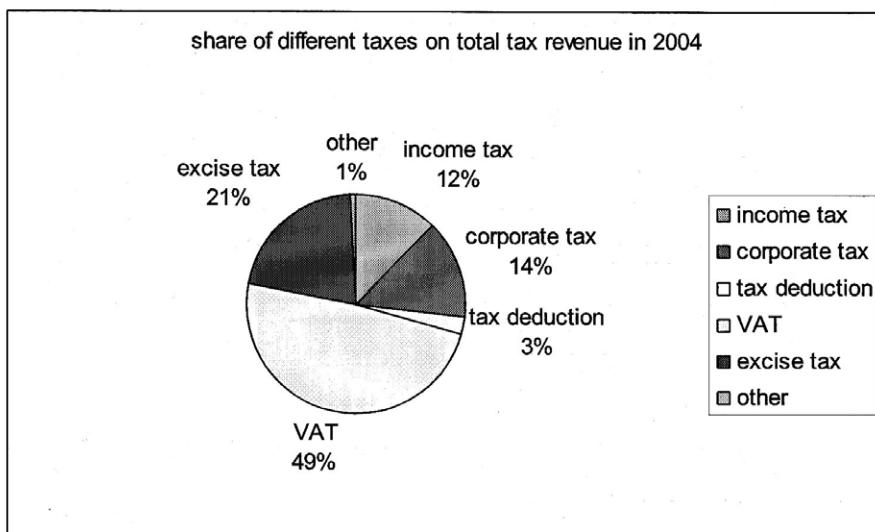
<sup>22</sup> The costs to society created by an inefficiency in the market.

**Fig #10**

The fig #10 shows that the deadweight loss will be relatively small compared to the increase in tax for inelastic goods. Thus the government will generate enough tax revenue without severely damaging the market allocation of resources.

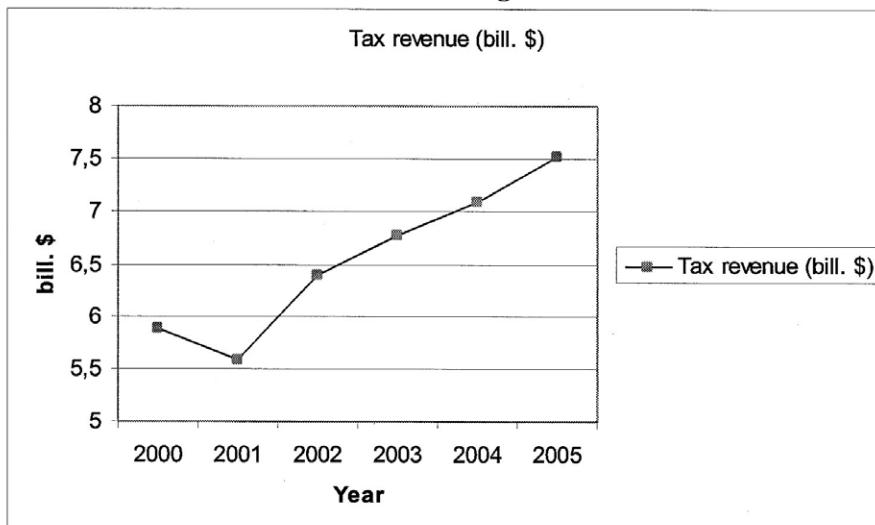
These changes in tax rates had an impact on the overall share of different taxes on the total tax revenue. Figs #11,12 summarize that. They clearly show that the share of all direct taxes (income tax, corporate tax and tax collected by deduction) has fallen in favor of the indirect taxes (VAT and excise tax).

**Fig #11****Fig #12**



In Summary G is still rising with increasing tax revenue for the government (fig #14). The short-term losses in direct-tax collection compared to the scenario without the reform should be more than compensated by an increasing willingness of the population to pay taxes and also increasing economic growth. A positive trend is illustrated by the sharp increase in CT revenues in 2005. This enabled Slovakia to reduce its public debt to a minimum of 33.7% GDP in 2005 compared to 43.1 % GDP in 2003.

Fig #14



### 3.1.4. Impact on exports (X)

Although, X is a function of foreign demand, the tax reform positively affects it by leaving domestic entrepreneurs more resources to improve production, implement new technologies and increasing the productivity of their employees. Furthermore, the big automobile companies KIA and Peugeot are export oriented. As they are only starting production at present, their impact cannot be quantified. It is highly probable though that they will have a substantial effect on X: estimates say that Slovakia should experience net positive exports, for the first time in its history, in 2008.<sup>23</sup>

### 3.1.5. Impact on imports (M)

M is a function of domestic demand – as domestic demand rises due to a more favorable taxing system as well as higher growth, M should also rise. This is a theoretical prediction based on economic theory, which cannot yet be tested in Slovakia due to the recent implementation of the tax reform.

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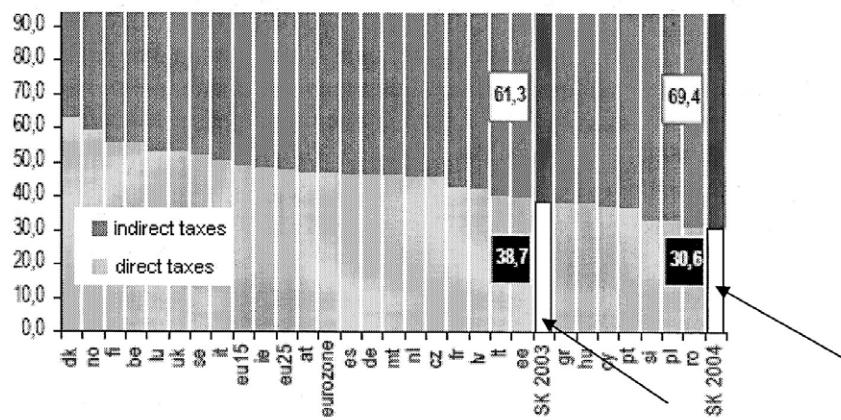
<sup>23</sup> www.pravda.sk

### 3.2. Effects of the tax reform on AS

Some economists believe that an increase in factor productivity is responsible for 50% to 70% of economic growth.

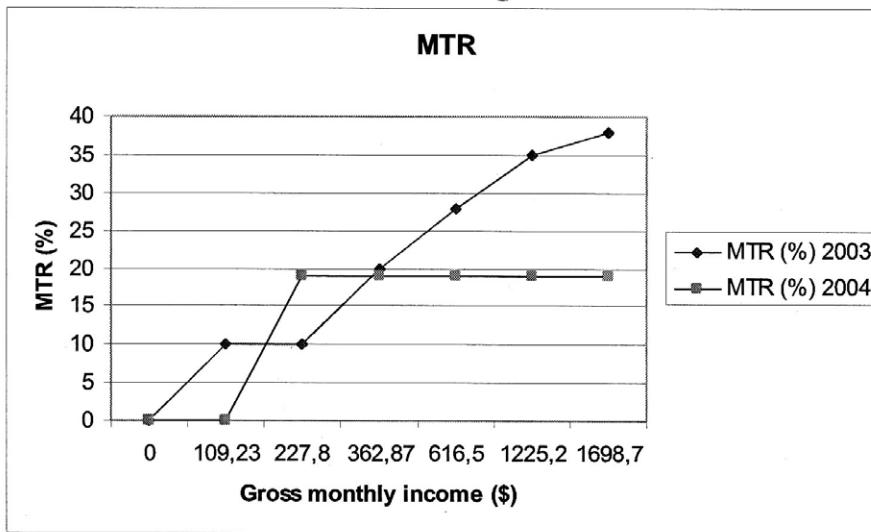
**Fig #15**

### The share of direct and indirect taxes on the total tax revenue in EU 25 in 2003 and SK in 2004



With the shift from direct to indirect taxes Slovakia now has the lowest proportion of direct taxes on overall tax in the EU and its direct tax contributed to only 5.5% of the GDP in 2004 compared to 7.2% in 2003. Fig #15 illustrates an 8.1% drop in the share of direct taxes on the total tax in Slovakia after the reform. This allows individuals to keep more of their gross income motivating them to work more, thus increasing factor productivity. Furthermore, leaving the MTR<sup>24</sup> constant for all incomes, removes the demotivational effect of having to pay more taxes when you are more productive. All this should contribute to AS shifting out.

**Fig #16**



<sup>24</sup> Marginal tax rate. It shows how much individuals have to pay in taxes out of ever extra \$ they earn.

In fig #16 it is visible that with the flat tax the MTR remains 19% for all incomes higher than the tax exemption. The largest MTR in the previous system was twice as big at 38%. This decreased motivation to work at higher incomes and introduced tax arbitrage<sup>25</sup>.

By decreasing taxation at lowest incomes, the tax reform also increased the incentive to look for a job, positively affecting AS. However, the increased VAT also increased costs for firms and thus adversely affected AS. It seems that the positive impacts were prevalent, though.

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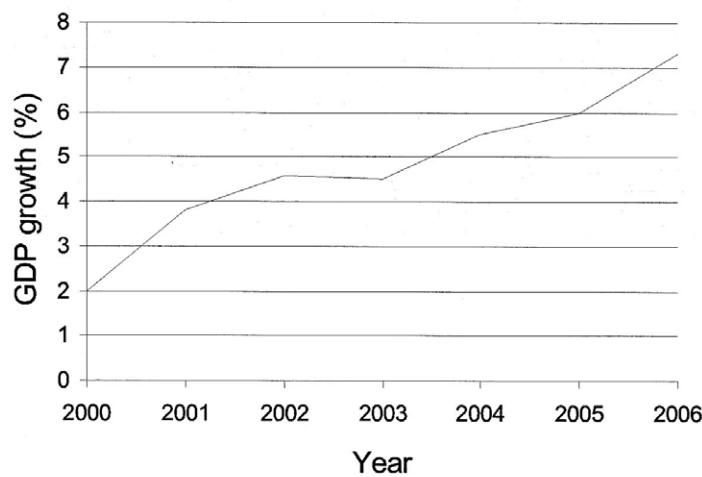
<sup>25</sup> Legally trying to transfer your income to a lower tax bracket.

### 3.3. Growth summary

After the previous analysis the estimate of the Slovak Ministry of finance that the tax reform contributed 0.2% to growth in 2004 and 0.5% in 2005 and that this trend will continue in the future<sup>26</sup> seems reasonable. Fig #17 shows economic growth in Slovakia over the past 6 years. The trend is positive, with Slovakia's growth estimated above 7% in the following 2 years.

**Fig #17**

#### GDP growth



The tax reform definitely seems to have been the right choice for the economy. In countries which adopted some form of a flat tax growth is generally twice as big as in those that did not and four times as big if we're only taking developing countries into account.<sup>27</sup> In the fourth quartile of 2006 Slovakia experienced growth of 9.8% which is its historic maximum and the second highest growth in the EU with only Estonia doing better – Estonia also has a flat tax. The effects of the flat tax on growth should increase in the long term, as now there is still some lag from the old system.

The second section of this essay shall examine how and whether at all, this positive trend in economic growth has contributed to economic development.

<sup>26</sup> (Krajčír, Zdenko; Ódor, Ľudovít, *Prvý rok daňovej reformy alebo 19% v akcii*. Bratislava: IFP, 2005)

<sup>27</sup> institute A. de Tocqueville

#### 4. Effects of the tax reform on economic development

Economic development is defined as an overall reduction in poverty, unemployment and income inequality.

##### 4.1. Effect on unemployment

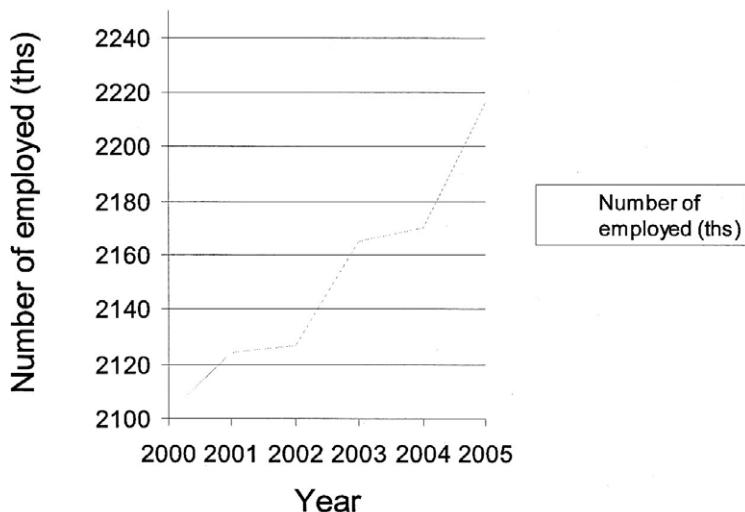
As unemployment measures are inconsistent – every country uses different criteria – employment statistics will be examined here, as a more suitable indicator of economic development. More employed people mean higher incomes for the previously unemployed individuals (otherwise they wouldn't accept the job) and also less expenditure for the government in the form of social benefits.

If what was stated in the previous part of the essay holds true, i.e. the tax reform will attract more Gross Investment it should also increase employment. However, due to relatively high levy compared to taxes, capital, which isn't subject to levy, is relatively more productive than labor. This could attract more capital intensive investment. With Slovakia's unemployment holding well about 10% since the time of its creation, this might not be a good thing. Capital is a lot more mobile, though and increasing the tax on it could very quickly cause its erosion. This would have disastrous effects for an economy like Slovakia's and would ultimately lead to a decline in employment. Therefore at this stage of Slovakia's development the status quo seems suitable.

Fig #18 supports this point.

**Fig #18**

### Number of employed



The tax reform indeed seems to be responsible for a far more rapid job creation than in the past. Only between 2004 and 2005 the number of employed increased by 55000 (during the previous four years it was 116000) and both the number of new firms and firms with profit increased enabling further job creation.<sup>28</sup>

Unemployment also reached its historical minimum at 11.6% in 2005. The tax reform decreased direct taxes, thus increasing the motivation of unemployed people to look for a job. It worked jointly with the reform of the social system which decreased

<sup>28</sup> See appendix Item 3.

unemployment benefits. Thus, according to economic theory there should be more people willing to accept a job for a given real wage and the voluntary unemployment<sup>29</sup> should also decrease.

#### 4.2. Effects on progressivity

A tax is defined as progressive when with rising incomes people pay a progressively higher tax. It is one of the ways of satisfying the vertical equity requirement of a tax system. Another is a proportional system where everybody pays the same percentage of their income as tax. Many people and the political opposition criticized the flat tax for removing progressivity from the system. It is true that in order to maintain at least some progressivity of a tax system a strongly progressive direct tax is required as virtually all the other taxes like the VAT and excise tax are regressive in nature. This is so because poor people spend more of each dollar they earn in order to sustain their living expenses. However, the tax exemption was increased by more than a half from \$ 1311 in 2003 to \$ 2734 in 2004. Furthermore in comparison with the previous system the tax exemption is set as 19.2 times the living wages and as such it will increase every year, further raising the progressivity in the future.

**Fig #19**

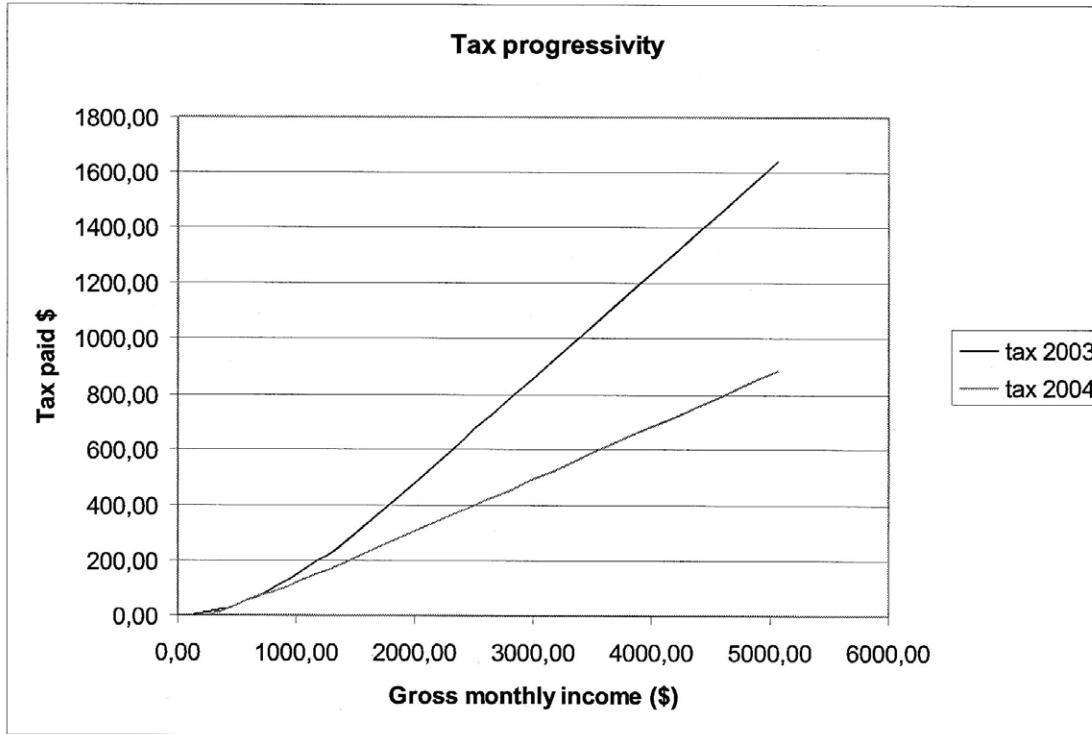


Fig #19 compares Gross monthly income to Tax paid. It shows a decline in overall tax burden. Both in 2003 and 2004 the tax was progressive with total values higher in 2003. This doesn't reflect percentage share on total tax of different income groups. The Kakwani index<sup>30</sup> has increased between the years 2002 and 2004 from 15.4% to 19.2%<sup>31</sup> implying

<sup>29</sup> People that are unwilling to accept a job at a given real wage.

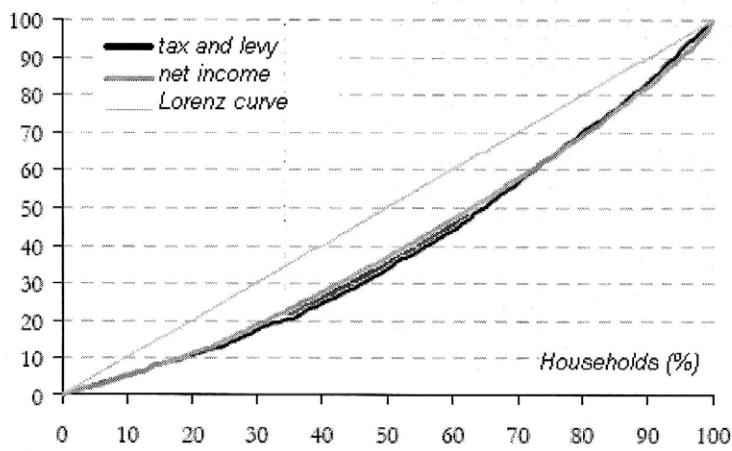
<sup>30</sup> The Kakwani index measures progressivity by measuring the area between the tax curve and the income curve in comparison to the Lorenz curve

<sup>31</sup> World Bank

greater progressivity. If the kakwani index is positive the tax system is progressive, if it is negative, the system is regressive. Figs #20,21 show that indeed the area between the tax curve and the income curve has increased and thus the system is more progressive according to the Kakwani index.

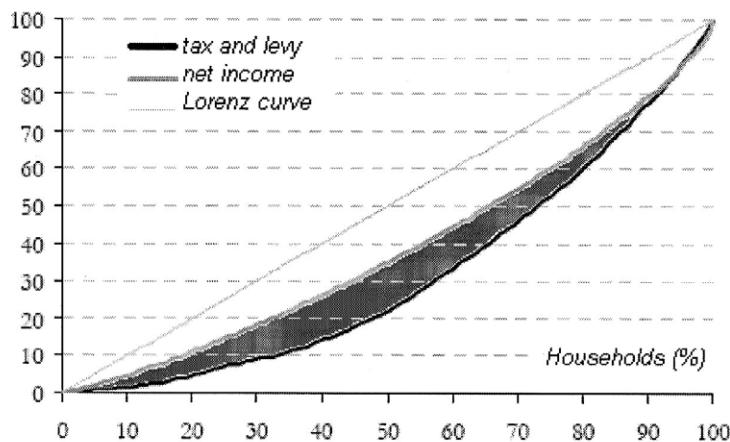
**Fig #20**

#### Distribution of incomes after taxation and taxes in 2003



**Fig #21**

#### Distribution of incomes after taxation and taxes in 2004



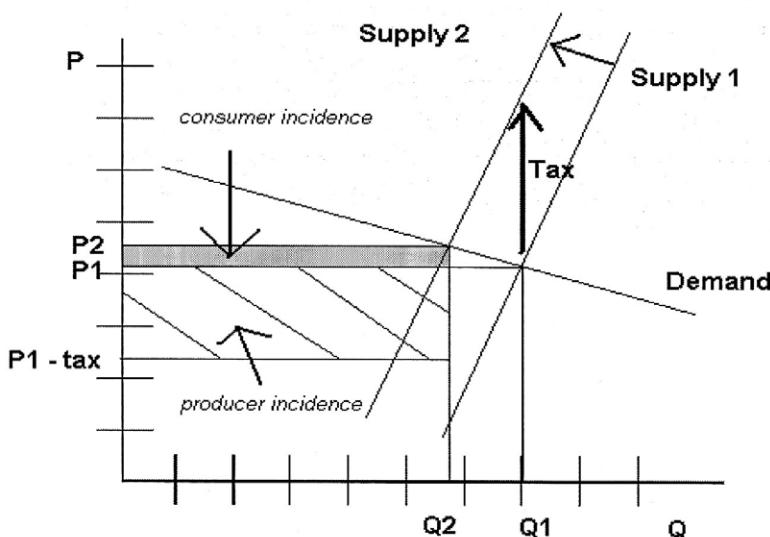
Horizontal equity is also satisfied as all incomes with the same value are taxed exactly the same. This is more just than with the previous system thanks to eliminating 195 out of 212 different exceptions. Cancellation of double taxation like the tax on dividends, heritage tax, the gift tax and tax of transfer of real estates increases horizontal equity as now all incomes are taxed only once – when they are produced.

#### 4.3. Effects on income distribution

Both the decrease in unemployment and increase in the progressivity of the tax system

should make the income distribution more even as the first will help the poor help themselves and the second will give the government more resources to redistribute incomes. However, the increase in VAT increased inflation by 1.9%<sup>32</sup>. "This was lower than anticipated because a big proportion of the VAT increase (especially for food) was absorbed by the profit margin of companies."<sup>33</sup> This happened because it was a time shortly after the entrance of many supermarkets to the Slovak market. Competition was fierce and none of the supermarkets wanted to lose their share in the market. Therefore they didn't dare to increase prices too much and although prices of e.g. most food went down initially they fell later on. The different supermarkets provided the consumers with alternatives thus increasing their elasticity. This shows that the elasticity for consumers was greater than for producers even though we are talking about an inelastic good as food meaning producers had a greater tax incidence than consumers.

Fig #22



In fig #22 equilibrium is at  $P_1$ ,  $Q_1$ . Supply 1 shifts to Supply 2 when tax is introduced. New equilibrium is established at  $P_2$ ,  $Q_2$ . As Supply is more inelastic than demand, producers bear a greater tax incidence than consumers.

The increase in inflation was more than offset for most working people due to the combination of rising real wages, increased exemption and lower MTR. The real losers here are people not paying taxes: the unemployed and retired people, as they only experience this negative aspect of the reform. The increase in levy from 12.8% to 13.4% mainly hit the middle class, but their disposable incomes rose due to real wages growth as mentioned earlier.

### 5. Connecting growth and development

Based on the previous analysis there does indeed seem to be a correlation between growth and development in Slovakia. Although there are winners and losers, a healthy economy will create more workplaces and an increasing productivity should pull up the real wages. Higher tax revenues for the government should translate into increased spending on education, healthcare and research. The effects of growth especially on the population will be more visible in the long term, though.

### 6. Conclusion

This analysis suggests that the tax reform was a good choice for Slovakia. Although

<sup>32</sup> (Krajčír, Zdenko; Ódor, Ľudovít, *Prvý rok daňovej reformy alebo 19% v akcii*. Bratislava: IFP, 2005)

<sup>33</sup> Mr. Bruncko in an interview for me (see appendix)

it is hard to quantify its impact on growth and development in Slovakia, one thing is for sure: none of the macroeconomic indicators worsened. Indeed, based on the previous analysis, it can be concluded that the tax reform helped improve many of them.

Slovakia achieved record rates of economic growth and FDI; unemployment fell to its historic minimum; working poor people and the rich largely benefited, with the middle-class's slight loss compensated by the increase in real wages. The retired people and the unemployed only felt the negative effects of the reform on inflation and thus their situation deteriorated. However, if the reform increases the overall quality of life, they will also gain in the long term – these findings correspond to economic theory.

This analysis also suggests that the argument of the opposition that the tax reform will decrease progressivity of the tax system is invalid, as the kakwani index increased after the reform.

It can be concluded that the increase in growth also reflected to development. While the long term benefits are highly probable, even in the short term the change has been to the better. "However, it is important to remember that the tax reform was mainly designed to for the economy not to redistribute incomes"<sup>34</sup>

Nevertheless, it remains unresolved whether the long run benefits will be as positive as predicted, whether inflation will be kept under control, how will the increasing strength of the economy affect exports through more valuable Slovak crowns and whether the economic growth will indeed be able to reach even to the poorest.

This paper dealt only with direct influences of the tax reform it did not evaluate other policies, reforms or barriers to growth in Slovakia which were created or terminated during the examined period.

3999 words

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<sup>34</sup> Mr. Sulik, author of the Slovak tax reform, in an interview for me (see appendix)

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## 9. Appendix

### **Item 1.**

A detailed description of the changes brought on by the tax reform:

- Implementation of a flat tax on incomes for private and corporate entities at 19%
- Unification of the VAT rates at 19% (previously 14% and 20%)
- Increase of excise taxes slightly above the minimum rates set by the EU
- Cancellation of the tax on dividends
- Cancellation of the tax on transfer of real estates
- Cancellation of the heritage and gift taxes
- Implementation of a higher tax exemption per taxpayer and a tax bonus per child
- Cancellation of various exceptions, deductible items and special regimes of taxation

**Item 2.**

Interviews:

- a) Mr. Bruncko, the chief advisor of our ex-Minister of Finance

Questionnaire and answers:

- a) Why the flat tax? – It is the most simple solution
- b) What was its main positive outcome? - same MTR, less deadweight loss, higher motivation to work than in a progressive system, no tax arbitrage
- c) How did the tax reform contribute towards the so far highest growth of the Slovak economy? – smaller shadow economy because the 19% tax rate approaches the illegal rate of 15%. People will choose to declare their incomes legally now. Also there has been a big marketing effect – Slovakia was unknown before.
- d) Did the tax reform contribute to attracting FDI? – Psychological effect – The flat tax is a symbol of Slovakia now and investors tend to act jointly due to a lack of reliable information. Also the managers will now have a higher disposable income with the same gross income. They need to be paid to come here.
- e) Was it meant to increase domestic investment? How? – lower tax burden, no double taxation
- f) Have some foreign firms started to declare their taxes in Slovakia? – Yes, no official numbers
- g) How did the tax reform impact the state budget? – It decreased the amount of tax revenue by 0,5% of GDP. It also increased inflation.
- h) What is the difference in implementing the flat tax in Slovakia and other countries? – People in Slovakia are not rebels. It was also shortly after the elections and the politicians wanted to pass some laws quickly. The increase in VAT was passed first, then the decrease in direct taxes was easy to pass. It would not work the other way. The notion that the rich should pay more than the poor is deeply enrooted in people. That is why not many countries have the flat tax. However, people do not know that with more exceptions and tax rates it is the rich people who can find ways to pay less taxes.
- i) What were the main reasons for transferring tax burden from direct to indirect taxes? – Higher motivation to work, consumption is being taxed instead of labor. In the future taxes should be raised, when unemployment is low. Now we need investment and job creation.
- j) How do you judge the coordination of the tax reform with other reforms(social, health...) – Good coordination. All reforms happened at one time – Big Bang.
- k) How has the tax reform affected income distribution? – It helped the poor people. The middle class is a bit worse off. It had a neutral or slightly positive effect overall.
- l) Should the government regulate positive and negative externalities through tax? – Not by tax, but by legislation.
  - In the long run the government should attempt to attract different than just automobile investment and help domestic small, middle and big firms. Also levies should be decreased and a balance between government spending and taxation should be found.

2. Mr. Sulik, author of the tax reform in Slovakia and chief advisor of our Minister of Finance

Questionnaire and answers:

- a) What were the main reasons for your proposal for the tax reform? – I saw it as an area where a lot of improvement could have been done in a relatively short period of time.
- b) Has it fulfilled your expectations? – yes. Out of 212 exceptions, 195 were cancelled. But the tax revenue was higher than expected. The flat tax could have been set at 18%. Now it is better to decrease levy than VAT because a 1% change in both causes a \$ 236,7 million dropout in revenue for the government.
- c) What were the main reasons for transferring tax burden from direct to indirect taxes? – It is a general trend in Europe
- d) Did the tax reform contribute to attracting FDI? – There was a marketing effect; but the value of the flat tax in attracting FDI is usually overrated. Foreign firms will usually declare only small profits here.
- e) How do you view the attempts of the new government to introduce that ‘millionaire tax’, two rates of VAT and the tax from monopoly? – Negatively; however, VAT is not central to the reform, it was just a tool for balancing the drop-out in direct tax incomes.
- f) Should the government regulate positive and negative externalities through tax? – It should not regulate anything.
- g) How did the tax reform contribute towards the so far highest growth of the Slovak economy? – It is no longer advantageous to cheat the state – not only has the corporate tax been reduced; the tax on dividends has been cancelled as well. Now firms cheat other countries and declare their profits in Slovakia.
- h) How has the tax reform affected income distribution? – The tax reform was designed for the economy, not as a tool of income redistribution. There have been some negative impacts from increased VAT and excise taxes. For instance a childless person with an income of \$ 380 a month will lose \$7 a month due to the increase in VAT.
- i) What criteria were used to determine the exemption from tax? – It was set at a level at which nobody will pay higher income taxes after the reform than before
- j) Has the tax collection become more effective, tax arbitrage and evasion reduced tax administration costs reduced?
- k) What changes are needed in tax policy for the future? – The tax base accounting has to be simplified and the tax base extended, the levy system and the social system have to be reformed.
- l) What is the difference in implementing the flat tax in Slovakia and other countries? – The political opposition did not have expertise in this field, the labor union was busy negotiating higher wages and the whole reform passed very quickly.

3. Mr. Major, economic director of ProCS ([www.procs.sk](http://www.procs.sk))

- a) Have you had sufficient information concerning the tax reform prior to its implementation? - yes
- b) What impacts has the tax reform had on your entrepreneurship?
  - a) Is the tax legislation simpler, less ambiguous? – Yes, except for the calculation of the taxable base. The tax rate is clear as set at 19%, no double taxation (development of the building industry due to the cancellation of the tax from transfer of real estates)
  - b) Has your tax administration become simpler? Has it reduced your costs? No, costs

- will reduce for firms doing accounting, but we still need economic advisors and costs have been introduced due to changes in the tax legislation.
- c) Has there been a decrease in the number of exceptions in the tax legislation? - yes
  - d) Have your employees become more productive due to the tax reform? Only the ones with higher incomes. Sophisticated firms are being able to hold on to sophisticated employees with high incomes more easily.
  - e) How has the single VAT tax bracket impacted your firm?
  - f) Has your overall tax burden been reduced? - Yes
  - g) Has the reform positively affected your competitiveness compared to foreign firms? No, prices are set and as the economy grows, the Slovak Crown is more valuable and export profits are falling.
  - h) Has the tax reform reduced the chances for tax arbitrage and evasion? – Small difference; but yes.
  - i) Do you perceive a difference in the creation of a positive environment for domestic and foreign firms? – Yes. FDI is being bribed (tax holidays...)
  - j) Which other reforms would be needed to improve the situation for domestic entrepreneurs? – levy. Now an employee gets only 50% of what a firm has to pay for him after taxation and levy

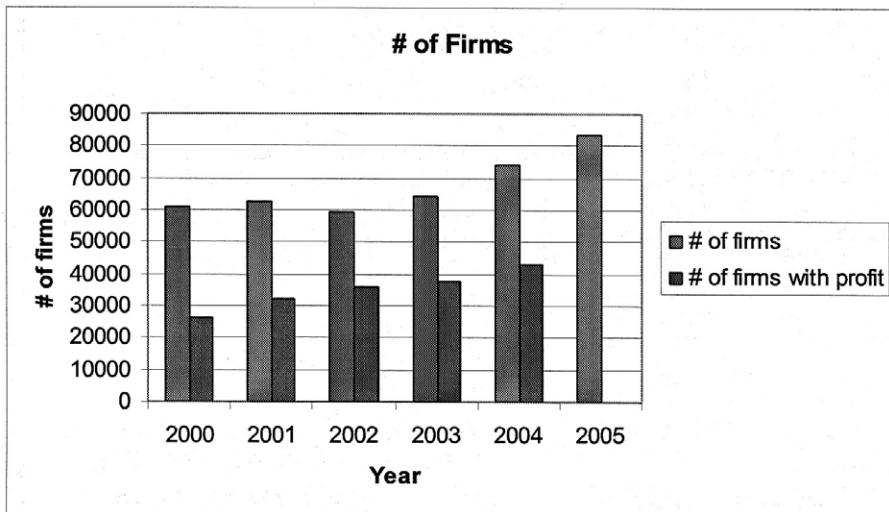
The winners are entrepreneurs (their incomes increased) and losers are low income groups and retired people (increase in VAT)

#### 4. Mr. Žbirka, economic director of SVUM

- a) Have you had sufficient information concerning the tax reform prior to its implementation? – only partly
- b) What impacts has the tax reform had on your entrepreneurship?
  - a) Is the tax legislation simpler, less ambiguous? - yes
  - b) Has your tax administration become simpler? Has it reduced your costs? - no
  - c) Has there been a decrease in the number of exceptions in the tax legislation? - yes
  - d) Have your employees become more productive due to the tax reform? -no
  - e) How has the single VAT tax bracket impacted your firm? – positively, impact close to zero
  - f) Has the cancellation of double taxation (cancellation of the tax on dividends and capital income) affected your firm? - yes
  - g) Has your overall tax burden been reduced? – partly, through subsidiary corporations
  - h) Has the reform positively affected your competitiveness compared to foreign firms?
  - i) Has the tax reform reduced the chances for tax arbitrage and evasion? - yes
  - j) Do you perceive a difference in the creation of a positive environment for domestic and foreign firms?
  - k) Which other reforms would be needed to improve the situation for domestic entrepreneurs?

**Item 3.**

Number of firms and firms with profit over the past 6 years



I was unable to obtain the number of firms with profit for 2005