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**First Year of the Tax Reform,**  
or  
**19 Percent at Work**

September 2005

Economic Analysis

8

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## Summary

*The tax reform is one of the foremost topics discussed both within the country and abroad. The following analysis surveys initial results. Although the overall outcome cannot be evaluated for several years to come given the expected long-term benefits, we can already say unequivocally that the change has been favorable rather than unfavorable in the short term, too. The budget target for tax revenue has been met, the impact on citizens has been largely favorable, and the interest of investors in Slovakia has grown. Understandably, no tax system is ideal, but we can say that, despite minor blemishes, the Slovak system has become an inspiration to many countries. We have identified several areas in which we believe the tax and social contributions of Slovakia may yet be improved. Therefore, by way of a conclusion we suggest several specific measures, as well as systemic changes.*

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## Disclaimer:

The present document sets forth the views of the authors which do not necessarily reflect the views of the Ministry of Finance of the Slovak Republic. We are grateful to the Statistical Office of the Slovak Republic and the staff of the Financial Policy Institute for the draft work, as well as to the members of the Board of Advisors for valuable comments and suggestions. All remaining mistakes and omissions are the sole responsibility of the authors.

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## Introduction

In 2004, Slovakia implemented a fundamental tax reform which caused countless debates not only within the country but also abroad. The key measures—introduction of a flat rate of the income tax at 19 percent and the unification of the rates of the value-added tax (VAT) at the same level—became the subject of not only economic but also political debate. This document concerns an assessment of the reform after one year of its operation. Of course, a comprehensive assessment may only be made after several years, when the long-term outcome of the reform becomes clearer. However, it appears to us that it is interesting to also view certain short-term effects of the reform.

The first chapter describes the key objectives and principles of the tax reform which emerged at the outset, as the optimal system was being sought.

Chapters 2 – 5 of the present document provide a detailed assessment of the reform from the point of view of its objectives and principles which are described in Chapter 1. The section on legislation sums up the facts. The next chapter discusses the impact of the reform on public finance revenue. It describes how the ultimate neutrality target has been met by comparing the budget, actual tax collection, and a scenario in the absence of the reform. The fourth chapter is devoted to the impact of the reform on the macroeconomic environment. It analyzes the direct impact on certain basic economic indicators. It is underscored that, with regard to economic growth, an in-depth assessment may only be made several years later. The fifth chapter demonstrates how the tax burden has changed in Slovakia after the reform and what long-term trends have emerged in Slovakia in this regard. The chapter relies on generally accepted and internationally comparable analytical indicators. Comparisons are made of the level and changes in the overall tax burden of Slovakia compared to all current member countries of the European Union.

Further analyses of the tax burden are based on dividing the population into three groups depending on their dominant source of income. The first group consists of employees whose main remuneration comes from wages. Indicators were selected so as not to follow just changes in the level of the tax burden but also to determine whether the changes reflected the proclaimed principles of justice and efficiency and whether they truly enhanced the motivation to work. The second group consists of agents for whom capital yields are the main source of revenue. These are, in particular, national entrepreneurs and foreign entrepreneurs operating in Slovakia. Once again, it was not only the change in the level of taxation that was analyzed, but also contributions to the future growth of investment and economic growth as such. The last group consists of citizens who neither work nor are significant owners of capital. Social transfers are their main source of income; therefore, they depend on the social assistance of the state. The present document also describes changes in the tax burden on two largest high-risk groups, such as retirees and families with children. Naturally, the first group is concerned solely with the value of the tax burden; changes in the area of motivation to work and to invest are not relevant for it. The analysis also includes a quantification of changes in the tax burden on households according to the statistics available.

The sixth chapter considers the future opportunities to improve the tax system. One aspect of justice in taxation, specifically the sharing of the burden between labor and capital, is considered in more depth. In such comments, we proceeded from amendments officially planned for the medium term and from the changes which, in our view, would benefit the

economy of Slovakia the most. We have identified several areas in which we believe the tax and social contributions of Slovakia can still be improved. Therefore, in the chapter in question we propose several specific measures, as well as systemic changes.

The Ministry of Finance was the one to implement the tax reform and will thus certainly not avoid the suspicion of being partial in the course of its assessment, regardless of how many facts are referred to. For this reason, we quote in the final chapter the opinions and views of foreign authorities whose professionalism is assured and respected throughout the world.

As such, an assessment unavoidably contains an element of subjectivity since it always depends on the assessor and the point of view. However, we believe that we can embark on this process striving to be objective, as long as the process rests on certain principles.

The first principle is to assess the results of the project in comparison with the targets which were set and the principles on which it was based. The second principle is found in the conviction that facts are the best argument. This results in the desire to quantify as much as possible the phenomena and effects which we are discussing. In the process, it is necessary to present the assumptions for the quantification in a transparent manner and point up the limitations which should be taken into account in interpreting the results.

Taxes are a complicated system which influences the economy and the social area fundamentally. Although it is substantial, the system is not isolated from other systems and, as a consequence, is not independent of the adjustment and operation of such systems. In addition to the tax reform, many structural reforms have been implemented in recent years which provide a framework and directly influence the environment for the efficient operation of taxes. It is impossible to ignore other reforms when evaluating the benefits and impact of the tax reform. However, it is the intent of this document to address as much as possible the effects of the tax reform itself. Its relationship with other reforms is only mentioned in the instances when this is truly unavoidable. At issue is in particular the reform of social contributions and the system of social benefits.

A tremendous positive response and attention attracted abroad by the tax reform implemented in Slovakia are likely to remain a separate chapter in the history of economic policy of Slovak governments. Even if all other aspects of the evaluations were equivocal, this one could not be doubted. Profound and sometimes painful structural reforms which have received praise abroad have been implemented in Slovakia in the last two years. However, none of the reforms has by far been greeted with a response as favorable as that to the tax reform. More precisely, at issue was one of the elements of the tax reform, a flat income tax.

It should be said honestly that nobody expected such a response; there were three good reasons for it. The first is found in the fact that Slovakia was not by far the first country to introduce a flat tax and by now we can say with certainty that it was not the last. Before us, Estonia was the first in Europe to introduce it, to be followed by the other Baltic states, but also, for example, by Russia. To be sure, Slovakia was the first such country within the developed OECD countries. At present, the introduction of a flat tax appears realistic in Poland and such a possibility is being vigorously discussed even in Germany. Another reason for the surprise lies in the fact that, from a professional point of view of tax policy, a flat tax does not amount to a substantial alteration of the economic system that the public consciousness interprets it to be. That is, a flat tax is not totally „flat“; it would be methodologically more appropriate to use the term „a flat rate of tax“. After all, progressive

taxation was not at all eliminated with the introduction of the flat tax. Progressive taxation was merely moderated and, as will be shown in the fifth chapter, in some cases even a lot less moderated than could appear. The third reason is that the tax system amounts to but the smaller part in the system of the tax and social contributions burden. In other words, given the current nature of health insurance contributions, the existence of a ceiling on the base amount makes it difficult to talk about the taxation of income at the flat rate.

Although the tremendous interest abroad in the tax reform was a surprise, it would be a mistake to believe that the only effect which resulted from this was a marketing effect. We identify two basic channels through which a favorable image of Slovakia will be translated into real effects, such as an improvement in the standard of living of the population. The first channel is already perceptible. In response to the reforms, rating agencies have continued to raise the rating of Slovakia which automatically means a reduction in the cost of servicing the national debt and thus savings on the expenditure side of public finance. The second channel conceals a potential which in the immediate future may be decisive for the economy of Slovakia. Slovakia is a small open economy operating in the world of a global economy marked by large international flows of investment. Besides, imperfect information about the profitability of investment opportunities is characteristic of economic reality. This means that fundamental analysis is relatively unreliable in the course of making decisions on the allocation of investment and thus is not always the determinant of decisions made by investors. In light of this, phenomena such as a favorable image of a country on the international scene are sometimes decisive to investment. Ultimately, the tax reform may also be a catalyst for other structural reforms which are no less important from the point of view of a foreign investor because they improve the business environment. Foreign investment usually has a cascading nature which may ultimately give a great developmental impulse for a small economy.

# 1 Tax Reform Objectives and Principles

The tax reform was designed with a view to introducing in Slovakia a modern tax system which **gives the people an incentive to work more, or vigorously look for a job, and gives the entrepreneurs an incentive to invest and thus create new jobs.** In this manner, the reform should facilitate dynamic and sustainable economic growth which is the main prerequisite for raising the standard of living of the population.

**The tax reform was conceived on the principles of fairness, efficiency, and simplicity<sup>1</sup>.**

The principle of **fairness** in the area of tax policy signifies a requirement that the distribution of the tax burden be subject to certain socially accepted criteria. Horizontal fairness in taxation means that a tax charged on a certain income should be the same regardless of the source of such income. This calls for reducing to a minimum the number of rates, deductions and exemptions in the course of income taxation. Vertical fairness calls for entities with higher incomes having to pay a higher tax than entities with lower incomes. Within the framework of vertical fairness, the tax system may, in principle, be set up in two modes. The first mode amounts to progressive marginal taxation when, as the income increases, the tax increases faster than the income itself; the average rate of tax thus increases. The other mode amounts to proportional taxation whereby the tax grows at the same rate as the income and the average rate is thus constant.

Unlike politicians, economists always have a problem evaluating a system from the point of view of fairness because fairness is a non-economic notion which falls rather within the domain of philosophy. In social consciousness, fairness is largely associated with the social dimension of this notion. This explains why, for the most part, the fairness of taxation is taken to mean vertical fairness which moderates income differences among groups of the population.

The principle of **efficiency** has the strongest association with the principle of fairness, in the sense that at first sight they are mutually exclusive. The prevailing opinion is that politicians making a decision on the tax system must choose between fairness and efficiency. However, this is true only if the system of progressive taxation is considered fair since a sad rule applies in economics to the effect that the size of the cake does depend on the manner in which it is sliced. In other words, people lose more of the motivation to work and to engage in entrepreneurship when each additional koruna earned is taxed heavier than the previous koruna.

Taxes affect basic economic activities, such as investment, saving, supply and demand for labor, and purchases of goods and services, and generally mean a loss of welfare for the economy „welfare loss“. It is also true that the higher the rates are the higher are costs in the economy. The same volume of taxes may be collected at a lower rate from a greater number of taxpayers and at a higher rate from a certain group of people. Therefore, the principle of efficiency should follow the old familiar rule: reduce the rates and broaden the base.

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<sup>1</sup> All of these principles also influence the morale of society favorably, albeit indirectly. Many economists acknowledge this as an important positive externality of this reform.



Investment and the labor market are influenced by the fact that the tax drives a wedge in between the pre-tax income actually earned by the person and the post-tax income which the person actually receives. Since people are mainly concerned with what they will really receive, a larger tax wedge (volume of taxation) automatically amounts to a reduction in the motivation to work and to engage in business. For this reason, heavy taxation of incomes is generally considered inefficient.

The basic rule of tax efficiency states, that activities, that are the most profitable before taxation should remain such after taxation. If various concessions, exemptions, and special treatments exist, this automatically leads to the allocation of resources to such activities because, with equal income before tax, their after-tax profitability is higher. This results in social inefficiency in that production and consumption are not influenced solely by supply and demand but also by tax concessions. Reducing concessions and exemptions to a minimum has already been mentioned in the case of horizontal fairness in taxation. This is proof that there should not necessarily be a contradiction between fairness and efficiency in taxation.

The principle of **simplicity** is frequently mentioned in the context of tax reforms but is still more often interpreted wrongly. It is commonly said that a tax system is simple when it has a small number of rates and the laws have few pages in them, and therefore the reforms should be headed in this direction. However, not much is said about the fact that the rates as such and their number are the least of a problem from the taxpayer's point of view. The definition of the tax base is what actually makes the system complex. This means whether a given income is subject to taxation, whether a special rate can be used for it, and whether it may subject to special concessions, treatment, or exemptions. This obviously prompts the taxpayers to speculate about defining their own tax base and thus also optimizing the tax burden. Obviously, as far as the tax administration is concerned, this drives up the cost of administration and impairs tax control<sup>2</sup>.

Is it legitimate to ask at this point why various deductions and exemptions exist in the first place? The answer is simple and surprising at the same time: The government needs them in order to accomplish tasks other than those of the budget through the tax system. Such instruments are always tied to an effort to achieve social objectives or provide benefits to certain business sectors. The latter is usually associated with political lobbying and economic inefficiency. Therefore, in evaluating the simplicity of a tax system, it is not important to ask about the number of rates or pages in the law but rather about the degree to which the tax system is used solely to generate the required volume of funds for the needs of funding public expenditures.

Approximate fiscal neutrality, i.e. the requirement to set the parameters of the tax system in such a manner that the reform does not bring about a significant decline in the revenues of public administration, is an important short-term objective of the tax reform. In other words, the total tax revenues in the absence of the reform in 2004 should have been approximately equal to the total revenues after the reform. This objective was in line with the key fiscal objectives of the government. Consolidating public finance gradually, meeting the Maastricht Criteria in 2007, introducing the common euro currency in 2009, and, finally, achieving an approximate balance of public administration finance in 2010 are the medium-term objectives. Thus, the long-term fiscal objective of the government is to provide an

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<sup>2</sup> Moreover, a simple system also reduces the indirect costs of entrepreneurs.

environment for the long-term sustainability of public finance which, in particular, means to ready public budgets for pressures associated with the aging of the population.

The objective to provide an incentive for people to work and engage in business and the principle of efficiency were associated with a reduction in the tax burden on income as the main prerequisite for achieving the objectives. The latter, in combination with the objective of approximate fiscal neutrality, unavoidably required that a further objective of tax policy be set forth, such as shifting the tax burden from direct to indirect taxes.

## 2 Legislative Changes

A new law on the income tax which changed the philosophy of income taxation in Slovakia became the main pillar of the tax reform. In the case of the VAT and excises, at issue was primarily a change in the tax burden; therefore, amendments to laws sufficed. Property taxes were gradually abolished beginning in 2004 or 2005. The following table describes the key features of the tax reform in Slovakia:

### The 2004 Tax Reform:

- ✓ introducing a flat rate of income tax at the level of 19 percent (for individuals and legal entities alike),
- ✓ unifying VAT rates, likewise at the level of 19 percent (previously, 14 and 20 percent),
- ✓ increasing the consumption taxes to slightly above the minimum rates required by the EU,
- ✓ abolishing the tax on dividends,
- ✓ abolishing the tax on the assignment and transfer of real estate (as early as 2005),
- ✓ abolishing the tax on inheritances and gifts,
- ✓ introducing a higher basic allowance for the taxpayer and a tax credit on children,
- ✓ abolishing many exemptions, deductions, and special treatments in income taxation.

### 2.1. Income Tax

The tax reform voided law No. 366/1999 – Collected Laws on income tax as amended by subsequent regulations; a new law, No. 595/2003 – Collected Laws on the income tax was adopted which took effect on January 1, 2004. This law became the mainstay of the tax reform. The new law considerably simplified the legislative framework of taxation, abolished all provisions on tax concessions, and introduced a uniform rate of 19 percent for individuals and legal entities. **The objective of the so-called flat tax was to tax all types of income in the same manner, regardless of the type of economic activity.** Various concessions, special treatment, and eventual tax exemptions which made the tax system less transparent and provided the leeway for tax evasion were abolished. The rules for calculating the tax base were formulated in a clearer manner.

#### 2.1.1 Personal Income Tax (PIT)

The reform changed profoundly the principles of taxing personal income from dependent activity and self-employment which were introduced in 1993. The main changes concerned the introduction of a uniform tax rate and simplification of the calculation of the tax base.

The opportunities to reduce the tax base for taxpayers receiving income from dependent activity became fewer. What remains is only a **deduction for the taxpayer** and his/her non-working spouse living together with the taxpayer in the same household. The value of the deduction is tied to the movement of the subsistence minimum; before the reform, the deduction was a fixed amount. The annual tax-free amount for the taxpayer and the spouse without his/her own income were determined as the subsistence minimum in effect on January 1 of the tax period in question times 19.2. **The amount was set in such a manner that the change in the rate would not affect the low-income groups of taxpayers unfavorably.**

The deduction for dependent children was replaced by the so-called tax credit which, however, does not reduce the tax base but instead is subtracted from the resulting tax (i.e., the result may be negative which will mean a payment by the state). The amount of the tax credit was set at SKK 400 monthly per one dependent child. It may be used by either of the parents having a job; however, the credit for the same child may be claimed by only one of the parents.

The deduction for supplemental pension contributions paid by the employee continued to be available in 2004 in accordance with law No. 366/1999 – Collected Laws on the income tax, as amended by subsequent regulations. This means that in 2003 and 2004 the maximum deduction amounted to SKK 24,000 annually and may not have exceeded 10 percent of income. The employee could take advantage of it on a monthly basis. The new law changed the provision on exempting from the tax supplemental pension contributions paid by the employer to its employees. Before the reform, such contributions were tax-exempt; after the reform, they are taxable income and are added to the tax base of the employee.

Some may ask why the aforementioned concessions were left in the system. A deduction for the taxpayer ensures the progressivity of effective taxation while a tax credit for the child or a deduction for special-purpose savings are in line with the efforts to moderate the consequences of the aging of the population (through the rate of participation or the savings rate).

<b>Tax-Free Segments of the Tax Base - annual amounts (in SKK)</b>		
	<b>Before the reform (2003)</b>	<b>After the reform (2004)</b>
taxpayer	38,760	80,832
non-working spouse	12,000	80,832
children	16,800**	-
taxpayer receiving PDB	8,400	-
taxpayer receiving DB	16,800	-
supplemental pension contributions	24,000	24,000*

\* since 2005 the maximum amount is SKK 12,000

\*\* since 2004 a tax credit in the amount of SKK 400 monthly

PDB = partial disability benefit

DB = disability benefit

Source: Ministry of Finance of the Slovak Republic

The introduction of a **uniform rate of the income tax amounting to 19 percent** was the central point of the tax reform. Before the reform, progressive tax rates were in effect; five tax brackets were established, with the rates ranging from 10 to 38 percent. Therefore, the maximum rate of the income tax declined by exactly one-half, thus substantially reducing the marginal taxation of income.

Tax Brackets and the Marginal Tax Rate Before and After the Reform			
Before the reform (2003)		After the reform (2004)	
Tax bracket (SKK per month)	Marginal rate (%)	Tax bracket (SKK per month)	Marginal rate (%)
less than 3,230	0	less than 6,736*	0
3,230 – 10,730	10	more than 6,736*	19
10,730 – 18,230	20		
18,230 – 36,230	28		
36,230 – 50,230	35		
more than 50,230	38		

\* indexed by the growth of the subsistence minimum

Source: Ministry of Finance of the Slovak Republic

The new law also introduced several specific changes for individual businessmen. The major difference is found in the abolition of the lump-sum tax and the introduction of the possible use of so-called lump-sum expenditures. This applies to taxpayers who do not pay the VAT and do not make expenditures for tax purposes which can be documented. Upon meeting certain conditions, a taxpayer whose income is derived from activities set forth in the law may claim expenditures in the amount of 25 percent of total income. If a taxpayer has income from a crafts shop he can claim expenditures of up to 60 percent.

The forms for filing tax returns have changed. Effective January 1, 2004, all taxpayers file uniform tax returns, regardless of their area of activity. The amount of non-recurrent income which is exempt from taxes changed from SKK 10,000 originally to five times the subsistence minimum. The threshold for tax advance payments also changed from SKK 10,000 to SKK 20,000 currently for the latest known tax liability.

Beginning in January 2005, the surviving distortion was eliminated which favored supplemental pension savings compared to other forms of long-term savings. By amendments to the law on the income tax, the maximum deduction for contributions to supplemental pension savings was reduced from SKK 24,000 to SKK 12,000; at the same time, a new deduction in an equal amount was introduced for special-purpose savings. The condition is that the agreed-upon duration of paying into special-purpose savings be at least 10 years, with the taxpayer being unable to request payouts from special-purpose savings before the end of this period and, at the same time, payouts from special-purpose savings will be made at the earliest once the taxpayer turns 55.

### 2.1.2. Corporate Income Tax (CIT)

The tax reform reduced the rate of the income tax from 25 percent originally to 19 percent. Before the reform, reduced rates of 15 percent and 18 percent also existed in addition to the base rate. These rates were used by a small group of taxpayers engaging in farming and those employing disabled employees. According to the new law, income is taxed at the **uniform 19-percent rate**.

The new income tax law is designed to be more favorable for the business environment compared to the status until 2003 as far as the calculation of the tax base is concerned. The taxation of dividends was abolished. **More liberal rules for depreciation of tangible and intangible assets** were introduced, as well as **for recognizing certain expenditures and write-off of losses for tax purposes**.

The reform reduced the number of depreciation groups from five to four, with assets previously included in the fifth depreciation group being included in the fourth group. The maximum duration of depreciation was thus reduced from 30 to 20 years. With linear depreciation, annual depreciation in each tax period is the same, unlike in the previous arrangement where depreciation in the first year could be claimed at only half the rate. With regard to the depreciation of passenger transportation vehicles, the law eliminated the maximum price for the purposes of their depreciation.

A cap on the tax recognition of leasing fees for transportation vehicles under financial leasing was likewise abolished. Advertising expenditures are recognized for tax purposes in full to the extent they are made to generate revenues. The new law abolished the condition that a fee be paid to establish the recognition of selected expenditures for tax purposes; the fee requirement remains valid for leasing fees and commissions paid to individuals.

The income tax law includes a more liberal and simpler arrangement for deducting losses for tax purposes compared to the previous periods. Since 2004, taxpayers have been able to subtract from the tax base each loss for tax purposes (previously, only the first one) in the course of the next five consecutive years, without an obligation to distribute them evenly at the rate of one-fifth annually and the subsequent obligation to invest the deducted loss for tax purposes.

On the other hand, **stricter rules on the generation of reserves and provisions** were introduced. Compared to the previous law, the scope of expenditures recognized for tax purposes was circumscribed precisely and their number was significantly reduced. The reporting of the actual status of claims was tightened. According to the adopted provisions, the reserves for the repair of tangible assets whose generation was recognized as an expense for tax purposes until December 31, 2003, must be drawn and applied to the tax base no later than the end of 2008. The reserves which, according to the repair plan, must be drawn after 2008 must be applied to the tax base in equal parts beginning in 2004 in the amount of one-fifth of the total volume of reserves planned. According to the provision, in banking reserves whose generation was recognized as expenditures for tax purposes must be included in revenues in the period they are drawn, but no later than five years from the moment the law takes effect.

In the interest of tax transparency and reducing market distortions to a minimum, various **concessions, exemptions, and special treatments** were eliminated as much as possible. Since January 1, 2004, it has only been possible to grant tax concessions for providing investment incentives which should be vetted by the European Commission, approved by the government of the Slovak Republic, and provided on the basis of a resolution of the Ministry of the Economy of the Slovak Republic. The aforementioned tax concessions may only be granted until December 31, 2006.

In the past, taxpayers had an opportunity to subtract from the tax base the gifts they made, contributions to an association of legal entities, and advertising expenses up to a certain pre-set ceiling. Such an opportunity is no longer provided by the present law, but advertising expenses in full are recognized for tax purposes. Opportunities for donations by legal entities for socially beneficial purposes continue to exist, but this is accomplished in a more transparent, although still questionable manner (see chapter 6). Beginning in 2004, the payers of the corporate income tax (CIT) may designate 2 percent of the taxes paid for special purposes of a registered legal entity. Individuals have had an opportunity to designate 2 percent of the tax paid since 2002, but then still at the rate of 1 percent.

### 2.1.3. Income Tax Withheld at Source

The tax reform also affected the withholding tax markedly. The rates of tax on all types of income were unified at 19 percent. This eliminated the differentiation existing in the previous legal arrangement whereby the special rate of tax ranged from 1 percent to as much as 25 percent. The rate of tax applicable to the withholding tax is no longer provided separately in the paragraph on the withholding tax but is rather set indirectly, by reference to the flat rate of tax.

Before the reform, in most cases the tax liability was considered to have been met for income which was taxed at a special rate. This principle has changed to a fairer taxation by prepayment, that is, the amount of tax withheld and transferred, except concessions, is considered to be prepayment.

The following table summarizes changes in the area of income tax rates. Before the reform, 18 different rates of tax were used; since 2004, only one „flat“ rate at the level of 19 percent has existed.

Change in the Rates of the Income Tax (percent)		
	2003	2004
Personal income tax	2; 2.25; 2.5; 2.5; 10; 20; 28; 35; 38	19
Corporate income tax	15; 18; 25	19
Income tax withheld at source	1; 5; 10; 15; 20; 25	19

*Source: Ministry of Finance of the Slovak Republic*

One of the key objectives of the tax reform was to broaden the tax base. The box below itemizes the fundamental changes in this area, such as the cancellation of various exemptions, deductions, and concessions. From the point of view of income tax, the cancellation of concessions for various interest and capital yields, the broadening of the base for employees by adding receipts from the social fund and contributions of employers to supplemental pension insurance, and finally the liquidation of an opportunity to deduct gifts from the tax base of legal entities were the most important. Other measures were intended to eliminate systemic distortions rather than increase the tax revenue substantially. The table does not include the very important elimination of so-called investment incentives (tax holidays) from the law because this step was a precondition for the accession of Slovakia to the European Union and its implementation would have been necessary regardless of the tax reform.

### Expansion of the tax base – cancellation of exemptions, deductions, and concessions:

#### *Personal and corporate income tax*

- ✓ Subsidies from the state budget for taxpayers doing business in farming, forestry, and water management.
- ✓ Yields from government bonds and securities issued by the National Bank of Slovakia and denominated in foreign currency, and yields of mortgage debentures.
- ✓ Funds from grants provided under international agreements.
- ✓ Receipts from the operation of small-scale power enterprises and plants. Receipts in the first year after commissioning and in subsequent five years.
- ✓ Receipts from the production and operation of ecological equipment.

#### *Personal income tax*

- ✓ Cancellation of the exemption for supplementary pension insurance paid by the employer for the employee. After the reform, such contributions are added to the tax base of the employee.
- ✓ The number of deductions reducing the base of tax was reduced from six to three after the reform.
- ✓ Income from the social fund was taxed at a special rate of 10 percent before the reform; after the reform, it is added to the taxpayer's tax base and taxed at the uniform 19-percent rate.
- ✓ Income from the sale of securities, if the period between their acquisition and sale exceeded three years, or if the net income of the taxpayer from their sale did not exceed SKK 50,000 in a calendar year.
- ✓ Payments made in foreign currency to members of the armed forces posted outside the territory of the Slovak Republic, employees accomplishing their tasks outside the territory of the Slovak Republic within the framework of UN peacekeeping forces and military missions of international organizations.
- ✓ Social benefits and severance pay of judges, social benefits, severance pay, and death benefits of prosecutors, social benefits and tenure-based benefits of members of the armed forces, armed security forces, and the SIS [Slovak Information Service].
- ✓ Compensation paid by health care administration to donors for blood and other biological substances extracted from the human organism.
- ✓ Interest on deposits in building society savings, including interest on state subsidies.

#### *Corporate income tax*

- ✓ Income of colleges, high schools, primary schools and educational establishments obtained through engaging in business.
- ✓ Concessions for the tax on successfully completed results of research activities, under certain conditions.
- ✓ Tax concessions for taxpayers in the form of reduced tax liabilities in the amount of SKK 10,000 for each employee with limited ability to work or in the amount of SKK 24,000 in the case of a severely disabled employee, if a reduced rate of tax has not been used.
- ✓ Opportunity to deduct the value of gifts in cash and non-cash forms for designated purposes from the tax base in the amount of up to 2 percent of the tax base.

## 2.2. Indirect Taxes

### 2.2.1. Value-Added Tax

From the budget point of view, the crux of the tax reform was in making the rates of the Value-Added Tax (VAT) uniform. At the beginning of 2004, **a single rate of 19 percent** replaced the base rate of 20 percent and a reduced rate of 14 percent. The introduction of a uniform rate affected in particular the prices of goods and services previously subject to the reduced rate (for the main part, food staples, medicines, energy, construction work, books, newspapers, magazines, hotel and restaurant meals). The introduction of a uniform rate means simplification of the system of tax collections, a reduction in the administrative effort for taxpayers and tax administrators, and prevention of various speculative arrangements which the existence of two rates made possible. Inefficient support of lower income brackets through indirect taxes was likewise eliminated.

Numerous changes had been made in the area of refunding excess credits even before the introduction of the tax reform; however, as early as 2004, **uniform procedures for the refund of excess credits** were introduced. Before the reforms, taxpayers deducted excess credits from their own tax liabilities for no longer than six months in the order in which they were claimed. After as long as six months, a payer could claim a refund of the undeducted portion of the excess credits in question within 30 days of the date of filing the refund claim on terms set forth in the law. An exception was made for taxpayers to whom the excess credits were refunded in as little as 30 days after the filing of a tax return for the tax period in question (for example, exporters). They had to meet the criteria specified by law. The reform introduced the same rules for all taxpayers without exception. If a taxpayer cannot deduct excess credit from a tax liability within 30 days of filing a tax return because he has accumulated excess credits once again, in the following month all taxpayers without exception may now claim a refund of the original excess credits.

As has already been mentioned, the tax reform changed in particular the level of the tax burden in the case of indirect taxes, as far as the budget is concerned. Measures intended to prevent tax evasion (above and beyond EU requirements) were an important area for changes; potentially, this is a very attractive area for budget revenues<sup>3</sup>. For this reason, new laws were not required, as in the case of the income tax; amendments to existing laws sufficed. After all, a new law on the VAT, No. 222/2004 - Collected Laws which takes into account the requirements of the EU directives, in particular the provisions contained in the Sixth Directive of the Council 77/388/EEC, as modified by subsequent regulations, took effect after Slovakia joined the EU. At issue is mainly the entire set of taxes on goods and services in member countries within the framework of a common market and new registration of tax-paying entities. They are mentioned in the present document because they influenced substantially the tax revenue in 2004; also, the degree to which they will also influence the budget in the coming years it is still open to question.

Effective May 1, 2004, a fundamental **change** occurred in the **taxation of the imports and exports of goods**. Within the framework of EU states, customs authorities stopped accomplishing tasks entailed by the VAT; this means that customs officials no longer collect tax on goods delivered from states which are part of the EU common market. After the accession of the Slovak Republic to the European Union, only goods imported from third countries, i.e., countries not belonging to the EU, are taxed as imported goods. Effective May 1, 2004, deliveries of goods from another member state to Slovakia are taxed as acquisitions of goods from other member states in accordance with procedures set forth in the law on the VAT. Likewise, the delivery of goods from Slovakia to another member state is not treated as export of goods effective May 1, 2004, but rather as a delivery of goods to another member state. Exports are referred to only when exports to third countries are concerned.

In accordance with the Sixth Directive, the **set of persons which are obligated to register as VAT payers has expanded**. The first reason for raising the number of payers is found in a different legal definition of the notion of person subject to the tax which, upon reaching a threshold of turnover in its activity, must register as a taxpayer. The law in effect after May 1, 2004 classifies as a person subject to the tax any person which engages in any business for its own account, regardless of the purpose or results of such an activity. Business is treated more broadly than it is defined in the Commercial Code. The use of tangible or intangible

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<sup>3</sup> Results are already evident, for example, in the tax on alcohol the performance of which has markedly improved recently.



assets with a view to generating income is considered being in business which means that a natural person–citizen becomes a person subject to the tax for the purposes of the VAT law, provided that he generates income from this activity. Also, effective May 1, 2004, each individual is considered to be a person subject to the tax if he delivers a new transportation vehicle to another member state.

A change in the volume of turnover on which compulsory registration hinges, as well as in the time period over which the volume of turnover is recorded, is another reason for expanding the set of VAT taxpayers. The volume of turnover needed for compulsory registration was halved, i.e. reduced to SKK 1.5 million for a maximum of 12 preceding months. Before April 30, 2004, the compulsory registration threshold amounted to SKK 750,000 for three consecutive previous months.

### 2.2.2. Excises

Unlike in the case of other taxes, legislative modifications of excises within the framework of the tax reform occurred as early as 2003. There were three factors which favored early implementation above all: the introduction of unpopular measures (an increase in indirect taxes) to be implemented before popular ones (a reduction in the income tax); an effort to better smooth over inflation as a result of raising indirect taxes<sup>4</sup> and the objective of offsetting the loss of state budget revenues caused by a lower receipt of the VAT in the year in question.

Increased rates affected the **excise on mineral oil, tobacco products and the excise on beer**. In the case of the excise on alcohol and wine, the rates did not change. The following table summarizes the situation before and after the increase in rates on August 1, 2003.

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<sup>4</sup> In 2003, inflation lagged considerably behind expectations.

Changes in the Rates of Excises since August 1, 2003					
	Unit of measurement	Before the reform	After the reform	Change (in SKK)	Change (in %)
<b>Excise on mineral oil</b>					
- motor gasoline, unleaded	SKK/1,000 l	12,400	15,500	3,100	25.0
- motor gasoline, leaded	SKK/1,000 l	14,500	18,000	3,500	24.1
- middle distillate	SKK/1,000 l	11,800	14,500	2,700	22.9
- gas oil (naphtha)	SKK/1,000 l	11,800	14,500	2,700	22.9
- gas oil (reduced rate)	SKK/1,000 l	4,100	6,800	2,700	65.9
- fuel oil	SKK/1,000 kg	600	800	200	33.3
- liquefied hydrocarbon gas (motor fuel)	SKK/1,000 kg	4,300	7,800	3,500	81.4
- liquefied hydrocarbon gas (fuel)	SKK/1,000 kg	0	0	-	-
<b>Excise on beer</b>					
- base rate	SKK/Plato/hl	30.0	50.0	20.0	66.7
- reduced rate	SKK/Plato/hl	23.0	37.0	14.0	60.9
<b>Excise on tobacco products</b>					
- cigarettes and cigars (SKK/piece)	SKK/piece	0.95	1.40	0.45	47.4
- tobacco for custom-rolling cigarettes	SKK/kg	1,000	1,350	350	35.0
- other tobacco	SKK/kg	880	1,350	470	53.4

*Source: Ministry of Finance of the Slovak Republic*

Just as in the case of the VAT, changes were also implemented in 2004 which resulted from the harmonization of the Slovak Republic legislation and EU legislation, in addition to legislative changes in conjunction with the tax reform. At the time of entering the EU on May 1, 2004, a change in the determination of the tax on cigarettes occurred since a combined rate of tax was introduced. Although the primary objective of this change was not to increase the tax burden on cigarettes, the design of the rate caused a moderate increase in the tax burden for most price brackets. The excise on cigarettes is also the last tax for which Slovakia is using a period of transition to meet the minimum tax burden required by the EU. The period of transition for the Slovak Republic lasts until 2009. On May 1, 2004, the responsibility for the collection of all excises was shifted from the tax administration to the customs administration.

### 2.2.3. Other Taxes

Changes in property taxes which constituted revenues of the state budget were also a part of the tax reform. Between 1993 and 2003, they were legally regulated by law No. 318/1992 – Collected Laws on the inheritance tax, gift tax, and the tax on the transfer and assignment of real estate, as amended by subsequent regulations. The reform of property taxes was carried out in two stages. At the first stage implemented on January 1, 2004, the **inheritance and gift taxes were abolished** and law No. 554/2003 – Collected Laws on the transfer and assignment of property was passed. Under the law, the original tax rates ranging between 0.5 and 6 percent of the tax base were unified at the level of 3 percent. At the second stage, effective January 1, 2005, the **tax on the transfer and assignment of real estate was abolished**.

Other taxes were affected by the EU accession and later by fiscal decentralization rather than directly by the tax reform. Effective May 1, 2004, import duties were transformed into a share in the collected funds of the European Union. Of that amount, 25 percent is retained as the

revenue of the state budget of the Slovak Republic and the balance of 75 percent is passed on to the EU budget.

Legislative changes to the tax on real estate, the tax on specific services and the road tax were related to fiscal decentralization which was launched in January 2005. A new law, No. 582/2004 – Collected Laws on local taxes and local fees for municipal waste and small construction waste transferred the responsibility for setting the rate of the taxes to local self-government bodies; the income from these taxes constitute the revenue of municipalities and higher territorial units.

### **3 Impact of the Reform on Public Finance**

From the standpoint of public finance revenues, the tax reform was designed from the very beginning in such a way that the total tax collection in the absence of the reform was roughly equal to the total revenues after the reform. Therefore, in the short term the objective of fiscal neutrality was dominant which was in line with the consolidation program of the government. Subsequently, coalition talks resulted in an agreement that, given the projected long-term benefits of the reform, a short-term unfavorable impact on tax revenues at the level of 0.5 percent of the GDP was acceptable<sup>5</sup>.

This document does not endeavor to estimate the long-term fiscal benefits of the reform because this depends primarily on the degree of success in motivating people to work and the manner in which the profits of legal entities are increased (by attracting direct foreign investment, increasing domestic investment, or reducing incentives to evade taxation). In other words, long-term benefits of the reform amount to increasing the potential product of the economy. This type of analysis may be undertaken only after a period of several years, but even then the results will be subject to considerable uncertainty. Therefore, in this document only the short-term fiscal impact of the reform will be evaluated. It will be analyzed from two points of view.

1. In the first instance, actual performance in 2004 is compared to the budget. It should, however, be kept in mind that macroeconomic assumptions of ministries and the quantification of the impact of certain legislative changes were set conservatively when the budget was compiled in order to avoid the risk of overestimating revenues. This is to say that greater revenues compared to the budget do not necessarily mean that the reform is successful.
2. In the second instance, the actual performance is contrasted with a hypothetical scenario „in the absence of the reform“. In other words, an answer is being sought to the question of what would have happened to revenues had the reform not been implemented. In this matter, there is a pronounced complication in that economics does not have unequivocal answers to questions of this nature. This is precisely why it is necessary to define clearly the assumptions on which such calculations are made.

The following table indicates the degree to which the objective of fiscal neutrality was successfully met and the risk in the compilation of the budget was successfully contained. The data are on the accrual basis by the ESA 95 methodology. The overall difference between

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<sup>5</sup> As a result of the tax reform, the target budget deficit of public administration for 2004 increased from 3.4 percent to 3.9 percent of the GDP.

the actual tax revenues and the budget was less than 0.1 percent of the GDP which, given a reform of this magnitude, is a very small difference. The overall tax burden declined by 0.5 percent of the GDP after the reform. This is not a negligible decline within one year, given that the overall tax burden was relatively low on an international scale even before the reform.

<b>Impact of the Tax Reform on Public Finance (ESA95, percent of the GDP)</b>						
	Actual 2003	Budget 2004	Actual 2004	2004 NON reform scenario	Difference 3-2	Difference 3-4
	1	2	3	4	3-2	3-4
Personal income tax	3.3	2.1	2.6	3.5	0.6	-0.8
Corporate income tax	2.8	1.8	2.5	3.1	0.7	-0.6
Withholding tax	0.8	0.9	0.4	0.6	-0.5	-0.2
VAT	6.7	8.8	7.9	7.1	-0.9	0.8
Excises	3.1	3.3	3.4	3.0	0.0	0.3
Property taxes	0.2	0.1	0.2	0.2	0.1	0.0
Local taxes	0.6	0.6	0.6	0.6	0.0	0.0
Other taxes	0.5	0.3	0.3	0.3	0.0	0.0
<b>Total tax revenues</b>	<b>18.1</b>	<b>17.9</b>	<b>18.0</b>	<b>18.4</b>	<b>0.0</b>	<b>-0.5</b>

Notes: 1) a GDP estimate of SKK 1,293.2 billion was used to compile the budget; the actual GDP was SKK 1,325.5 billion.

Source: Ministry of Finance of the Slovak Republic

2) differences are due to rounding.

From the analytical point of view, it is more meaningful to compare only the revenues of taxes which are closely related to the tax reform. In the following table, the estimates of the Ministry of Finance of the Slovak Republic (budget) and the International Monetary Fund (IMF) made in the fall of 2003<sup>6</sup> are compared with actual numbers for the five key taxes. The estimates of the Ministry of Finance of the Slovak Republic and the IMF were very similar and largely differed very little from actual numbers. However, we should add for the sake of objectivity that relatively large deviations occurred in the composition [of taxes] compared to the budget. As far as the breakdown, the IMF was closer to the actual statistics for the corporate income tax and the Ministry of Finance of the Slovak Republic was closer to the truth in the case of the personal income tax.

<b>Comparison of Estimates and Actual Tax Revenues for 2004 (ESA95, % of GDP)</b>			
	Ministry of Finance of the Slovak Republic	IMF	Actual
Income tax	4.8	4.8	5.6
<i>Personal income tax</i>	2.1	1.8	2.6
<i>Corporate income tax</i>	1.8	2.1	2.5
<i>Withholding tax</i>	0.9	0.8	0.4
VAT	8.8	8.9	7.9
Excises	3.3	3.3	3.4
<b>TOTAL</b>	<b>16.9</b>	<b>17.0</b>	<b>16.9</b>

Notes: GDP used in the projections are estimates in the time of projections.

Source: Ministry of Finance of the Slovak Republic, IMF

<sup>6</sup> At the initial stage of the tax reform, estimates were also made by other institutions, although legislation still continued to be modified over time. For this particular reason, it is the estimates of the Ministry of Finance of the Slovak Republic and the IMF made on the basis of legislation taking effect on January 1, 2004 that can be effectively compared.

### 3.1. Comparison of the Budget and Actual Tax Revenues

On the whole, it is possible to say that the reform was really successful from the point of view of the budget. **Compared to the budget, the actual collection of taxes was SKK 6.4 billion better on an accrual basis, although the total revenues were also SKK 6.1 billion less than in the non reform scenario**<sup>7</sup>. If we ignore taxes which had little to do with the tax reform (other taxes, local taxes, and the inflow of property taxes), the difference from the budget amounts to less than 2 percent of the total tax revenues. Given the scope of changes, this is a very small difference.

The largest differences between the actual implementation and the budget were registered in the case of the income tax and the VAT which is understandable, given the size of their revenues and the scope of legislative changes. From the point of view of the budget, the differences canceled each other out; a shortfall in the implementation of the VAT and the withholding tax was almost symmetrically offset by the excess of the personal and corporate income tax. The reasons for the differences between the actual implementation and the budget were many; on the whole, they may be divided into five groups.

A. **Changes in the economic environment** which ultimately influenced the difference between the actual and budgeted implementation of the tax favorably in the amount of SKK 1.8 billion were the first factor. A more dynamic growth of wages than expected during the compilation of the budget influenced favorably the tax revenues from PIT from dependent activity. This more than offset the slower growth of employment. Similarly, faster growth of consumption of households in real terms affected favorably the VAT and excises. On the contrary, a more rapid decline in interest rates affected the withholding tax unfavorably.

Rates of Growth of Selected Macroeconomic Indicators in 2003 and 2004 (in %)			
	2003 actual	2004 budget	2004 actual
Registered employment	0.8	1.1	0.3
Average monthly nominal wage	6.3	7.9	10.2
Real wages	-2.0	-0.6	2.5
Final consumption of households (constant prices)	-0.9	2.0	3.5

*Source: Ministry of Finance of the Slovak Republic; Statistical Office of the Slovak Republic*

B. **Taxes which were not directly connected to the tax reform** were the second group of causes. Therefore, it would be useful to separate them out when analyzing the difference between the actual revenues and the budget. Property taxes were markedly affected by additional tax payments from previous years; local taxes are budgeted by municipalities themselves (a projection by the Ministry of Finance of the Slovak Republic is merely tentative for the purposes of compiling the budget of public administration), and the customs duties were affected by the EU accession. All of these are factors unrelated to the tax reform, but they produced a favorable effect amounting to SKK 2.2 billion.

C. The greatest negative difference between the actual implementation and the budget was registered in the case of the VAT. According to the current analyses of the ministry,

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<sup>7</sup> Changes in terms of the proportion of the GDP were small due to the fact that the actual GDP was SKK 32.3 billion greater than assumed. Given the volume of the tax burden, this means a difference of SKK 6.1 billion in absolute terms.

a shortfall of at least SKK 8.1 billion<sup>8</sup> may not be ascribed to the tax reform as such but rather to the **accession of Slovakia to the EU on May 1, 2004**. Such a shortfall was not taken into account when the budget was compiled; the details are found in the chapter on the VAT.

D. The budget assumed that **dividends** paid in 2004 out of distributed 2003 profits would be taxed by means of the withholding tax which, however, did not take place. A part of the dividends in the amount of SKK 2.4 billion reached the budget of public administration as non-tax revenues of the National Property Fund; the excess was part of the personal and corporate income taxes.

E. **Residual factors** whose total favorable impact amounted to SKK 12.9 billion were the most important component. The ministry can register this source of differences between the actual implementation and the budget; however, it is not possible to quantify individual components at this point without the use of highly arbitrary assumptions which is what we would like to avoid. As the name of the factors suggests, the total amount was calculated as a residual, as a difference between what the ministry can and cannot quantify in a relatively accurate manner.

To a degree, this amount represents the „black box“ of the tax reform and includes a number of factors. Certainly, a *conservative approach of the ministry* to compiling the budget was a factor. The approach called for accepting a conservative expert estimate when changes to legislation which were supposed to affect the tax revenues were made but a reliable quantification was impossible due to a lack of relevant data. Examples are found in particular in the area PIT from dependent activity. At issue is the taxation of income from the social fund, taxation of the employer's contributions for supplemental pension insurance, but also unreliable data on the wage distribution in Slovakia<sup>9</sup> and the number of children for whom the tax credit is expected to be claimed. The abolition of many deductions and concessions, with the attendant expansion of the tax base, also belongs in this category.

Another factor is „everything else“ that has happened within the framework of the corporate and personal income tax. Within this group, two components may still be distinguished. Uncertainty as to the degree to which the growth of profits was caused by fundamental trends in the macroeconomic environment and the degree to which it was due to cyclical changes in the economy is one component. After all, in the latter case the growth of the tax revenue was just temporary and in the future will be offset by shortfalls due to a cyclical decline in the economy. The other component represents the type of impact of the tax reform that is one of the most eagerly awaited within the country and abroad. It amounts to the proportion of the tax receipts which may be attributed to the *greater willingness of individuals and legal entities to acknowledge and pay the tax*. At issue is a „dividend“ of sorts of the tax reform which results from a reduction in the tax burden and simplification of the tax system. Regrettably, at present the Ministry of Finance of the Slovak Republic cannot state with confidence how large the dividend is. However, at present it does not appear likely that

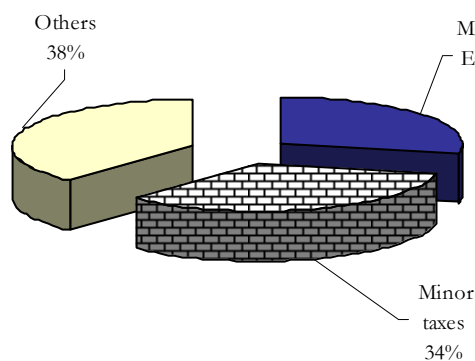
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<sup>8</sup> Of which we estimate approximately SKK 2 billion to be a one-time shortfall.

<sup>9</sup> For example, in the absence of the income distribution of the taxpayers, markedly conservative assumptions were made which explains the underestimation of revenue from the personal income tax by approximately SKK 6 billion. The negative effect of legislative changes on the corporate income tax was overestimated accordingly; for budget purposes, it was put at SKK 1.3 billion.

(based on approximate calculations<sup>10</sup>) it was above SKK 2 billion in the first year, although it is certain that future analyses will revisit this issue.

**Difference Between the Actual Implementation of the Tax and the Budget – Factor Quantification (SKK million)**



<b>(A) Influence of macroeconomic indicators</b>	<b>1 793</b>
PIT from dependent activity	1 145
Withholding tax	-1 915
VAT	2 051
Excises	512
<b>(B) Influence of taxes unrelated to the reform</b>	<b>2 165</b>
Property taxes	1 235
Local taxes	722
Other taxes	208
<b>(C) VAT – surrender to the EU</b>	<b>-8 100</b>
<b>(D) Withholding tax – non-tax income of the NPF</b>	<b>-2 350</b>
<b>(E) Residual factors</b>	<b>12 891</b>
<b>TOTAL (A)+(B)+(C)+(D)+(E)</b>	<b>6 399</b>

Source: Financial Policy Institute

### 3.1.1. Income Tax

Income taxes were budgeted in the amount of SKK 62.2 billion. The actual revenue of the income tax in the amount of SKK 73.5 billion exceeded the budget of public administration by SKK 11.3 billion which corresponds to executing the budget 118.2 percent. Implementation was the best for the corporate income tax where the budget was exceeded by almost 40 percent; on the other hand, the withholding tax was implemented at just under 50 percent of the budgeted amount.

**Income Tax in 2004 (ESA95, SKK million)**

	2004 budget	2004 actual	Difference	% of budget execution
	1	2	2-1	2/1 x 100
Personal income tax	27,083	35,122	8,039	129.7
- dependent activity	23,283	30,404*	7,121	130.6
- self-employment	3,800	4,718	918	124.2
Corporate income tax	23,700	33,164*	9,464	139.9
Withholding tax	11,400	5,675	-5,725	49.8
<b>Total income tax</b>	<b>62,183</b>	<b>73,522</b>	<b>11,339</b>	<b>118.2</b>

\*funds donated for socially beneficial use have been deducted

Source: Ministry of Finance of the Slovak Republic

In 2004, **PIT from dependent activity** reached SKK 30.4 billion which was SKK 7.1 billion more than budgeted. The higher implementation was partially (by SKK 1.1 billion) due to the faster growth of wages. Many factors were responsible for the positive difference.

When the budget was being prepared, no reliable data were available on two parameters which are of great importance to the introduction of a flat tax. Therefore, the parameters

<sup>10</sup> Taking into account many factors, such as the actual wage distribution, taxation of dividends reported on tax returns, shifting profits to 2004, taxation of diplomats, the social fund, etc.

were set conservatively. The first was the number of children for whom the taxpayers can claim tax credits. At present, final data of the number of children for whom tax credits were claimed in 2004 are still not available. However, according to preliminary data, it was somewhat lower than the ministry assumed originally. The distribution of employee wages, i.e. the breakdown of employees by the level of their income, was the second important parameter. No official data exist in Slovakia which would cover the wage distribution of all taxpayers in an adequate range of incomes.

Also, some of the higher revenues were due to factors which could not be quantified because relevant information was lacking; therefore, they were a reserve of sorts in the budget. This included the introduction of a uniform 19-percent rate of taxes which after the reform also applied to employee income from the social fund. Before the reform, such income was taxed by means of a withholding tax at the rate of 10 percent. The abolition of a tax exemption for contributions to supplemental pension insurance which the employer pays for the benefit of its employees also contributed toward higher revenues. Since 2004, such contributions have been added to the tax base of the employee and taxed at the 19-percent rate.

The **PIT from self-employment** was budgeted in the amount of SKK 3.8 billion in 2004. The actual tax revenue exceeded the budget by SKK 0.9 billion and reached SKK 4.7 billion. There were a number of factors responsible for the higher implementation.

The taxation of dividends at the level of the personal income tax was one such factor. This concerned dividends paid to shareholders in 2004 but not covered by the withholding tax, as was the case in the past (and as was assumed in the budget); instead, the shareholders in question included the dividends in 2004 tax returns. Therefore, the cash revenue was taken in by the budget as late as 2005 whereas the accrual of the revenue was attributable to 2004.

Many factors were similar with regard to dependent activity, especially as far as the tax credit on children is concerned. The influence of the abolition of the lump-sum tax is the most difficult to quantify. It is also questionable to what degree a favorable economic environment and improving conditions for small businesses contributed to the higher tax revenues, if at all. A greater willingness to acknowledge the tax liability could have also played a role, unlike with tax revenues from PIT from dependent activity where this was practically impossible.

Finally, there are two factors which are specific for the PIT from self-employment. The first is that the tax revenues consist not only of the self-employment but all taxes which are paid on the basis of tax returns filed by individuals. The resulting tax liability is also based on income from dependent activity (in the case of individuals who additionally engage in business), capital yields, income from the rental of real estate, and other income. The second factor is that the tax administration performs yearly settlement<sup>11</sup> for the tax on the income of individuals, including from dependent activity, within the framework of the self-employment. Therefore, the receipts of PIT from self-employment are influenced by the PIT from dependent activity through two channels – once through the individual tax returns and once through the tax settlement. Moreover, both these components tend to be highly volatile.

The **corporate income tax** in 2004 came to SKK 33.2 billion which was SKK 9.5 billion more than budgeted. This relatively large difference is the main source of the „black box“ which

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<sup>11</sup> The difference between advance payments and the actual tax liability.

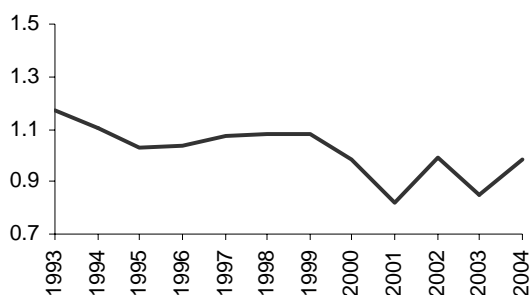


has been mentioned above. The difference is due to many factors which may be described but are virtually impossible to quantify.

In general, it is possible to say that the higher tax collection was not due to a large increment in profits but rather to the broadening of the tax base. While profits increased by 10% in 2004, the tax base increased by as much as 29%. In 2003, the tax base was almost SKK 30 billion less than the profits reported on tax returns; in 2004, the difference narrowed down to SKK 3.5 million. To be sure, the ratio between the profit and the tax base was highly volatile in the past; therefore, it is questionable to what degree the faster growth of the tax base compared to profits in 2004 was caused by the tax reform.

However, from the point of view of future budgetary revenues it is even more important to ask to what degree the expansion and mainly the growth of the tax base were a one-time phenomenon and to what degree they are permanent. For example, a change in the area of generating reserves is a case in point as far as one-time increments of profits and the tax base are concerned. Changes were made and stricter rules were introduced for the generation and liquidation of reserves and provisions. In the case of businesses, liquidated reserves were included in the tax base and thus increased it. In the case of banks, the disbursement of reserves resulted in higher incomes and thus the growth of profitability. In both cases, this influenced favorably the corporate income tax. However, such growth will not be permanent which should be taken into account in the future as budgets are compiled. Shifting profits from 2003 to 2004 may be another short-term phenomenon<sup>12</sup>.

**Changes in the Ratio of Operational Income and the Base of the Corporate Income Tax in 1993-2004**



*Source: Ministry of Finance of the Slovak Republic*

Just as in the case of individuals, some of the higher tax collection is attributable to the taxation of dividends for 2003 which were not taxed by means of the withholding tax but instead were included in the tax base of legal entities for 2004. This was likewise a one-time effect because the taxation of dividends was definitively abolished by the reform.

The greatest favorable effect on the tax revenue due to reducing the tax burden (including the abolition of dividend taxation) and the resulting greater willingness and motivation to acknowledge the tax was expected for the corporate income tax. In the case of the personal income tax, this assumption was not too realistic because income from work is encumbered by the still relatively high social contributions and, in the case of income from dependent activity the opportunity to evade taxation is very small. Unfortunately, it would be

<sup>12</sup> On the other hand, one-time tax payments in the amount of almost SKK 3 billion occurred in 2003.

irresponsible on the part of the ministry at present to say unequivocally how large this effect was in 2004.

The budgeted amount for the **withholding tax** was not collected. This tax was supposed to bring SKK 11.4 billion to the budget; the actual revenue was SKK 5.7 billion less. When the budget was compiled it was assumed that the withholding tax would include the revenue from taxing the dividends for 2003 which was not the case. However, the budget did not forego this revenue in 2004 since it was obtained through other channels of public administration revenues: some of it through the personal income tax, some through the corporate income tax, and some through the non-tax revenues of the National Property Fund.

The tax reform reduced considerably the number of the types of income on which this tax is collected. However, such types of income, with the exception of dividends, were not exempted from taxation, as they went directly into the base of individuals and legal entities. In view of the lack of data, it was impossible to distinguish and quantify this shift; for this reason, for the purposes of budget compilation this proportion of income was still „taxed“ by means of the withholding tax. Similarly to the case of dividend taxation, the state did not forego such income but instead received it through other taxes. **Therefore, it is better to compare the budget with the actual data for total income taxes where the percentage deviation is much smaller than in the case of individual taxes.**

The budgeted withholding tax and, at the same time, the total revenue of public administration dropped for just one reason – a greater than expected decline in interest rates in the economy.

### 3.1.2. Indirect Taxes

The VAT and excises combined were budgeted at a level of SKK 157 billion; the actual tax revenue was SKK 7.5 billion smaller. The shortfall was attributable in particular to the VAT in the amount of SKK 8.9 billion which was the largest shortfall of any tax. On the other hand, excises came out better than budgeted by SKK 1.4 billion.

Indirect Taxes in 2004 (ESA95, SKK million)				
	2004 budget	2004 actual	Difference	% of budget execution
	1	2	2-1	2/1 x 100
VAT	113,800	104,859	-8,941	92.1
Excises	43,200	44,597	1,397	103.2
on mineral oil	27,000	29,079	2,079	107.7
on alcohol	3,200	4,145	945	129.5
on beer	2,400	2,113	-287	88.0
on wine	200	137	-63	68.5
on tobacco products	10,400	9,122	-1,278	87.7

\*the breakdown of individual types of excises is illustrative; the data are not official

Source: Ministry of Finance of the Slovak Republic

Many factors affected changes in the **value-added tax in 2004**. In addition to the unification of the tax rates – which was the main thrust of the reform with regard to this tax – this was,

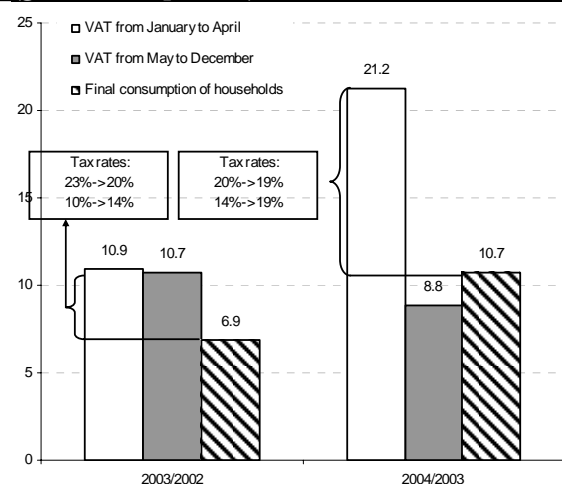
in particular, the accession of Slovakia to the European Union and requisite changes in the legislation. The budget put VAT at SKK 113.8 billion; the actual revenue was SKK 8.9 billion lower.

The lower tax collection for the budget was due to the effect of the EU accession. **Currently, the Ministry of Finance of the Slovak Republic estimates the loss of the VAT for this reason to have been approximately SKK 8.1 billion.** As the budget was being prepared, only a loss on the cash basis (SKK 15.4 billion) was expected for the VAT which was to be caused by a time shift in the collection of the VAT on imports from EU countries. The time shift occurred because the collection of the VAT on intra-EU imports by customs offices stopped and the VAT began to be collected by tax offices similarly to domestic payments. Therefore, the VAT on goods imported from EU countries was not collected immediately upon their importation but instead with a delay, after the filing of a tax return. In reality, the cash-based loss was considerably smaller than expected, mostly as a result of conservative assumptions.

The Ministry of Finance of the Slovak Republic estimated the size of the VAT shortfall by reason of Slovakia's accession to the EU as a residual. Although the size of the shortfall is derived residually, as a difference between the budget and the actual level, which we cannot explain by economic arguments, we can say with certainty that the shortfall occurred after Slovakia joined the EU. We believe that it was caused by a greater incidence of fraud with tax liabilities, tax evasion, and in part by a slow adjustment of taxpayers to the new system of tax collection (mistakes, poorly filled out tax returns). It is generally known that the intra-community trade within EU provides more opportunities for tax evasion and fewer opportunities for control on the part of the customs and tax administrators. Similar shortfalls have been registered in the past; for example, Hungary, in addition to Slovakia, also reported lower VAT after joining the EU in 2004.

The following chart shows a comparison of year-on-year rates of growth of VAT in the first four and the following eight months of 2003 and 2004. The growth of VAT is compared to the growth of consumption of households which accounts for the bulk of the VAT base. In 2003, the tax grew evenly in both periods and, for the most part, faster than consumption of households. Higher growth was kept in mind for an effective increase in the rates by 1 percent when the rates were changed from 23 percent and 10 percent to 20 percent and 14 percent. In 2004, the situation was the exact opposite. In the first four months, the VAT grew by 21 percent which could correspond to the growth of the effective tax rate by 4 percentage points when the rate was unified from 20 percent and 14 percent to 19 percent. However, in the eight following months (after EU accession), the growth of the VAT no longer kept up with the growth of consumption of households. We believe that such a slump cannot be explained solely by the possible tendency of consumers to stock up fearing the growth of prices after EU accession.

### Changes in the VAT, accrual basis (growth rate, percent)



Source: Ministry of Finance of the Slovak Republic

The following table illustrates the residual method of estimating the shortfall. The method is based on comparing individual components of the estimate of total VAT for budget compilation with the current estimate of the components, or their actual level where such is available. The difference of SKK 8.1 billion between the total current estimate and the reported actual level for 2004 is ascribed to the effect of joining the EU. Individual components of the total VAT estimate (their total) are shown below.

VAT in 2004 (ESA 95, SKK billion)				
	Budget	Current estimate	Actual	EU effect
	1	2	3	2 – 3
(+) VAT in the absence of the tax reform	99.4	100.7	-	-
(+) effect of unifying the VAT rates	12.0	11.5	-	-
(+) effect of the flat tax on consumption	2.0	1.2	-	-
(+) reduction in the registration [threshold] from SKK 3 million to SKK 1.5 million	0.4	0.4	-	-
(-) deduction of the property of newly registered payers	1.7	0.8	-	-
<b>Total VAT estimate</b>	<b>112.1</b>	<b>113.0</b>	<b>104.9</b>	<b>8.1</b>

Estimate: Ministry of Finance of the Slovak Republic

The first item in the table, „VAT in the absence of the tax reform“, represents an estimate of the VAT in the absence of any legislative changes compared to 2003. This is the point of departure for estimating the VAT in 2004. In such a case, the rate of growth of the VAT in 2004 corresponds to the rate of growth in an identical year of the macroeconomic base which consists of consumption of the households and the government (excluding the flat tax effect). This approach is currently used throughout the world to estimate excises for which a unit elasticity of VAT to its base is assumed. The difference between the current estimate and the budgeted VAT represents the difference in the consumption estimated when the budget was compiled and the actual level reported for 2004.

The effect of unifying the VAT rates is represented by an additional income resulting from unifying the VAT rates from 20 percent and 14 percent to 19 percent. A number of methods based on available data on the breakdown of consumption (for example, the consumption basket of households) have been used to estimate the effect; some of them have been

developed recently. A relatively conservative estimate which takes into account all existing basic methods was used to obtain current values.

The effect of the flat tax on consumption is due to resources available to households for consumption increasing in 2004 because a flat income tax was introduced which reduced the income of PIT from dependent activity. The additional receipts of the households were calculated as the difference between the estimated revenues of PIT in the absence of the reform and after the reform. An arbitrary assumption was accepted that 80 percent of the additional receipts would be used for consumption and the balance would be saved. A decline in the current estimate compared to the budget is due to the fact that the budget projected a lower than actual revenues of personal income tax; therefore, the disposable income of households did not grow for this reason as much as expected.

A reduction in the threshold of compulsory registration for VAT payers from SKK 3 million to SKK 1.5 million in 2004 meant an expansion of the tax base and thus greater projected revenues. An accurate quantification of this effect is still not possible at present; therefore, to ensure a consistent comparison of the total amount, an assumption was made that the actual level is equal to that budgeted. At issue is a relatively small amount which cannot considerably distort the overall estimate.

A deduction of the property of newly registered VAT payers was a legislative change which was supposed to cause a one-time decline in tax revenues in 2004. Given that at issue was a one-time drop in the tax which by definition is not related to the development of the economy, this effect was originally classified in the budget as a cash effect. However, the resulting tax liability was not adjusted for this effect in the process of notification; therefore, ultimately it influenced the taxes not only on cash, but also on accrual basis. Therefore, for the present comparison this effect was classified as an accrual effect which reduced the total tax revenues (a negative sign). This is the source of SKK 1.7 billion difference between the actually budgeted accrued VAT in the amount of SKK 113.8 billion and the number SKK 112.1 billion which we provide in the table as budgeted VAT. Unlike the previous effect, the actual level could be accurately quantified on the basis of tax returns.

Compared to the budget, **the excises** in 2004 were SKK 1.4 billion higher, with individual types of taxes changing differently. The excise on mineral oil and alcohol performed better whereas the three remaining taxes failed to meet expectations. From the standpoint of evaluating the tax reform, the taxes whose rates were increased in August 2003 to levels suggested by the tax reform (mineral oil, beer, tobacco products) are the important ones.

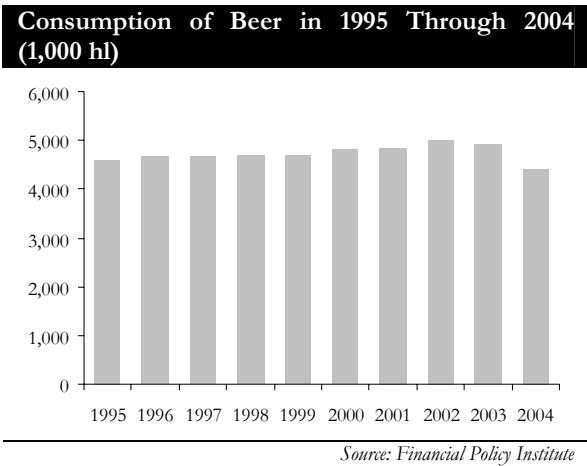
A better economic performance and uncertainty associated with the projected scope of illegal trade in alcohol products and cigarettes should be considered the main drivers of development in 2004 which differed from the budget.

In 2004, macroeconomic indicators were better than assumed; from the point of view of excises, the growth of real wages and consumption of households was important. Therefore, economic development was one of the reasons why excise on mineral oil was higher; at the same time, it prevented a more significant decline in the consumption of beer and tobacco products.

A relatively pronounced increase in the rates of excises affected the consumption of the commodities taxed. The use of traditional motor fuels in 2004 increased at a fair rate of 2.6 percent in 2004 regardless; in the previous year, a decline of 1.7 percent was registered.

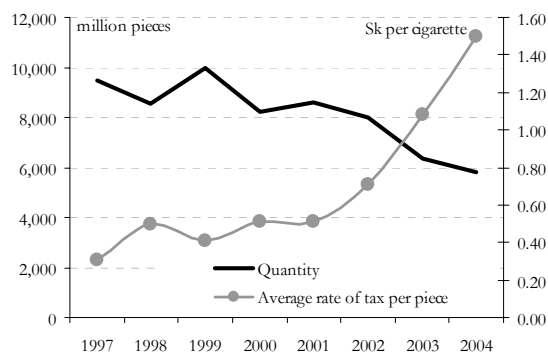
Although the growth of oil prices in international markets manifested itself in the growth of prices for motor fuels, the weakening exchange rate of the U.S. dollar prevented more pronounced price increases and subsequent reductions in consumption.

In the case of beer consumption, a more pronounced decline in consumption occurred (-10.2 percent) which was in part due to relatively the highest increase in rates (66.7 percent) of all excises. However, consumption declined also under the influence of other factors, especially colder weather during the summer season and also a possible change in consumer preferences. A negative campaign by breweries also played a role. After all, the growth of excises did not push up the final price of many brands of beer, but their consumption declined nonetheless, probably in part as a response to the negative statements made by breweries. The chart below indicates that beer consumption has been relatively stable in Slovakia for a long time and there have been no significant dips or jumps.



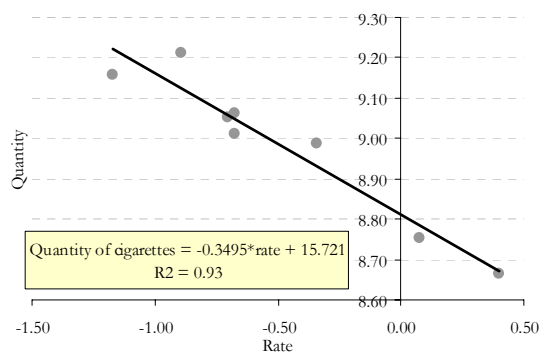
The consumption of tobacco products or, more precisely, legal consumption (based on tax returns) which consists, in particular, of cigarettes has been declining for several years now as a consequence of increasing rates. Increased rates depress the consumption of cigarettes in two ways. The first is the decline in consumption due to an increase in cigarette prices; possibly of a change in preferences since cigarette smoking happens to be to a large degree a question of culture trends in a society. However, empirical research largely confirms theoretical findings to the effect that the consumption of cigarettes is not too elastic in relation to the change in prices, that is, does not tend to decline markedly as prices rise. A decline in the consumption of legal cigarettes by reason of their illegal distribution in the territory of the Slovak Republic across the border with Ukraine is the second, more likely and at the same time more significant reason. The first chart shows the almost exactly opposite trends in the consumption of legal cigarettes and the growth of rates and, at the same time, prices of cigarettes. On the second chart, a close statistical dependence may be seen (a high determination coefficient) which is documented by a simple econometric equation with two parameters of the consumption and rates for cigarettes.

**Legal Consumption of Cigarettes and the Average Tax Rate in 1997 Through 2004**



Source: Financial Policy Institute

**Relationship of the Legal Consumption of Cigarettes and the Average Level of Tax Per Cigarette (ln)**



Source: Financial Policy Institute

A comparison with the situation with beer also indicates that an increase in the illegal consumption of cigarettes is at issue. While beer consumption has been stable despite the growth of prices, the consumption of cigarettes has been declining continuously and markedly. It is also true that illegal (untaxed) distribution of beer is almost impossible for practical reasons, which is not the case with cigarettes. It is also known that consumption of beer (alcohol in general) and cigarettes are complimentary in nature, hence the popular saying „he who drinks for the most part also smokes“. For the sake of objectivity, we should add that the receipts of this tax have been growing relatively fast in 2005 which indicates an improvement in the struggle against illegal imports.

The excise on wine and alcohol was not directly affected by the tax reform. In the case of the excise on wine, it was assumed that the decline in beer consumption resulting from the increase in rates in August 2003 would be partly offset by an increase in the consumption of wine for which the rates were not adjusted. However, a perceptible substitution effect did not materialize.

### 3.1.3. Other Taxes

The tax reform of property taxes taken in by the state budget (inheritance tax, gift tax, tax on the transfer and assignment of real estate) influenced public finance negligibly because the total tax collection of the three taxes mentioned even before the reform fluctuated around 1 percent of the total tax revenue of public finance.

In view of the cancellation of the inheritance and gift taxes, no revenue from these taxes was budgeted. The projection of the tax on the transfer and assignment of real estate was influenced by the expected supplemental assessments for the tax from past years. Unifying the rate at 3 percent was expected to have an approximately neutral effect on the revenues.

In 2004, the accrued payments of inheritance and gift taxes from previous years were actually taken in by the state budget, in addition to the tax on the transfer and assignment of real estate. The higher receipts of the tax on the transfer and assignment of real estate were due, in particular, to higher supplemental assessments of the tax for past years. The simplification of the system and a reduction in marginal rates could have also influenced the tax revenue favorably. Effective January 2005, the tax on the transfer and assignment of real

estate was abolished, thus definitively bringing the existence of such taxes to an end in Slovakia.

Property Taxes in 2004 (ESA 95, SKK million)				
	Budget	Actual	Difference	% of budget execution
	1	2	2-1	2/1 x100
Inheritance tax	0	42	42	X
Gift tax	0	80	80	X
Tax on the transfer and assignment of real estate	1,500	2,612	1,112	174.1
<b>Property taxes, total</b>	<b>1,500</b>	<b>2,735</b>	<b>1,235</b>	<b>182.3</b>

*Source: Ministry of Finance of the Slovak Republic*

### 3.2. Comparison of Actual Tax Revenues and the Non Reform Scenario

At first sight, evaluating differences between actual tax revenues and revenues under a non reform scenario appears problematic. After all, actual revenue is being compared to potential revenue on certain assumptions. The heart of the issue is in specifying such assumptions, which can be easily assailed because many of them must be selected arbitrarily. After all, exact legal assumptions which cannot be misinterpreted are lacking. Assumptions must be made about alternative economic developments and the behavior of agents in the market. This calls for inserting into equations elasticities which cannot be accurately identified, but their levels must be set. In the subsequent section of this chapter, we outline in a transparent manner all key assumptions on which the non reform scenario was based. The ministry cannot do more than that from the standpoint of trustworthiness and public scrutiny.

**The main assumption in this chapter is an estimate of the tax in the non reform scenario on the basis of actual developments in the economy.**

Therefore, no consideration is given to an alternative economic scenario in the event that the tax reform had not been carried out which would have changed the macroeconomic basis of the tax. This assumption is a simplification which, from the analytical point of view, eliminates the dynamic effect of the reform. On the other hand, it has many advantages. Those include greater transparency since the estimated difference in the tax revenues is caused solely by changes in the tax legislation (static approach). It is also virtually impossible to separate the influence of the tax reform on economic development from that of other structural reforms, especially where many of them were launched in 2004 and were substantive. Finally, the dynamic influence of structural reforms on economic development may be analyzed only from a long-term perspective; over a period of one year, it is rather an analytical exercise.

Another important assumption was to omit from the calculations various effects whose quantification would have involved considerable uncertainty and thus been easily misinterpreted. It was mentioned in the preceding section that it is not possible to estimate currently whether the tax revenue after the reform was influenced by the greater willingness of taxpayers to acknowledge the tax liability. Therefore, the data estimated for the non reform scenario did not have any reform “dividends” subtracted from them. In other words, **the tax revenues in the non reform scenario differ from the actual revenue only due to the influence of changes in the tax burden and the tax base.** Although, once again, a static approach is involved, the advantages are the same as for identical economic assumptions.



To calculate the impact of the tax reform, it is necessary to draw up scenarios for changes in individual taxes which would take into account the actual macroeconomic environment, with the legislation (in effect in 2003) remaining unchanged. A simulation will produce hypothetical revenue estimates which will be compared with the actual 2004 data. The deviations generated express the impact of the reform on the budget of public administration inasmuch as they make the position of public finance more favorable or less favorable.

As far as the method is concerned, structural models<sup>13</sup> were used to quantify taxes in the absence of the reform which the Ministry of Finance of the Slovak Republic routinely uses to project taxes for budget purposes. The structural models make it possible to simulate changes in the tax burden (changes in rates and deductions), and in some cases also changes in the tax base (deduction of losses for tax purposes).

**The conclusion is that, in the absence of the tax reform, total tax revenues would have been higher by approximately<sup>14</sup> 0.5 percent of the GDP.**

### 3.2.1. Income Tax

The tax reform was intended to reduce the tax burden on income, which it has accomplished. In the absence of the reform, the total income tax would have been SKK 22.2 billion higher. In relative terms, the tax burden declined the most in the case of the personal income tax. The assumptions on which the estimates of individual taxes in the absence of the reform are based are described in the text below.

The difference between the actual level and the revenue in the absence of the reform in the case of the personal income tax was caused, in particular, by the unification of tax rates which eliminated tax brackets and by changes in deductions. However, the deductions in the non reform scenario were not set at the nominal values of 2004 but were rather indexed by the projected growth of wages when the budget for 2004 was compiled.

Income Tax in 2004 (ESA95, SKK million)				
	Actual	NON reform scenario	Difference	Difference (in %)
	1	2	2-1	2-1
Personal income tax	35,122	46,384	11,262	32.1
- from dependent activity	30,404*	40,153	9,749	32.1
- from self-employment	4,718	6,231	1,513	32.1
Corporate income tax	33,164*	40,939	7,775	23.4
Withholding tax	5,675	8,405	2,730	48.1
<b>Total income tax</b>	<b>73,522</b>	<b>95,728</b>	<b>22,206</b>	<b>30.2</b>

\*less funds donated for socially beneficial uses

Source: Ministry of Finance of the Slovak Republic

<sup>13</sup> These models were published on the web page of the Financial Policy Institute in the form of economic analyses ([www.finance.gov.sk/ifp](http://www.finance.gov.sk/ifp)). To date, the following analyses were published: „Projecting the VAT in the Slovak Republic“, „Projecting the Corporate Income Tax in the Slovak Republic“, and „Projecting the Personal Income Tax“. The FPI is planning to publish gradually similar analyses for all other taxes.

<sup>14</sup> The word „approximately“ accentuates the fact that at issue is an approximative calculation based on certain assumptions.

In the past, deductions did not change for long periods of time, thus bringing about an increase in the tax burden. This was caused by a drift of taxpayers into higher income brackets as wages increased while deductions remained unchanged<sup>15</sup>. A growing tax burden means a change in the tax policy of the government, although legislation does not change. The non reform scenario may be compiled in two ways. An unchanged tax policy may be conceived of as a neutral policy, i.e. a policy which does not change the tax burden on the economy. In the case of the personal income tax, this means raising deductions at a rate equal to wages. The other way of interpreting the non reform scenario is to accept the gradual increase in the tax burden regardless (or, as the case may be, due to) the absence of modifications to the legislation as a form of government policy. We have opted for the first approach in the present document because over many years in the past the deductions were indeed increased on one occasion which may be interpreted as an approximation of the policy of not increasing the tax burden.

Several assumptions were used to estimate the **corporate income tax** in the absence of the reform; the assumptions made it possible to quantify the influence of many legislative changes by using the structure of aggregate tax returns.

The assumption that the volume of reported profits would not be different from that actually reported for 2004 was the point of departure for the non reform scenario. While revenue and profit/loss are in essence macroeconomic aggregates, this assumption is in line with the decision to take into account actual economic developments when quantifying taxes in the absence of the reform.

The availability and relative stability of the time series of tax returns made it possible to quantify two legislative changes. The reform abolished the opportunity to subtract the value of gifts of up to 2 percent of the tax base. In previous years, an approximately stable amount of deductions for gifts was seen in tax returns. Therefore, a simple average of these amounts was applied in the non reform scenario. The resulting conclusion is that, had the deduction of gifts from the tax base not been abolished, the resulting tax would have been SKK 0.1 billion lower.

The influence of introducing more liberal rules for subtracting losses from the tax base may be quantified in a similar manner. Once again, in previous years a relatively stable level of loss deductions was noted; however, 2004 saw an almost twofold increase which may be attributed to the reform. The conclusion is that, had old rules for loss deduction remained in effect, the tax revenue would have been SKK 1.2 billion greater.

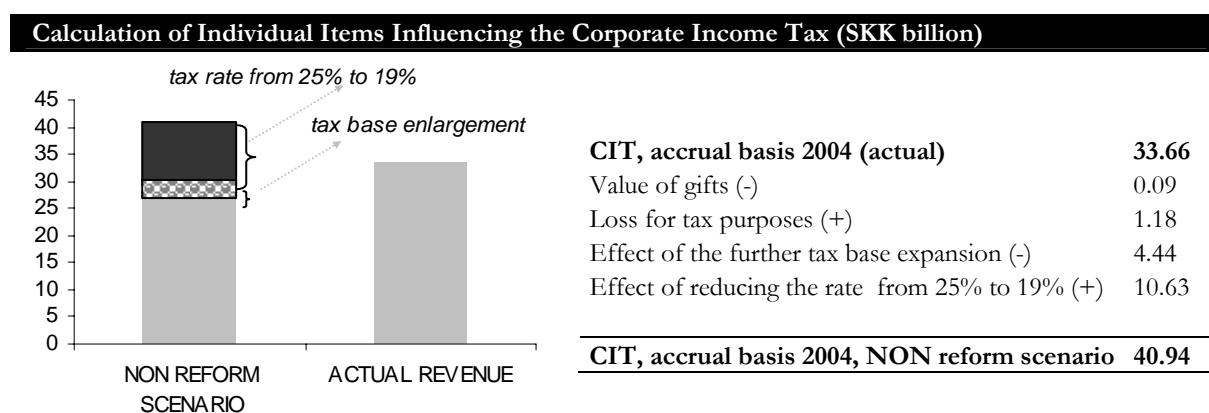
The effect of the further expansion of the tax or, more precisely, the effect of residual factors, was also calculated by this method, but with a far greater uncertainty than in the two previous cases. The uncertainty is due to the great volatility of the ratio of the tax base to profits in previous years. A high rate of fluctuations combined with the absence of a trend component of such a ratio made it impossible to use an instrument different from, yet again, a simple average. Thus, the arbitrary design of an assumption markedly affects the result, which should be kept in mind when interpreting it. The result is that, had the expansion of

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<sup>15</sup> On the other hand, the trend was the opposite in the case of social and health insurance contributions; the value of bases for assessment remained unchanged for a long time, thus reducing the total burden of contributions.

the tax base not occurred, the tax revenue in the absence of the reform would have been SKK 4.4 billion smaller than it actually was.

Estimating the effect of the change in rates is the simplest and at the same times the least controversial. Ignoring considerations associated with the possible increase in the tax base in conjunction with a lower rate, which was the case, the estimate of this effect amounts to the difference derived by mechanically multiplying the old (25 percent) and new (19 percent) tax rates by the same tax base. The influence of the previously existing two reduced rates (15 and 18 percent) was not taken into account because in the past their significance for the corporate income tax was negligible. Had the reform not been implemented and had the old tax rates remained in force, the total tax revenue would have been SKK10.6 billion greater. The following table demonstrates the link between the actual tax receipt in 2004 (after the reform) and the estimated tax receipt in the absence of the reform, with the contribution of individual factors discernible.



*Source: Ministry of Finance of the Slovak Republic*

It is necessary to stress yet again that the favorable effect of the further expansion of the tax base after the reform in the amount of SKK 4.4 billion is the result of a combination of various factors influencing its scope in opposite directions; moreover, some factors may produce long-term effects and others a one-time effect. It is also important to appreciate that what is most favorable for the enterprise sector in the short term may have the opposite effect on public finance, especially in the short term. Greater opportunities for including expenditures in costs automatically reduce the tax base, and thus the tax itself. In particular, certain factors, such as the tax amortization of assets, cause a time shift since higher tax amortization allowances in the first years of amortization automatically mean lower allowances in later years. On the contrary, more liberal rules for writing off losses will be permanent. Therefore, such factors will influence the tax revenue unfavorably because, in effect, they reduce the tax base. Naturally, in the long term all measures which are favorable for business are expected to have a favorable effect on public finance, too, because they are associated with faster growth of the economy and thus profits.

On the other hand, the reform resulted in many changes which expanded the tax base, with a favorable impact on the tax revenue in the short and long term. At issue is an entire group of abolished exemptions and concessions mentioned in the chapter on legislation, as well as the abolition of deductions for gifts. These changes will exert permanent influence, although the scope of their influence is subject to question, with the exception of the deduction of gifts. The inclusion of 2003 dividends in the 2004 tax base had a one-time favorable effect which will not recur in the future due to the abolition of the taxation of dividends. Changes in the

area of reserves have likely had a pronounced, although only temporary favorable effect since new rules have forced economic agents to begin including the reserves accumulated without justification in previous periods in the tax base. Finally, neither the growing number of taxpayers nor the possible contribution of the greater willingness of the economic agents to acknowledge the tax should be ignored, especially given that the combined rate of tax on capital yields has declined markedly.

Therefore, the favorable estimate of SKK 4.4 billion notwithstanding, it is impossible to say unequivocally whether, from the standpoint of the tax revenue, an effective broadening or narrowing of the tax base has occurred. This, however, is not overly significant for assessing the tax reform. The important conclusion is that non-systemic concessions and distortions were eliminated, more transparent rules for calculating the tax base were introduced, and the incentives and opportunities to circumvent tax liabilities were also diminished.

**On the whole, we can say that in its first year the tax reform yielded SKK 3.4 billion by broadening the base of the corporate income tax (the total of the first three factors) and „took away“ SKK 10.6 billion through a lower rate.**

Had the tax reform not been implemented, the **withholding tax** would have been SKK 2.7 billion greater. It was possible to break down the revenue into four components by using simplifying assumptions; the components also reflect the influence of the reform.

Estimate of the Withholding Tax (SKK million)			
	2003 actual	2004 actual	2004 NON reform scenario
<b>Total</b>	9,143	5,675	8,405
on interest on deposits, winnings, yield of stock certificates, bonds, etc.	6,670	5,675	4,480
on state dividends	614	-	1,855
on private dividends	463	-	546
at the special rate	1,396	-	1,524

*Source: Ministry of Finance of the Slovak Republic*

The actual revenue of the income tax withheld at source in 2004, SKK 5.7 billion, is drawn from the base which is still subject to the withholding tax after the reform. At issue is, in particular, interest on deposits, yields of stock certificates, winnings and lotteries, etc. It is possible to assume with great certainty that, unlike in previous years, the „bulk“ of the withholding tax in 2004 was drawn from only interest yields on deposits and securities. Therefore, it will suffice to apply the effective rate of 15 percent (which prevailed in the past for this type of base) to this component in the non reform scenario.

An estimate of the potential revenue from taxing dividends which would have been taken in by the budget by reason of state ownership is likewise straightforward. In 2004, the state received dividend income in the amount of SKK 12.4 billion as non-tax revenue of the budget by reason of the shares of joint stock companies owned. After taxation at the 15-percent rate, this means an income of SKK 1.9 billion, which is the next part of the withholding tax in the non reform scenario. An estimate of the tax on dividends by virtue of the private ownership of shares (SKK 0.5 billion) was calculated as a residual using the structure of the withholding tax in 2003 and 2004 and the assumption that the rate of growth of private dividends in 2004 would have been in line with the rate of growth of the corporate income tax in the absence of the reform. The part of the tax collected at a special rate was the last component of the income tax withheld at source for which historic data were available. This part was

estimated for the non reform scenario on the basis of the trend in previous years. After all, this type of base for the withholding tax did not disappear after the reform, but it was incorporated completely into the base of the personal income tax, thus broadening the base.

### 3.2.2. Indirect taxes

An estimate of the VAT in the absence of the reform is influenced only by the use of the old tax rates of 20 percent and 14 percent. The VAT base was virtually unaffected by the reform; a change in the threshold for compulsory payer registration was an issue associated with the EU accession. The same applies to the shortfall which was directly associated with the EU accession. Had the VAT rates not been unified the VAT would have been SKK 11.2 billion lower than it actually was.

Indirect Taxes in 2004 (ESA95, SKK million)				
	Actual	NON reform scenario	Difference	Difference, percent
	1	2	2-1	2-1
VAT	104,859	93,615	-11,244	-10.7
Excises	44,597	40,018	-4,579	-10.3
on mineral oil	29,079	26,907	-2,172	-7.5
on alcohol	4,145	4,145	-	-
on beer	2,113	1,488	-625	-29.6
on wine	137	128	-9	-6.6
on tobacco products	9,122	7,349	-1,773	-19.4

\*the breakdown of individual types of excises is illustrative; the data are not official

Source: Ministry of Finance of the Slovak Republic

Compiling a non reform scenario for **excises** means primarily assuming away the increase in rates in August 2003. Nonetheless, in 2004 the rates of the excise on mineral oil and the excise on tobacco products had to be adjusted to the level of the minimal rates required by the European Union no later than the date of accession to the EU of the Slovak Republic. Therefore, in the case of these goods it was necessary to estimate changes in consumption in 2003 at the original rates and subsequently estimate consumption in 2004 in the event that the increase in rates had occurred in May. The table shows in which manner the rates would have had to be adjusted in 2004 had the government decided to increase them only to the minimal level required by the European Union.

<b>Levels of Excises Rates in 2003 and 2004 in the Absence of the Reform</b>					
	Unit	Rates in 2003 (w/o the reform)	Rates in 2004 (w/o the reform)	Change (in SKK)	Change, (in %)
		1	2	2 - 1	2-1
<b>Excise on mineral oil</b>					
- motor gasoline, lead-free	SKK/1,000 l	12,400	14,803	2,403	19.4
- motor gasoline, leaded	SKK/1,000 l	14,500	17,360	2,860	19.7
- middle distillate	SKK/1,000 l	11,800	12,453	653	5.5
- gas oil (naphtha)	SKK/1,000 l	11,800	12,453	653	5.5
- gas oil (reduced rate)	SKK/1,000 l	4,100	4,100	-	-
- fuel oil	SKK/1,000 kg	600	619	19	3.2
- liquefied hydrocarbon gas (motor fuel)	SKK/1,000 kg	4,300	5,154	854	19.9
- liquefied hydrocarbon gas (fuel)	SKK/1,000 kg	0	0	-	-
<b>Excise on beer</b>					
- base rate	SKK/Plato/hl	30	30	-	-
- reduced rate	SKK/Plato/hl	23	23	-	-
<b>Excise on tobacco products*</b>					
- cigarettes and cigars	SKK/piece	0.95	1.04	0.09	9.5
- tobacco for rolling own cigarettes	SKK/kg	1,000	1,000	-	-
- other tobacco	SKK/kg	880	880	-	-

*Source: Ministry of Finance of the Slovak Republic*

A non reform scenario in the case of the excise on mineral oil assumes the growth of motor fuel consumption over all of 2004 at the level of the year-on-year growth in the first six months of 2003. While the rates increased effective August 1, 2003 the month of July was already affected by stocking up the goods. The rates of tax in effect on January 1, 2003, that is, before the increase in August, were used to calculate the tax revenue in this case. An estimate of the increment of consumption in 2004 proceeded from an analysis of historical data on the impact of rate increases on prices and consumption. According to the above, the aforementioned growth of rates on May 1, 2004 to the level required by the EU would have meant an increase in consumption in 2004 at the level of 2.3 percent.

Estimating the use of mineral oil in the absence of the reform is highly complex in view of the fact that the use of mineral oil in Slovakia, particularly in recent years, does not depend to a significant degree on the prices of motor fuels. This means that consumption may be affected by many factors whose effect is difficult to separate quantitatively from the influence of prices. To date, not a single commonly used econometric equation describing the demand for mineral oil<sup>16</sup> has revealed a satisfactory statistical dependence within the framework of analyses by the Ministry of Finance of the Slovak Republic. The natural conclusion is that, to a certain degree, structural changes may be involved, such as the culture of increasingly favoring private over public transportation, giving a preference to road transport over railroads, or the increasing significance of Slovakia as a transit country after EU accession.

Other excises were estimated in a similar manner. While the excise on wine was not directly affected by the tax reform, a moderate substitution effect was projected between beer

<sup>16</sup> Demand as a function of prices for motor fuels, real disposable income of households, prices for public transportation as a substitute for private transportation, the number of registered vehicles, etc.

consumption and wine consumption. In the case of the excise on beer not increasing, such an effect would not have manifested itself and the revenue would have been approximately SKK 9 million smaller.

### 3.2.3. Other Taxes

The non-implementation of the tax reform would have influenced the tax collection of **property taxes** minimally. In 2004, the gift and inheritance taxes were abolished; to be sure, their revenue was negligible from the point of view of public finance. Given the abolition of the taxes, theoretically their revenue in 2004 should have been zero; however, in reality payments of the taxes for the previous years contributed to the revenue. For this reason, the difference between the revenue of the taxes in the absence of the reform and the actual revenue is not exactly equal to the estimate of such taxes in the absence of the reform.

In addition, the rate of the tax on the transfer and assignment of real estate was unified. The original rates ranging between 0.5 percent and 6 percent of the tax base were unified at 3 percent. This gives us the right to assume that the reform did not change the effective tax burden. Therefore, the actual revenue also equals the revenue in the absence of the reform. To be sure, as the reform was being designed the elimination of this tax was also considered, which actually occurred effective January 2005. This document concerns the evaluation of the reform in 2004; in principle, however, the reform reduced the total tax burden by [eliminating] this tax, too. All other taxes were not affected by the reform.

<b>Property Taxes in 2004 (ESA95, SKK million)</b>				
	<b>Actual</b>	<b>NON reform scenario</b>	<b>Difference</b>	<b>Difference (in %)</b>
	1	2	2-1	2-1
Inheritance tax	42	100	58	138.1
Gift tax	80	170	90	112.5
Tax on the transfer and assignment of real estate	2,612	2,612	-	-
<b>Property taxes, total</b>	<b>2,734</b>	<b>2,882</b>	<b>148</b>	<b>5.4</b>

*Source: Ministry of Finance of the Slovak Republic*

## 4 Influence of the Reform on the Macroeconomic Environment

Estimates of the influence of structural reforms on the macroeconomic environment always entail considerable uncertainty. Such analyses are usually done after a period of several years, when an eventual turning point in the growth or structure of the economy may already be observed. Moreover, in Slovakia this kind of analysis becomes considerably more complex because many profound structural reforms affecting, in particular, the labor market were concentrated in a relatively brief period of 2003 and 2004. Such reforms were complementary in nature and had a synergic effect on the economy; therefore, it is virtually impossible to estimate the influence of just one reform<sup>17</sup>.

The tax reform exemplifies the type of reform affecting the supply side of the economy which may be studied only in the longer term. Many years later, it will become obvious

<sup>17</sup> The analysis is also made more complex by the effect of the Slovak Republic joining the EU in May 2004.

whether greater incentives to work and engage in business have actually lead to the growth of potential product. The volume and structure of the inflow of direct foreign investment will be important in this regard.

However, it is possible to estimate the influence of the reform on certain economic indicators with varying degrees of uncertainty as early as 2004, to which the present chapter is devoted. The topical section of the document is also the proper place to detail the macroeconomic context in which the reform was implemented. After all, the context is important from the standpoint of how favorable the conditions were in terms of political and societal acceptance of structural reforms as such. It is equally interesting to look at the economic indicators which were projected when the 2004 budget was compiled. Such indicators show what the scope of the reforms was generally expected to be. A comparison with actual changes in the economy in 2004 will say a lot about how acceptable and socially sustainable the reforms were.

#### 4.1. Projection vs. Actual Performance

The macroeconomic framework for compiling the 2004 budget assumed the continuation of favorable developments; however, reality exceeded expectations. Almost all important indicators developed substantially better than was expected when the budget was compiled.

<b>Macroeconomic Framework of the 2004 Budget vs. Actual 2004 Data</b>			
	<b>Unit</b>	<b>Budget</b>	<b>Actual</b>
Gross Domestic Product, current prices	SKK billion	1,293.2	1,325.5
Gross Domestic Product, comparable prices, rate of growth	percent	4.1	5.5
Inflation, yearly average	percent	8.1	7.5
Real consumption of households, rate of growth	percent	2.0	3.5
Registered unemployment, average for the year	percent	14.9	14.3
Employment according to statistical reports, rate of growth	percent	1.0	0.3
Deficit of the public administration budget	% of GDP	4.0	3.3
Average real wage in the national economy, rate of growth	percent	-0.6	2.5

*Source: Ministry of Finance of the Slovak Republic, Statistical Office of the Slovak Republic*

In 2004, Slovakia registered the most dynamic growth of all countries in the Central European region which far exceeded the average for the EU countries, despite a stagnant global environment. The economy grew by 5.5 percent which was an unexpected 1.4 percent higher than envisaged by the budget. The accelerating economic growth did not influence inflation unfavorably; on the contrary, inflation was below that envisaged in the budget, which points to healthy changes in the economy. A pick-up in consumption of households continued, despite the projected unfavorable influence of the reform and price deregulation on the real disposable income of the population. Such consumption clearly benefited from a far better growth of real wages and old-age pensions than projected in the budget whereby, instead of a decline in real terms, they registered growth by 2.5 percent and 0.4 percent, respectively. The only area to perform worse than assumed in the budget was employment. It did not grow at the rate projected which proves yet again that high productivity is the main driving force of economic growth in Slovakia. However, registered unemployment declined, especially as a consequence of stricter conditions for the registration of unemployed which were aimed at eliminating abuses of the system.



From the point of view of political economy, it is hard to deny that the tax and other reforms were implemented in Slovakia under ideal political and economic conditions. On the political side, the launch of the reforms was facilitated by the formation of a coalition government which had the political mandate to carry out fundamental reforms. Although it was clear that unpopular measures would be at issue, it is also possible to say that a social demand for reforms emerged to a certain degree, especially in the circles of college-educated population. Healthy economic growth which moderated certain social aspects of the reform considerably was not the least important factor contributing to the positive acceptance of the reforms. Inasmuch as Slovakia was an inspiration to other countries in some areas, political foresight and proper timing of the reforms should be noted, along with the flat tax. Moreover, combining certain popular reforms with measures which were perceived unfavorably was the key.

## 4.2. Economic Growth

The tax reform was designed with a view to increasing the potential product of the economy which is a supply-side issue. The analysis of the reform's influence on the macroeconomic environment consists of two parts. First, the short term, the year 2004, is analyzed. This view is based on the assumption that in 2004 the economy was affected by the reform solely on the demand side. After all, within a period of one year changes may only be expected in the expenditure components of the GDP, such as consumption and investment. Deviations from the baseline scenario are caused, in principle, by the shift of the tax burden from direct to indirect taxes. At the same time, the deviations are relatively small which is due to the approximately fiscally neutral nature of the reform. The assumption was used to the effect that wages will not adjust to the growth of inflation due to the increase in indirect taxes.

The second part analyzes the long term through a supply shock to the economy (inflow of direct foreign investment) as a consequence of the reform. A macroeconomic model routinely used for projections by the Ministry of Finance of the Slovak Republic was used for the analysis.

<b>Short-Term Impact of the Tax Reform on the Slovak Economy</b> (constant prices and percentage deviations from the base scenario, unless indicated otherwise)					
	2004Q1	2004Q2	2004Q3	2004Q4	2004
GDP	-0.1	0.0	0.0	0.0	<b>0.0</b>
Consumption of households	-0.9	-0.8	-0.8	-0.9	<b>-0.8</b>
Gross fixed capital formation	0.4	0.3	0.3	0.2	<b>0.3</b>
Imports of goods and services	-0.4	-0.4	-0.4	-0.4	<b>-0.4</b>
Employment	0.0	0.0	0.0	0.0	<b>0.0</b>
Rate of unemployment (percent)	0.0	0.0	0.1	0.0	<b>0.0</b>
Deflator of consumption of households	2.1	2.1	2.1	2.1	<b>2.1</b>
Average wage	0.0	0.0	0.0	0.0	<b>0.0</b>
Disposable personal income (current prices)	1.4	1.4	1.5	1.4	<b>1.4</b>
Enterprise profits (after tax, current prices)	0.6	0.8	0.8	0.8	<b>0.8</b>

*Source: Financial Policy Institute*

It is not surprising that the resulting influence of the reform on economic growth is negligible, as it does not even reach 0.1 percent of the GDP. This is due to the high elasticity of import in the model and the fact that the reform was designed to be gradually fiscally neutral.

The disposable income of households in nominal terms increased due to a reduction in the tax burden on income and the growth of wages in the economy. However, income in real terms was reduced considerably due to the growth of indirect taxes, and consumption of households in constant prices thus declined compared to the baseline scenario.

Pre-tax profits could have benefited modestly from depressed unit labor costs. The projected after-tax profits increased still more by reason of the reduced rate of the corporate income tax; this contributed to the growth of investment at the level of 0.3 percent compared to the baseline scenario.

Weaker aggregate demand was reflected in declining imports; for this reason, there was no influence on economic growth. To be sure, it is true that the ultimate impact on economic growth depends to a considerable degree on the response of imports to the change in aggregate demand, which is a source of great uncertainty. Ultimately, a minor demand shock was too small to affect employment perceptibly.

After analyzing short-term effects, we can look into **simulations** of long-term development (indicative calculations on the basis of an impulse in the form of an inflow of SKK 80 billion in direct foreign investment) in light of the concept of potential product. Model simulations were supplemented by certain expert estimates, as well as assumptions on the temporal and material progress of the subsequent implementation of new products and qualitative and structural changes in the economy. Unless indicated otherwise, the results of simulations provided amount to an estimate of the percentage of real change in a macroeconomic indicator under the influence of the tax reform compared to the baseline scenario (i.e., without the influence of the tax reform).

<b>SIMULATION OF THE INFLUENCE OF A CHANGE IN EFFECTIVE TAX RATES AND DFI INFLOW ON REAL SECTOR DEVELOPMENT</b>						
A relative change in the actual value of the variable compared to the baseline scenario; percentage change (unless indicated otherwise)						
Year	Consumption of households (percent)	Gross investment (percent)	GDP (percent)	Number of the unemployed (thousand)	Price level (CPI)	Current account (% of GDP)
2004	1.3	0.6	0.2	0.0	0.8	-0.5
2005	1.6	1.4	0.5	-0.2	1.1	-0.6
2006	1.6	2.2	0.5	-0.2	1.6	-0.7
2007	1.6	3.8	0.5	-0.2	2.0	-0.9
2008	1.6	3.4	0.4	-0.2	2.0	-0.9

*Source: Financial Policy Institute*

The reform attracts foreign investors and valuable know-how. Based on the experience of other countries, it is possible to state that direct foreign investment influences the growth of the potential product of a country favorably. Its influence is manifested primarily through an increment of capital and total factor productivity (a combination of the productivity of labor and capital). Based on the simulation, a higher inflow of direct foreign investment in 2005 in the amount of SKK 80 billion may be expected to increase the potential product by

0.4 percentage points and total productivity by 1 percentage point. This means that the tax reform supports indirectly (through the intermediation of direct foreign investment) qualitative changes in the economy, the growth of competitiveness and potential product; this amounts to the only way for achieving a high and at the same time stable rate of economic growth.

Since economic growth so generated should be the result of increasing the potential of the economy, there should be no risk of additional demand pressures emerging to which the central bank would need to respond by increasing interest rates. Ultimately, the analysis indicates that the tax reform implemented has been a favorable influence on accelerating the overall convergence of the economy of the Slovak Republic (in nominal, real, and structural terms) to the level of the developed EU countries, and then at a sustainable level.

The conclusion of this chapter is that, despite its relatively small influence in 2004, the tax reform may result, through greater investment, in an increase of the potential product by about 0.5 percent, given an impulse in the form of an increment of direct foreign investment by SKK 80 billion.

For the sake of accurate interpretation of individual results, it should be stressed yet again that mutually distinct methodological approaches had to be used for analyzing the tax reform from the standpoint of fiscal effects and macroeconomic impact. The impact on fiscal parameters also incorporates indirect influences acting in parallel (for example, inflows of direct foreign investment, a reform in the social area) while in the course of macroeconomic simulations it was technically possible to simulate solely the tax effect (short-term effect in 2004).

### **4.3. Inflation**

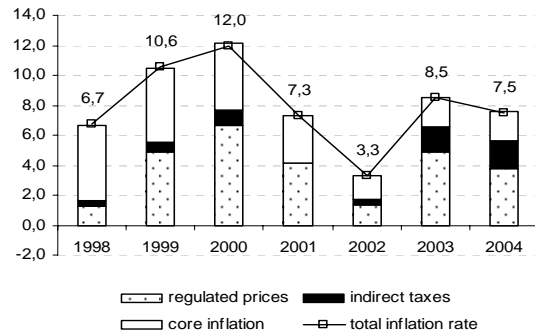
The influence of the tax reform on consumer price inflation may be demonstrated directly by breaking inflation down into the contributions of regulated price adjustments, indirect tax adjustments, and core inflation. Such a straightforward approach indicates that the growth of indirect taxes contributed 1.9 percent to the growth of the price level in 2004. Given that, unlike the VAT, the excises were raised as early as the middle of 2003, a base effect occurred in a year-on-year comparison. According to an estimate of the Ministry of Finance of the Slovak Republic, a contribution of 2 percent to the growth of inflation may be ascribed to the increase of indirect taxes due to the tax reform<sup>18</sup>. This is a pessimistic estimate because in many cases prices did not increase in line with the increase in indirect taxes due to great competition in retail trade. Therefore, some of the increase in indirect taxes was absorbed by the profit margin of companies (possibly by wages) and did not manifest itself in the growth of prices.

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<sup>18</sup> The impact of regulated prices on the price level was far greater than that of the tax reform. Moreover, the CPI is an index designed with fixed weights; for this reason, it does not incorporate the substitution effect and thus intrinsically overestimates the impact of the reform on prices.

## Influence of Indirect Taxes on Consumer Prices

	Rate of inflation [percent]	Proportion of the growth of consumer prices [percent]		
		regulated prices	indirect taxes	core inflation
1998	6.7	1.3	0.4	5.0
1999	10.6	4.9	0.7	4.9
2000	12.0	6.6	1.0	4.5
2001	7.3	4.2	0.0	3.2
2002	3.3	1.4	0.4	1.6
2003	8.5	4.9	1.7	2.0
2004	7.5	3.7	1.9	1.9



Source: Statistical Office of the Slovak Republic

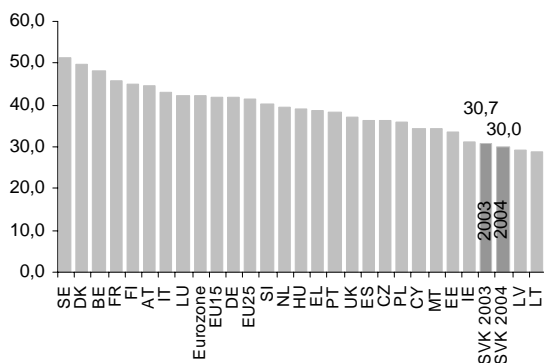
## 5 Tax Burden

The issue of the tax burden is frequently discussed not only by the public but also in the context of professional analyses. The tax reform brought about a considerable modification of the tax structure, resulting not only in a fiscal impact on the budget but, first of all, in an impact on taxpayers. This chapter shows the level of the tax burden from the macroeconomic standpoint in particular (through national account aggregates). It analyzes especially the tax burden on income from labor and capital income; also a review is presented of the impact of the tax reform on common citizens and the key risk groups. In summation, we devote relatively extensive space to the issue of the progressivity of the tax which was much discussed in Slovakia, but not so much supported by analyses and facts.

### 5.1. Total Tax Burden

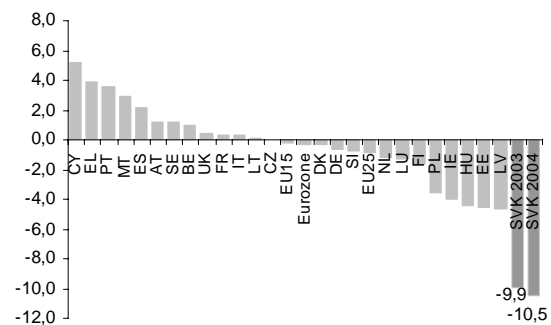
Expressing the volume of the taxes and social contributions as a share of the gross domestic product is one of the ways of measuring the overall tax burden. This is a very simple aggregate indicator which, its drawbacks notwithstanding, is frequently used for international comparisons. Depending on the manner of expressing the tax burden, tax quota I and tax quota II are distinguished. In the first instance, at issue is an indicator showing the tax as a proportion of the GDP; in the second instance, social contributions are also added to the taxes.

**Tax Burden in the EU 25 Countries in 2003 (percent of the GDP; ESA 95) – tax quota II**



Source: Eurostat, Ministry of Finance of the Slovak Republic

**Change in the Tax Burden Between 1995 and 2003 (percent of the GDP; ESA 95) – tax quota II**



Source: Eurostat, Ministry of Finance of the Slovak Republic

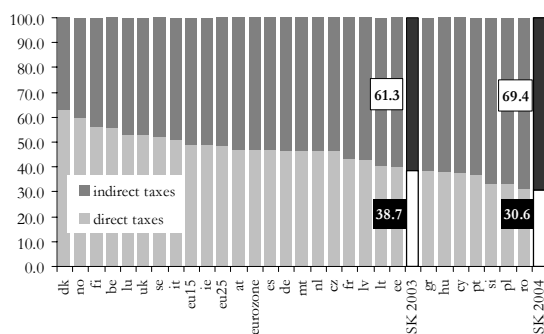
Among the 25 European Union countries, Slovakia registered the third lowest tax burden at 30.7 percent of the GDP in 2003; only Lithuania and Latvia had lower tax burdens. The Slovak Republic also reduced the tax burden the most; between 1995 and 2003, it declined by 9.9 percent of the GDP.

The reasons for this phenomenon can be found among both the taxes and social contributions. Tax cuts as such are one of the most important factors. Progressive taxation is important in this regard because the personal income tax is the only progressive tax in the Slovak tax system, while at the same time being relatively insignificant from the point of view of total tax revenues (the personal income tax as a share of total taxes in Slovakia is the lowest in OECD member countries). On the contrary, in the case of social contributions the maximum social contributions bases were set as fixed amounts and did not track the growth of the wage base, making this tax regressive. Another factor is found in the structure of GDP growth; it was driven primarily by tax-exempt exports and, to a lesser degree, by consumption. The decline of the tax quota was also caused by taxes whose rates are not set on a relative base (as percentages) but rather on an absolute base, whereby the quantity rather than the price of a product is taxed. In particular, consumption and property taxes are the case in point. Besides, the import surcharge, customs duties, and certain taxes on specific services were abolished within the framework of liberalizing foreign trade and in conjunction with the process of the Slovak Republic joining the EU.

A pronounced decline of the tax quota is disadvantageous from the point of view of public finance. It indicates a lack of elasticity in the tax system with regard to the growth of the Slovak economy. High rates of economic growth do not translate into higher tax revenues which, given higher public expenditures, worsens the overall fiscal position. Therefore, it is desirable for public finance to maintain a more or less stable tax quota, except for the cases when changes in it result from changes in legislation.

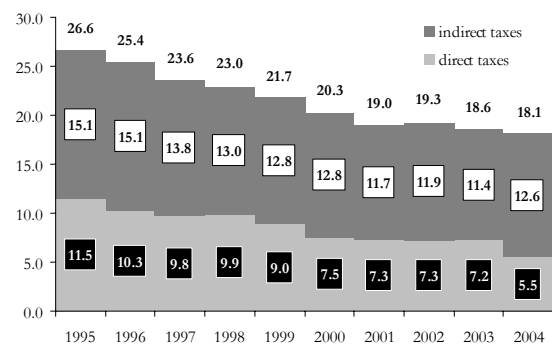
Changes in tax quota I are important from the point of view of the tax reform. Between 1995 and 2004, the quota declined by 8.6 percent, from 26.6 percent of the GDP to the level of 18.1 percent of the GDP. Compared to 2003, it declined by 0.5 percentage points<sup>19</sup>, with the structure of the quota changing in favor of indirect taxes. In 2004, indirect taxes accounted for as much as 69.4 percent of the taxes collected and direct taxes for only 30.6 percent. Among the European Union countries, Slovakia is the one with the lowest direct taxes as a share of tax revenues.

**Direct and Indirect Taxes as a Share of All Taxes in the EU 25 Countries in 2003**  
(percent; ESA 95)



Source: Eurostat, Ministry of Finance of the Slovak Republic

**Movement of Tax Quota I in the Slovak Republic Between 1995 and 2004**  
(percent of the GDP; ESA 95)



Source: Eurostat, Ministry of Finance of the Slovak Republic

<sup>19</sup> Differences from the previous tables are due to definitional differences between tax quota I and total tax revenues. For example, Eurostat also includes certain non-tax revenues in the quota.

## 5.2. Tax Burden on Labor

From the point of view of measuring the tax burden, indicators of the burden on labor and capital have one advantage compared to the total tax burden. More precisely, these indicators carry a different message and should be used correctly for analyses. The total tax burden (the tax revenues over the GDP) mainly indicates the amount of resources available in the economy for redistribution through public finance. For various reasons, a low ratio does not necessarily indicate a low tax burden, however. The category of GDP is based to a considerable degree on various estimates or inclusion of imputed product, which can differ from country to country due to methodological differences, differing degrees of accuracy, etc. A low ratio of taxes to the GDP may also be the consequence of a high incidence of tax fraud in the country, or a relatively large gray economy sector. This certainly explains, to a degree, lower ratios in less mature economies, for example, but it is questionable to which degree this explains the situation in Slovakia. Finally, in the short term, the ratio may go up or down by reason of differing structures of economic growth and cyclical fluctuations rather than as a result of a change in the tax burden.

In this segment, we will look at four types of indicators which will reveal more to us about the tax burden on labor. The tax wedge which is very broad and expresses the difference between the net wage and the total labor expenditures is the first indicator. The second and third indicators take a narrower view of the personal income tax. Effective average tax rates reflect the shares of taxes and gross wages whereas marginal tax rates reflect the taxation of the additional koruna earned. A comprehensive indicator of the macroeconomic burden on labor is the last category; it synthesizes direct taxes, social contributions, and also indirect taxes which ultimately also generate a burden on labor.

### 5.2.1. The Tax Wedge

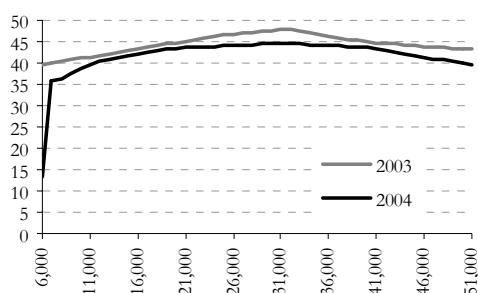
Let us look first at the percentage of the total labor outlays which the employee does not “take home”. This is shown by the tax wedge indicator which is derived as the difference between total outlays for an employee made by the employer and the net after-tax income received by the employee. This indicator may be followed for various types of employees, depending on the level of income, number of children, etc. According to official OECD data (the „Taxing Wages“ publication), last year saw a reduction of this indicator in Slovakia in most cases. The cases differ as to the level of income or the family situation (number of children, non-working spouse). The following charts show the cases of a single taxpayer and a taxpayer with a non-working spouse and two children<sup>20</sup>. The charts suggest that the tax burden declined markedly for families with lower incomes.

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<sup>20</sup> At issue is the „net“ tax wedge derived as follows:  $(\text{tax} + \text{social contributions from the employee} + \text{social contributions from the employer}) / (\text{gross wage} + \text{social contributions from the employer})$ , percent.

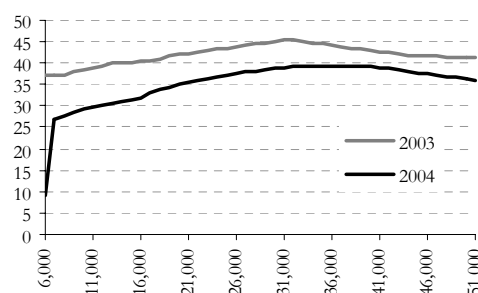
The OECD methodology includes transfers from the state in the numerator; in this instance, the „effective“ tax wedge is at issue.

### Tax Wedge of a Single Person (in %)



Source: Ministry of Finance of the Slovak Republic

### Tax Wedge of a Taxpayer With a Non-working Spouse and Two Children (in %)



Source: Ministry of Finance of the Slovak Republic

It is also interesting to see an international comparison which will offer more information on the relative standing of Slovakia within the OECD. According to OECD data, the standing of the Slovak Republic compared to V4 countries is good. Compared to other countries, the Slovak Republic is in a good position (lower tax burden) primarily with regard to high-income employees and employees who have a non-working wife (or husband) in view of increased deductions. The circled numbers in the table indicate a problem primarily for low-income families which is suboptimal, especially in the case of Slovakia; for this reason, this problem will be discussed further.

### Taxation of Wages in 2004 (indicators are shown as percentages)

	S (67%)	S (100%)	S (167%)	S-2 (67%)	C-2 (100%,0%)	C-2 (100%,33%)	C-2 (100%,67%)	C (100%,33%)
<b>Tax wedge</b>								
OECD average	32.5	36.5	41.4	16.8	26.6	28.7	31.1	33.5
Slovakia	38.8	42.0	44.5	25.4	27.2	29.4	35.3	36.1
<b>Marginal wedge</b>								
OECD average	42.3	44.8	50.1	44.7	45.7	43.1	45.0	43.5
Slovakia	48.3	48.3	48.3	48.3	36.1	36.1	48.3	36.1
<b>Elasticity 1*</b>								
OECD average	0.85	0.87	0.84	0.68	0.75	0.80	0.80	0.85
Slovakia	0.85	0.89	0.93	0.69	0.88	0.90	0.80	1.00
<b>Elasticity 2**</b>								
OECD average	0.85	0.86	0.85	0.68	0.74	0.79	0.80	0.85
Slovakia	0.85	0.89	0.93	0.69	0.88	0.90	0.80	1.00

S = single person; C = couple; number of children; the percentages show the proportion of the average wage of an employee in industrial production. Source: OECD

The shaded area indicates numbers worse than the OECD average.

\* percentage growth of net employee income when the gross salary grows by 1 percent

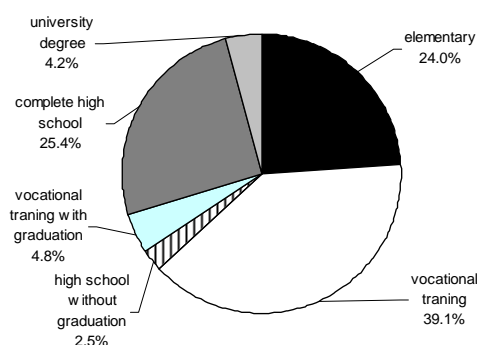
\*\* percentage growth of net employee income when the price of labor grows by 1 percent

The above statistics of the tax wedge are for the year 2004; they are worse than the OECD average. However, in 2005, within the framework of introducing the second pillar of the pension system, some of the social contributions (9 percent of the base of calculations) were rerouted to the personal accounts of citizens. Ownership rights exist to such funds, which mean that they cannot be considered revenues of the state anymore, but rather the net income of a person (such was also the decision of Eurostat on the issue of excluding these schemes from the scope of public finance). In other words, it is not a tax that is at issue here but rather forced savings. In its surveys, the OECD addresses social contributions within the scope of public finance; for this reason, the social contributions for the second pillar will

probably not be included in the wedge after 2005<sup>21</sup>. **Therefore, the conclusion is that the Slovak Republic will place below the OECD average on many wedge indicators after the introduction of the second pillar.**

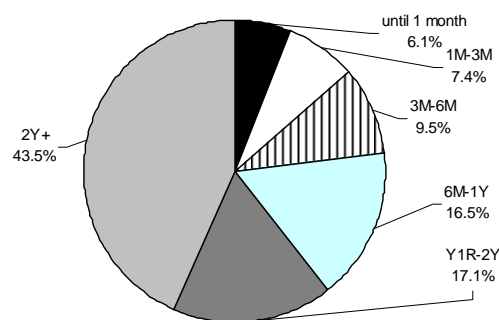
The level of the wedge is significant primarily for low-income groups, insofar as the efforts to reduce unemployment are concerned. The following charts clearly indicate that motivation should be increased primarily for the groups which may expect to receive wages close to the minimum wage. After all, long-term unemployed and individuals with lower educational levels account for the great bulk of the unemployed.

**Breakdown of the Unemployed by Educational Level in 2004**



Source: Statistical Office of the Slovak Republic

**Breakdown of the Unemployed by Duration of Unemployment in 2004**



Source: Statistical Office of the Slovak Republic

### 5.2.2. Effective Rates of the Income Tax

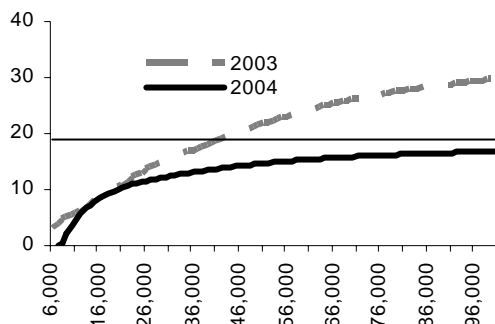
The average effective rate of the income tax is an important indicator describing the tax burden on labor. It amounts to the tax withheld as a share of the gross income of the employee.

In particular, two combinations of the taxpayer type were tracked: a taxpayer as a single person and a taxpayer with a non-working wife and two dependent children. In both cases, the impact was calculated in the case of receiving wages between the minimal wage and SKK 50,000 monthly. As the following charts show, the average effective rate of the income tax was clearly affected favorably in the low and high-income groups in particular. However, even for the medium-income groups the influence of the reform was not unfavorable (from the point of view of the income tax). In the case of a simulation for a taxpayer with a non-working wife and two dependent children, a situation emerged whereby the effective rate was negative in 2004, mainly for the low-income groups. The deduction for a non-working wife may reduce the tax to zero, although a negative effective rate may result only from a tax credit. Until 2003, the tax base was reduced by a deduction for children. If the tax base was smaller than, or equal to, zero, the resulting tax was zero and the effective rate could not fall to a negative value. Beginning in 2004, a tax credit was introduced which is subtracted from the resulting tax. Ultimately, the yearly tax may turn out to be smaller than the claim of a taxpayer in a lower income bracket on a tax credit. Under the circumstances, funds in the amount of the difference between the amount he must pay (has paid) and the tax credit will be refunded to him. It is here that a negative effective tax rate becomes possible.

<sup>21</sup> Depends on whether the OECD will take into account those remaining in the first pillar or those who have joined the second pillar.

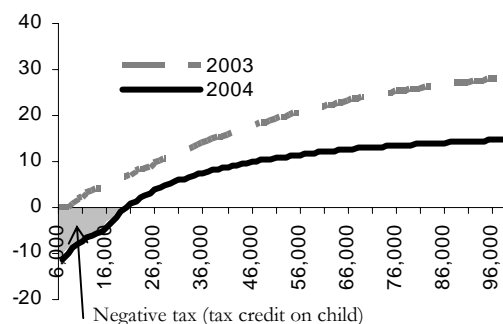


**Single person (in % of gross wage)**



Source: Financial Policy Institute

**Taxpayer, non-working spouse and two children (in % of gross wage)**



Source: Financial Policy Institute

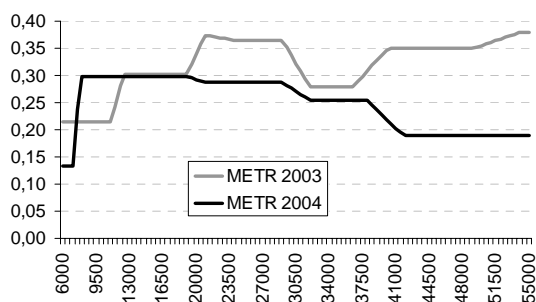
On the whole, we can state that the tax burden on the taxpayer has declined considerably after the reform, thus meeting one of the objectives of the tax reform. It is interesting to look at the progressivity of taxation (a single person and a family with two children) for the income range in question (between SKK 6,000 and SKK 50,000 monthly) in this instance. The effective income tax (tax/ gross wage) for the above types of taxpayers ranged between 0 and 22 percent before the reform, and between -12 and +15 percent after the reform. In other words, tax progressivity before the reform was around 22 percent of the gross wage; after the reform, it is as much as 27 percent of the gross wage due to the credit for children. Contrary to how the flat tax was perceived in Slovakia from the beginning, such a tax actually reduced progressivity for certain types of taxpayers while increasing it for other types.

### 5.2.3. Marginal Effective Tax Rates

The marginal effective tax rate (METR) is another indicator of the tax burden. This indicator shows how much the state will take away from the taxpayer's additional gross wage. Therefore, will it make sense for the taxpayer to make an additional effort to increase his gross wage?

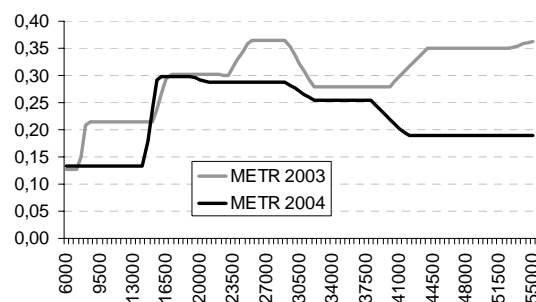
In this case, two types of families were also tracked: a single person and a taxpayer with a non-working wife and two dependent children. For both family situations, marginal taxation was studied in the event that the gross wage of a taxpayer (plotted on the horizontal axis) increases by 10 percent<sup>22</sup>. It is possible to see that motivation increased in most cases.

**Single person**



Source: Financial Policy Institute

**Taxpayer, non-working spouse, two children**

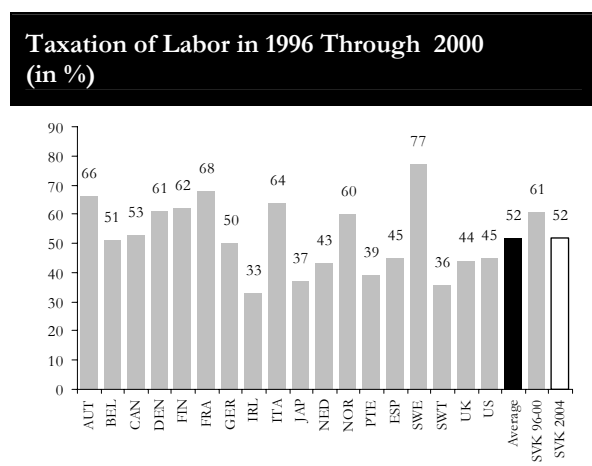


Source: Financial Policy Institute

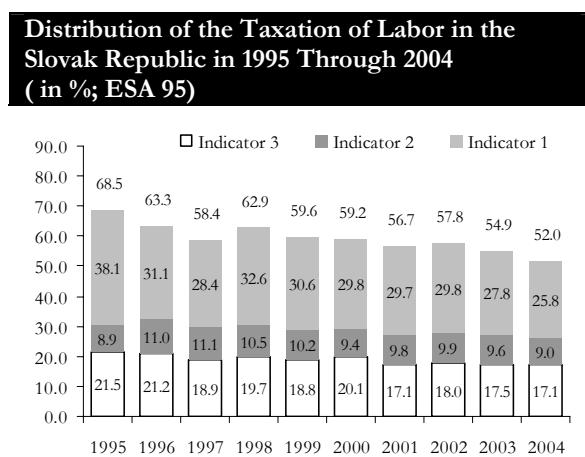
<sup>22</sup> Changes social contributions between 2003 and 2004 were also taken into account in calculations.

### 5.2.4. Macroeconomic Burden on Labor

The burden on labor may also be measured through macroeconomic indicators published in national accounts. The method used defines taxation of labor as a sum of three indicators. The first is the share of social contributions paid by the employer on top of the gross wage; the second is the share of social contributions and taxes paid by the employee in the current income of households; the third indicator follows indirect taxes less subsidies as a share of the total private consumption of households<sup>23</sup>.



Source: Nickell, CEP Discussion Paper No. 634, May 2004; Ministry of Finance of the Slovak Republic



Source: Statistical Office of the Slovak Republic; Ministry of Finance of the Slovak Republic

Compared to the OECD countries, Slovakia registered above-average values of the taxation of labor (61 percent) between 1996 and 2000. However, the burden has declined gradually since 1995, reaching the level of 52 percent in 2004. The level of taxation of labor thus reached the level of the OECD countries in 2004. From the structural point of view, indicator 1 declined most markedly in 2004; it was due to the decline of the total rates of contributions by employers by 3 percentage points. Indicator 2 benefited from a reduction in direct taxes, whereas indicator 3 declined by reason of a one-time drop in the VAT revenue in 2003 (a change in the method of levying the tax on inputs), as well as a moderate drop in 2004 due to the accession of the Slovak Republic to the European Union. Therefore, the decline in indirect taxes was not caused by a reduction in the tax burden, but rather by one-time drops in the VAT.

### 5.3. Tax Burden Imposed on Capital

Let us take a look at the tax burden imposed on capital from three different points of view. The first is the statutory rate directly resulting from taxation statutes. A very narrow view, it will only tell us how much tax is to be paid on each koruna before taxation, and of course ignores changes in the overall tax base. The second, macroeconomic approach monitors the effective tax burden using ratio indicators, where tax paid represents the numerator and economic result the denominator. The third possibility is a microeconomic approach, which evaluates the real tax burden imposed on projects given certain financing, depreciation and other similar projections.

<sup>23</sup> Nickell S., CEP Discussion Paper No. 634, May 2004.

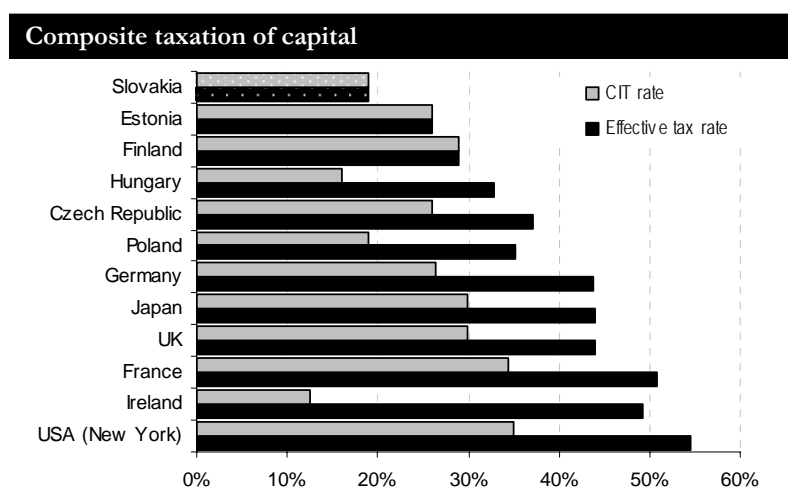
### 5.3.1. Statutory Rate

For the sake of eliminating double taxation, we have abolished dividend taxation. This has led to one-time taxation of capital income, i.e. at the level of company profit taxation. The abolishment of dividend taxation resulted in a significant reduction in the composite taxation of capital revenue, by up to 17.3 percentage points as compared to 2003.

Tax Burden Imposed on Legal Entities (in %)												
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Corporate income tax rate	45.0	40.0	40.0	40.0	40.0	40.0	40.0	29.0	29.0	25.0	25.0	19.0
Dividend tax	25.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	0.0
<b>Composite taxation of capital income</b>	<b>58.8</b>	<b>49.0</b>	<b>49.0</b>	<b>49.0</b>	<b>49.0</b>	<b>49.0</b>	<b>49.0</b>	<b>39.7</b>	<b>39.7</b>	<b>36.3</b>	<b>36.3</b>	<b>19.0</b>

Source: Financial Policy Institute

The following graph demonstrates different capital taxation rates (profit and dividends) in Slovakia and elsewhere. It shows that Slovakia has the lowest composite taxation of capital among the represented countries. We must point out, however, that the capital revenue taxation indicator has been calculated using a mechanical multiplication of the basic corporate income tax and dividend tax rates. An international comparison does not necessarily reflect effective capital income taxation because this income of natural persons is often subject to different tax benefits in many countries that apply dividend taxation.



Source: Ministry of Finance of the Slovak Republic

### 5.3.2. Macroeconomic Approach

The following table demonstrates two ways of looking at the effective tax rate using the macroeconomic approach. The first indicator is the ratio of corporate income tax revenue to the tax base defined by law (line 500 of the tax return). The second indicator is the tax revenue-to-profit ratio (line 100 of the tax return). In both cases, the indicators declined in 2004 and the current ratios represent less than half the 1996 figure. These indicators show the effective taxation of legal entities. We must, however, add that in the short-term these indicators tend to fluctuate; therefore, an increase (decrease) in the effective tax rate does not necessarily represent an increase (reduction) in the real tax burden imposed on businesses.

The table shows another interesting fact – continued growth in the number of companies reporting profits in 2004 is not matched by a corresponding reduction in the number of businesses reporting a loss. The good news is that the total number of subjects filing a tax return is increasing: this is a positive sign indicating that the tax base will continue to grow in future.

<b>Estimated Effective Tax Rate for Legal Entities</b>									
<b>(SKK million)</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Profit/loss (PL)	75,033	72,989	66,238	64,994	99,585	129,795	135,633	192,980	213,650
Tax base (TB)	77,492	78,530	71,450	70,187	98,169	106,455	134,737	163,552	210,208
Number of profitable subjects	18,122	20,837	21,848	22,211	26,078	32,040	36,057	37,488	43,191
Number of loss-making subjects	N/A	N/A	N/A	N/A	32,568	31,056	30,935	33,440	34,138
Corporate income tax revenue	25,939	25,348	26,605	24,991	26,146	23,967	29,689	33,638	33,664
<b>Effective tax rate – TB (%)</b>	<b>33.5</b>	<b>32.3</b>	<b>37.2</b>	<b>35.6</b>	<b>26.6</b>	<b>22.5</b>	<b>22.0</b>	<b>20.6</b>	<b>16.0</b>
<b>Effective tax rate – PL (%)</b>	<b>34.6</b>	<b>34.7</b>	<b>40.2</b>	<b>38.5</b>	<b>26.3</b>	<b>18.5</b>	<b>21.9</b>	<b>17.4</b>	<b>15.8</b>

*Source: Statistical Office of the Slovak Republic, Tax Directorate, Ministry of Finance of the Slovak Republic*

### 5.3.3. Microeconomic Approach

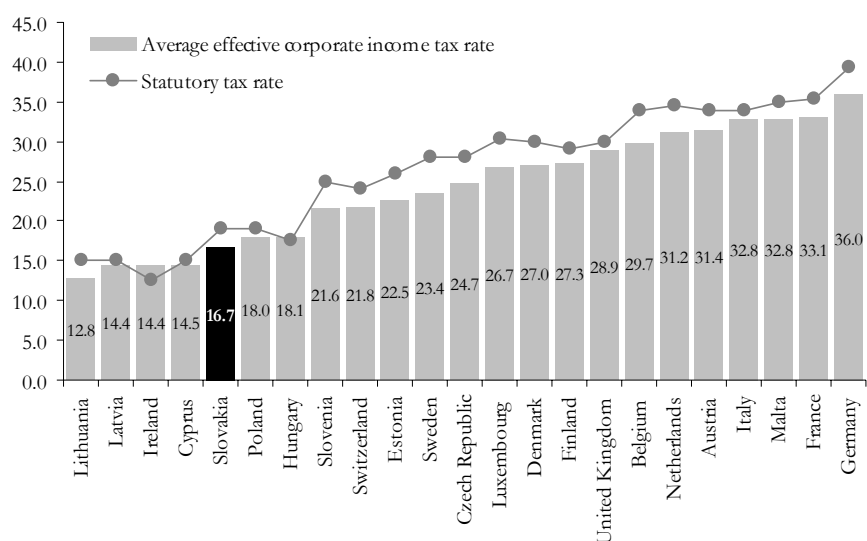
The method and amount of taxation is important not only from the fiscal, but also from the macroeconomic viewpoint. An unsuitable taxation system creates undesirable negative effects on fixed capital formation and capital allocation, which is negatively reflected in foreign direct investment inflow, job creation and, ultimately, in general government revenue.

Legislative changes affecting corporate taxation not only introduced a tax rate reduction to 19%, but also resulted in many tax base changes. In order to assess the total effective tax burden, we must draft a concept considering all factors impacting the tax liability. Therefore the resulting tax burden normally differs from the nominal statutory tax rate.

**According to the German ZEW Institute<sup>24</sup>, the marginal tax rate reduction and depreciation policy correction resulted in a reduction of the effective corporate income tax rate by 5.4 percentage points in 2004. As a result, Slovakia became the European Union country with the fifth lowest tax burden.** The Institute's approach was based on a review of the real taxation of business subjects based on different projects. Such a low tax burden establishes conditions for increased investment (including foreign direct investment) and increased corporate sector activity.

<sup>24</sup> ZEW Institute, 2004, Company Taxation in the New Member States

### Effective capital taxation in 2004



*Note: EU 10 countries + Germany – data for 2004 (source A); other EU countries – data for 2003, data for Spain and Portugal were excluded (source B)*

*Source A: Jacobs, O. H., Ch. Spengel, M. Finkenzeller, M. Roche: Company Taxation in the New EU Member States, 2004 second edition, Ernst and Young and ZEW, Mannheim/Frankfurt*

*Source B: OECD (taken over from ZEW Economic Studies Vol. 28), OECD Tax Database (Table II.1)*

Tax reform introduced some elements influencing the allocation of capital. Overall, capital income taxation is now more neutral. The reform eliminated the double taxation of legal entities; profit is taxed at the legal entity level, while dividends are no longer subject to tax at the household level. Revenue from investments financed via stock issues (profit in the form of dividends) is subject to the same marginal tax rate of 19%, as is revenue from debt-financed investments. The reform has reduced the cost of investments financed by stock issues and created more room for companies potentially interested in this type of financing. Undistributed profit is subject to the highest taxation-related costs since it is taxed at both the corporate income and household levels. In the case of share price increases, capital income is subject to 19% tax levied when profit is actually realized.

Average Effective Corporate Income Tax Rate in Slovakia (in %)		
	2003	2004
Total average tax rate	22.1	16.7
<b>Average tax rate according to the financing source</b>		
Undistributed profit	25.0	18.9
Issue of shares	25.0	18.9
Debt	16.3	12.3
<b>Average tax rate according to the asset type</b>		
Buildings	21.3	15.5
Intangible fixed assets	20.5	15.6
Machinery and equipment	20.9	15.9
Financial assets	24.6	18.7
Inventory	23.3	17.7

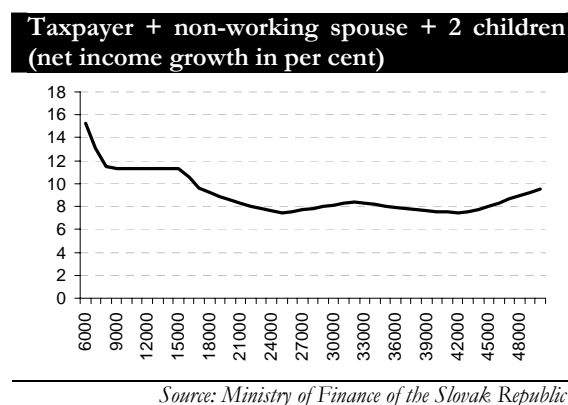
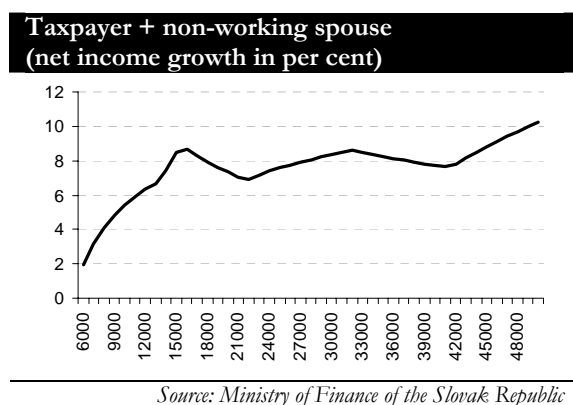
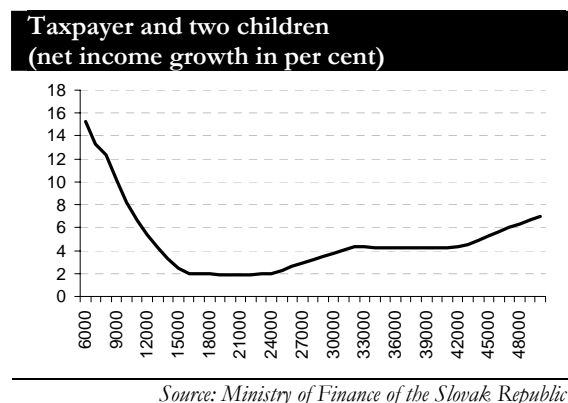
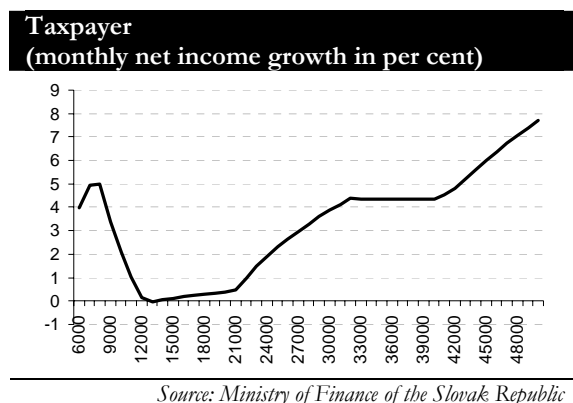
*Source: Jacobs, O.H., Ch. Spengel, M. Finkenzeller, M. Roche: Company Taxation in the New EU Member States, 2003 first edition, 2004 second edition, Ernst and Young and ZEW, Mannheim/Frankfurt*

## 5.4. Tax Burden Imposed on Households and Taxation Progressivity

There was much discussion as to who the winners and losers would be in connection with tax reform. There was also discussion of how to compensate groups without income from work that will not subsequently benefit from a direct tax reduction. This part of the document describes the (primarily short-term) impact of tax reform on selected types of taxpayers and households as a whole. The conclusion is that given the projected long-term benefits in the form of faster living standard improvements, the reform, even in the short term, did not have a significant negative impact on most households.

### 5.4.1. Taxpayer Types

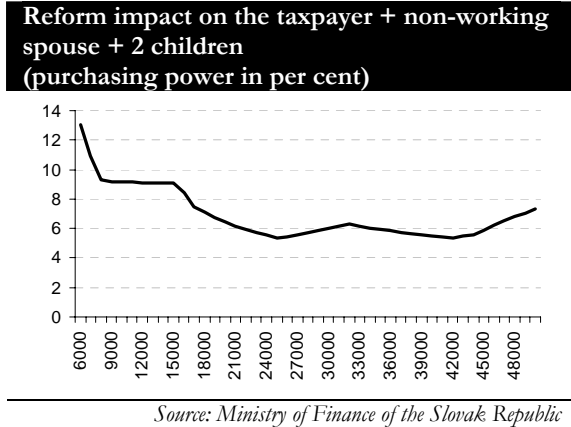
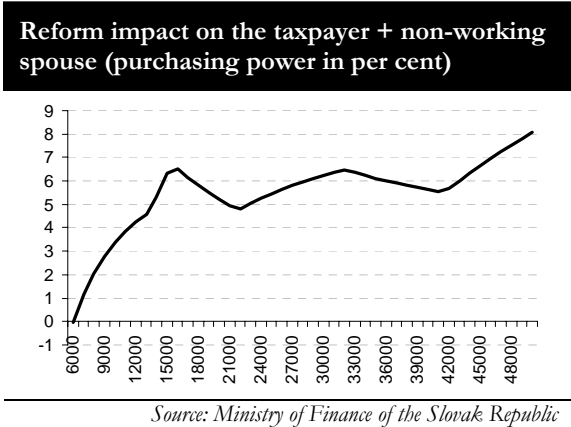
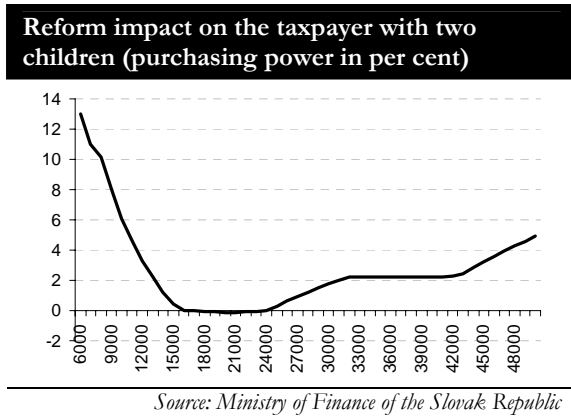
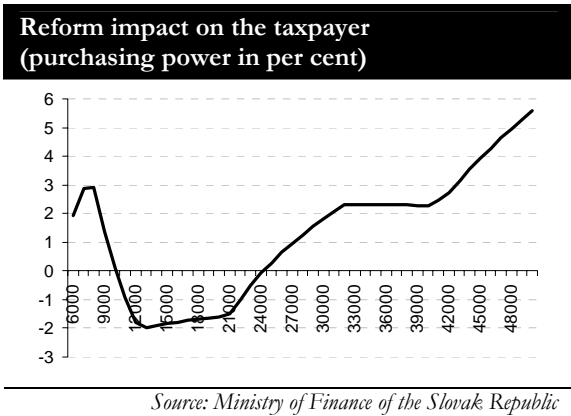
We can look for winners and losers from different perspectives. First of all, let us take a static look and apply the new and old tax laws to certain gross monthly incomes. The graphs below show a percentage change in net income before and after the direct taxation change. In order to eliminate the effects of the employee social contributions rate increase, here we consider a case not involving a rate change.<sup>25</sup>



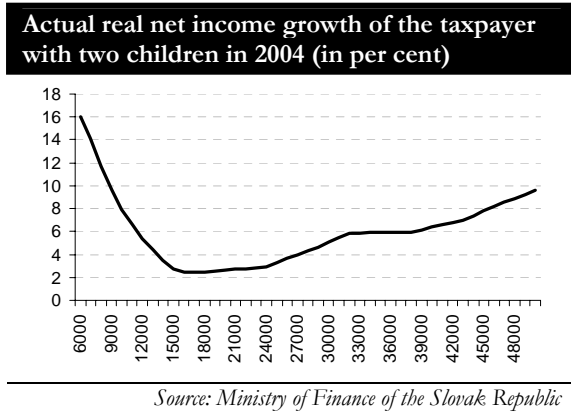
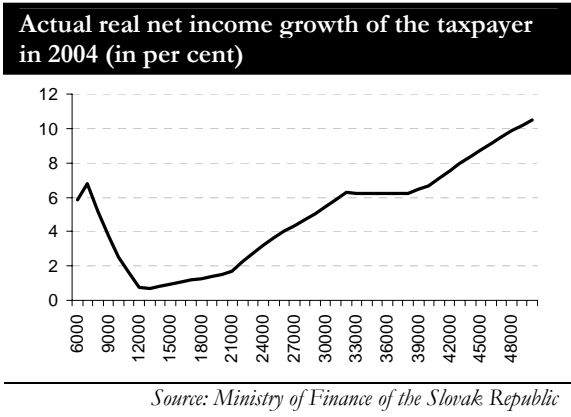
We conclude that no one has been hurt by changes in direct taxation. Of course, tax reform also involved indirect tax changes that must be considered. Higher VAT and excises resulted in higher prices and a subsequent reduction in disposable taxpayer income (however, the question is to what extent we need to consider excises that subject to taxation some negative externalities). The following graphs show a 2% impact of indirect tax adjustments (Financial

<sup>25</sup> The employee social contributions rates increased in 2004 from 12.8% of the tax base to 13.4%.

Policy Institute's estimate)<sup>26</sup>. The average impact naturally does not provide an accurate account of the impact on individual income categories – we will return to this point during our analysis of household taxation.

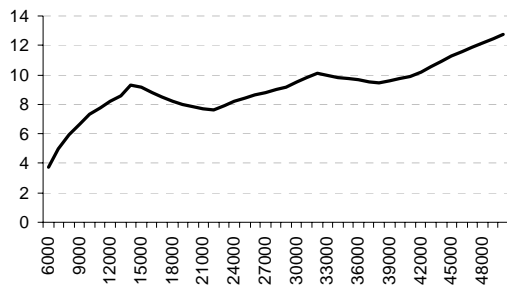


As you can see, from this perspective middle income category individuals, in particular, were negatively affected. However, it is also interesting to look at whether a net real income reduction actually occurred in the case of these income categories in 2004. **Therefore for comparison we are also providing a dynamic look, including all effects, i.e. nominal year-on-year wage growth between the years 2003 and 2004 as well as actual average inflation.**



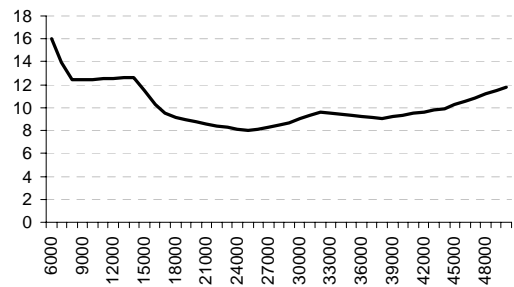
<sup>26</sup> The actual impact was likely lower because price increases did not always match the increase in indirect taxation; part of the reform costs was indeed absorbed by profit margins (or labor costs) of the corporate sector.

Actual real net income growth of the taxpayer and non-working spouse in 2004 (in per cent)



Source: Ministry of Finance of the Slovak Republic

Actual real net income growth of the taxpayer and non-working spouse + 2 children in 2004 (in per cent)



Source: Ministry of Finance of the Slovak Republic

Clearly, given dynamic economic and nominal wage growth in 2004, the real net income of individual worker categories did not drop (of course, this does not mean there are no exceptional cases in which an individual's net real income did drop). To the contrary, an overwhelming majority of working families (primarily families with children) has gained during the last year.

#### 5.4.2. Main Risk Categories

Here let us look at the four most vulnerable population types: minimum-wage workers, retirees, families with children and the unemployed.

Those receiving **the minimum wage in 2004** received 8.5% more in nominal terms before taxation. The flat tax increased their net income by 11.7%. For low-income categories, last year's inflation was 8.3%, i.e. a 3.1% improvement for this population category in real terms. If we look at a couple with two children earning minimum wage, the real improvement is nearly 9%. It is clear that working people at the lower end of the income distribution received much more income in 2004 than in 2003.

The following table summarizes the static and dynamic views of net income growth for the main working population categories, including risk categories (low income individuals and families with children). The static view only explores the effects of tax reform; the first column represents net income growth resulting from the income tax rate change and the second column broadens this view by including the effect of indirect taxes. The dynamic view includes year-on-year income growth and considers higher inflation in the case of low-income categories as compared to the average consumer inflation in the economy. It provides a view of the total living standard; therefore, real income has been deflated by total inflation (including regulated price adjustments). The table shows that, of all the explored categories, the situation has only worsened for average wage-earning individuals and only from the static point of view. According to the static analysis, the other categories benefited from reform and, from the dynamic point of view, the situation has improved for all categories, primarily owing to sound economic and wage growth. In relative terms, the category of families with a non-working spouse and two children showed the greatest improvement. For the purposes of better illustration, the last column provides amounts in SKK by which the monthly incomes of individual working population categories increased in real terms.



Change in net income in 2004 (in per cent)					
	STATIC VIEW		DYNAMIC VIEW		
	Income tax and social contributions	Income tax and indirect taxes	Income tax and social contributions	Real income growth	
				(in %)	(in SKK)
<b>INDIVIDUAL receiving</b>					
minimum wage	3.5	1.4	11.7	3.1	561
average wage	-0.4	-2.4	8.4	0.9	963
triplicate of average wage	6.5	4.5	16.4	8.3	5,050
<b>FAMILY</b>					
Worker (average wage) + 2 children	2.7	0.7	11.7	3.9	1,433
Worker (average wage)+non-working spouse+2 children	7.8	5.7	17.1	8.9	2,613
Worker (average wage)+spouse(average wage)+2 children	2.9	0.9	13.8	5.9	836

Source: Financial Policy Institute

**Retirees** who do not pay direct taxes could not have benefited from the introduction of the flat tax rate. In their case, pensions were subject to valorization pursuant to a new mechanism;<sup>27</sup> at the same time, pensioners received a one-time compensation of SKK 1,000. In the case of old-age pensions, this resulted in nominal growth of 8.5% (in the case of other pensions it was somewhat higher given the relatively greater importance of the compensation payment). Last year, inflation for retirees was 8%, i.e. the real income of this population category increased 0.4%.

Tax reform primarily focused on the working population; therefore, an evaluation of the reform impacts on the living standard of this population category is relevant. The unemployed and individuals outside of the labor market (retirees, the handicapped) were embraced to a greater extent by state welfare policy.

The above graphs and studies done by some international organizations<sup>28</sup> clearly show that in most cases **families with children** with at least one working parent gained from tax reform. The question is somewhat more complex in the case of families in which no one is working, i.e. people in the fourth category, generally **the unemployed and welfare recipients**.

Slovakia was often criticized in the past for its relatively generous welfare system which failed to motivate people to seek employment once they had become unemployed. In some cases, if an individual took a low-paying job, then his/her family's financial situation would worsen. **Welfare reform** generally addressed this problem, eliminating system abuse and reducing welfare benefits. This, of course, led to a reduction in the living standard of some marginal population categories. The goal of **tax reform** was to help increase the motivation of the unemployed to seek employment and thus, in the long-term, to contribute to their well-being and to overall economic growth. The unemployment rate in Slovakia is one of the highest in the EU and the OECD, and that slows present and potential future economic growth.

<sup>27</sup> One-half of the valorized amount matched the inflation and one-half the development of nominal wage in the economy.

<sup>28</sup> International Monetary Fund, 2005, Slovakia's Tax and Welfare Reforms

This is clearly visible from a comparison of marginal effective tax rates (METR). As mentioned earlier, METR is an indicator monitoring what per cent of additional gross income a worker never “nets”, which means that this amount actually represents additional (marginal) taxation for such worker. The following table shows two types of “traps” that may de-motivate people from returning to work. The first is the “unemployment trap” which shows the financial motivation for returning to work if a worker collects unemployment benefits.

The second "inactivity trap" monitors motivation if a citizen is inactive (i.e. lives on welfare). In both cases, the results are compared to the EU-19 average (exclusive of the six new member states that are not OECD members) in 2003 according to Carone and Salomaki (2005)<sup>29</sup>.

<b>Unemployment trap</b>														
<b>Marginal effective tax rate (METR) for an unemployed person</b>														
(last job = 67% of the average wage in industrial production (APW) return to work with the following wage)														
	Individual				Individual with 2 children					Couple, only one works				
	50%	67%	100%	150%	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%
2003 average **	91	79	65	57	104	87	77	68	59	98	88	83	68	58
Slovakia 2003	88	73	56	48	96	92	79	64	54	96	105	95	72	57
Slovakia 2005	81	68	55	47	68	71	60	50	43	78	78	76	56	47

	Couple, one works, 2 children				Couple*					Couple with 2 children*				
	50%	67%	100%	150%	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%
2003 average	90	85	73	63	115	85	72	60	54	122	91	77	63	55
Slovakia 2003	106	111	86	68	118	85	69	53	46	118	92	74	57	51
Slovakia 2005	69	71	56	47	115	84	70	57	48	115	84	70	57	47

<b>Inactivity trap</b>															
<b>Marginal effective tax rate (METR) for an inactive person</b>															
	Individual					Individual with 2 children					Couple, only one works				
	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%
2003 average	76	70	63	54	50	74	68	62	58	52	78	75	73	62	54
Slovakia 2003	109	87	72	56	47	125	112	94	73	60	125	125	110	81	64
Slovakia 2005	78	60	52	45	40	64	69	51	49	42	78	78	76	56	47

	Couple, one works, 2 children					Couple*					Couple with 2 children*				
	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%	33%	50%	67%	100%	150%
2003 average	77	76	75	66	58	27	27	29	31	34	41	38	37	37	38
Slovakia 2003	125	125	125	96	74	18	19	20	20	24	30	34	31	28	32
Slovakia 2005	64	69	71	56	47	18	20	23	25	26	18	21	23	25	26

METR = 1 (change in net income)/change in gross income; in these cases the change in gross income = gross wage after returning to work

<sup>29</sup> The comparative OECD average is not available.

\*wage level is fixed at 67% of the average wage in industrial production while the wage of the second family member is indicated in the column

\*\*all 2003 values were taken from the Carone publication (2005)

the highlighted values are higher than the EU 19 average according to the Carone publication (2005)

The Slovak Republic is in a relatively good position compared to both the EU-19 average and the pre-reform situation. In the case of the inactivity trap, below average values primarily exist in the category of low-income individuals and couples only one of whom returns to work. In the case of the unemployment trap, we can see a very significant de-motivation to work primarily in cases of a new job being offered at a wage lower than the original job. We must add, however, that this situation only lasts for 6 months; after that, the unemployment trap transforms into the inactivity trap (unemployment benefits are no longer collected).

**The conclusion is that, to a certain extent, tax reform contributed to reducing the living standard of those collecting welfare benefits (via higher inflation), but on the other hand helped increase motivation to seek employment (via direct taxes). In our opinion, there was no other way of correcting the system in a sustainable manner (given the present budget limitations).**

#### *5.4.3. Tax Burden and Taxation Progressivity at the Household Level*

The above comparisons were made on the basis of standardized households. We must also explore what impact tax reform had on the real structure of Slovak households. For example, we can say that middle-income households may have more children, in which case tax reform may have helped them more than might appear from graphs demonstrating the situation of individuals. The problem is that there are no regular, detailed and/or reliable household income and expenditure data available in Slovakia that take individual types of taxes into consideration. Mikrocensus (micro census), with data for 2002, and Household Budget Survey (HBS) seem to be the best source.

The disadvantage of Mikrocensus is that, despite being broad-ranging, it is taken at greater than 2 year intervals and therefore only includes 2002 data. There are two key problems with HBS. Firstly, there was a methodological change in 2004, and secondly the number of monitored families is relatively low and therefore does not represent a sufficiently wide base for comparing households based on individual deciles<sup>30</sup>. Despite these shortcomings, we attempted to calculate the short-term effect of tax reform on households as no other data are available. **We must emphasize, however, that the results in this part must be interpreted with great caution and the conclusions must be understood as tentative.**

Let us first take a look at some World Bank calculations (2005) which concluded, using the Mikrocensus data, **that 2004 income tax at the household level is more progressive than in 2002** (abstracting from behavioral aspects).

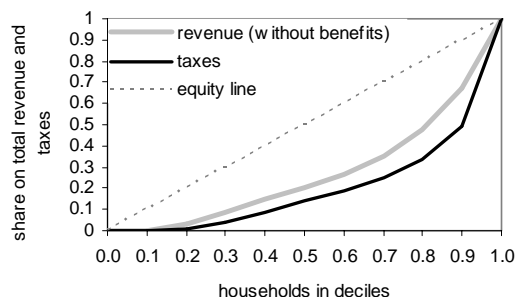
The foregoing may be illustrated by the following graph. The horizontal axis shows the percentage of households divided into deciles, while the vertical axis provides the household share in total income and taxes. "The equality line" describes a hypothetical situation in which all the household deciles have the same income and/or pay the same taxes. In other words, the equality line shows all households receiving the same income and paying the same amount of taxes. In reality, however, the more the income or tax curve diverges to the

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<sup>30</sup> Decile means 10 per cent of households.

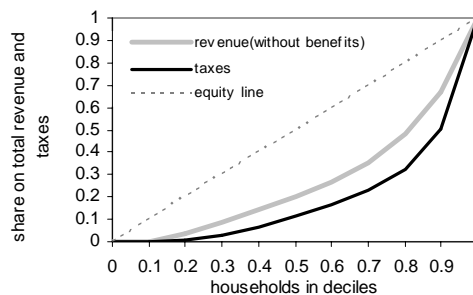
right of the equality line, the higher the income inequality (or more progressive tax system) because some households have higher income than others and some households pay higher taxes than others.

#### Situation in 2002 (household deciles according to gross income after equalization<sup>31</sup>)



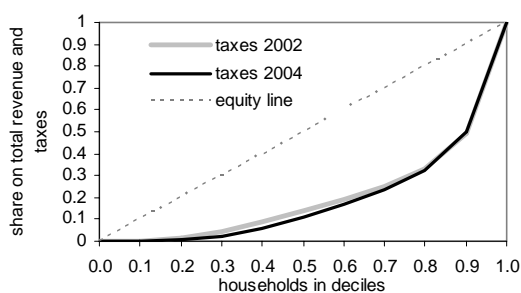
Source: World Bank, Statistical Office of the Slovak Republic, Ministry of Finance of the Slovak Republic

#### Situation in 2004<sup>32</sup>



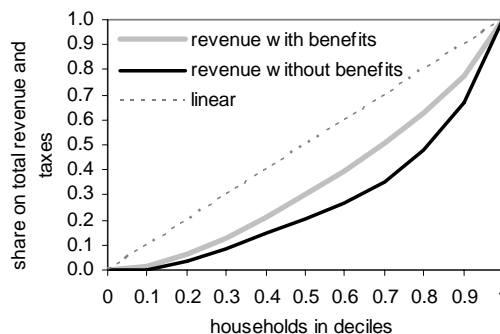
Source: World Bank, Statistical Office of the Slovak Republic, Ministry of Finance of the Slovak Republic

#### Comparison of direct taxation



Source: World Bank, Statistical Office of the Slovak Republic, Ministry of Finance of the Slovak Republic

#### Effect of the welfare benefit system



Source: World Bank, Statistical Office of the Slovak Republic, Ministry of Finance of the Slovak Republic

Some indicators explore tax system progressivity. One such indicator is the Kakwani Index, which (in a very simplified manner) measures the area between the income and the tax curve (taxation is proportional if these two curves are equal). The higher the value of the index, the more progressive is the system. According to World Bank calculations, the Kakwani index increased from 15.4 to 19.2 between the years 2002 and 2004.

Of course, tax reform cannot solely be evaluated on the basis of direct taxes. We must also consider indirect taxes, which place a different burden on lower income categories of the population as compared to higher income categories. From the point of view of efficiency, harmonizing the VAT rate was undoubtedly a step in the right direction. A study by the German ZEW Institute<sup>33</sup> also confirmed that a reduced rate represents a highly inefficient tool for supporting lower income categories. A reduced tax rate does not only benefit those with lower income, but often benefits those with very high income – sometimes even in relative terms. The literature often mentions cases of family swimming pool heating costs,

<sup>31</sup> According to the standard OECD scale: first adult 1.0; children under the age of 18 0.5; and every other family member 0.7

<sup>32</sup> On the basis of indexation

<sup>33</sup> ZEW Institute, 2005, Reduced VAT Rates Unsuitable as Instrument of Redistribution Policy, ZEWnews

etc. The following table enumerates the benefits of a harmonized VAT rate from both the economic and the social perspectives as compared to multiple tax rates.

**Uniform VAT rate - benefits**

*Vertical justice and efficiency*

- ✓ Reduced VAT rate is normally introduced with the aim to reduce the tax burden imposed on lower income categories. However, higher income categories often also benefit from lower tax rates (e.g. heated pools).
- ✓ It is important to keep in mind that efficient support of lower income categories can be achieved via the budget spending side. For example, a housing benefit defined based on income will only help the poor to reduce their heating costs.

*Horizontal justice and efficiency*

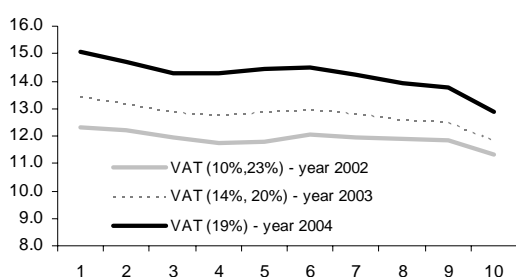
- ✓ The existence of several VAT rates means that some activities are subject to higher taxation as compared to others. This results in allocation inefficiency and deformation of relative prices.
- ✓ The existence of several VAT rates supports tax arbitration - speculative attempts to "re-classify" own production from the higher to the lower tax rate category.
- ✓ The existence of several rates also causes that some sectors are able to permanently claim excessive tax deductions despite not being primarily export-oriented. That can potentially create room for tax evasion.

*Impact on the budget and the households*

- ✓ The uniform VAT rate was the "brick and mortar" of the tax reform since it helped to compensate budget reduction resulting from the introduction of flat income tax rate. These two types of taxes are "interconnected" to a certain extent and uniform tax rate is not the only issue. Reducing the VAT rate by 1 percentage point in the case of goods subject to the reduced tax rate prior to the reform, would mean a budget reduction of more than SKK 2 billion.
- ✓ In order for the consumer prices to actually benefit from a tax rate reduction, the reduction would have to be much more significant - otherwise it is very likely that it would only result in increased business margins; the consumers would not feel any price reduction and the budget would be reduced. A much more significant tax rate reduction automatically represents a large budget cut.

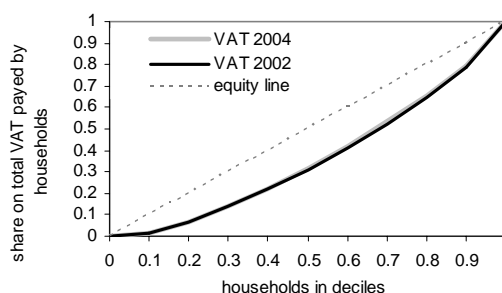
On the other hand, we must also look at the effects of this change on the progressivity of taxation. According to IMF calculations, the following represents the VAT and excise duty burden imposed on households across all income categories in the years 2002 and 2004:

**Efficient taxation of net income by VAT (household deciles, in per cent)**



Source: The IMF, Statistical Office of the Slovak Republic, Ministry of Finance of The Slovak Republic

**Difference in VAT taxation between the years 2002 and 2004 (same net income)**

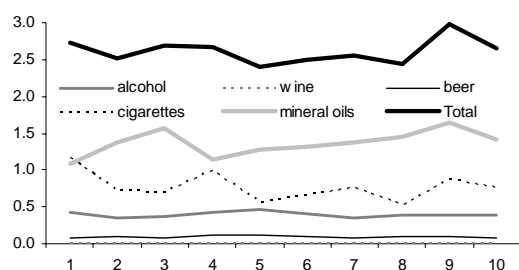


Source: The IMF, Statistical Office of the Slovak Republic, Ministry of Finance of The Slovak Republic

As you can see, VAT was already a degressive tax (i.e. expressed in per cent, it placed a greater burden on lower income households) in the years 2002 and 2003. Owing to tax rate harmonization, total effective taxation increased while the degressivity rate did not change greatly.

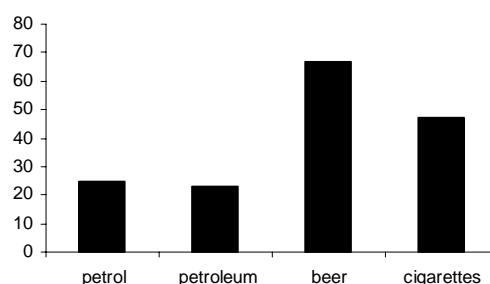
The last substantive tax reform change was the excise duties increase. Given their relatively proportional character in 2002, and the fact that excise duty on fuels is more or less progressive, the 2003 increase has not caused any significant changes that would disadvantage low-income families (from the point of view of progressivity).

**Efficient taxation of net income by excise duties**  
(household deciles, in per cent, year 2002)



Source: The IMF, Statistical Office of the Slovak Republic, Ministry of Finance of The Slovak Republic

**Excise duty tax rate increase in August 2003**  
(in per cent)



Source: The IMF, Statistical Office of the Slovak Republic, Ministry of Finance of The Slovak Republic

**The second approach is to use information from Household Budget Survey.** The Ministry Finance of the Slovak Republic performed an analysis based on data from the years 2003 and 2004. The analysis is structured to provide detailed information on the composition of households, the economic activity of individual household members, and the structure of income and expenditure including household spending and taxes paid. However, some of the following characteristics of the available data limit the reporting ability of the results.

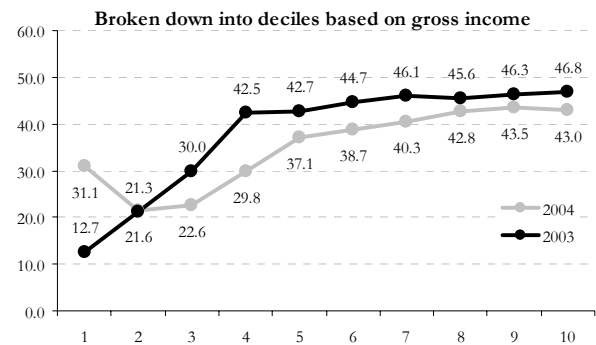
- Households were selected in 2003 using so-called quota-based selection; this fails to provide a representative household sample. Some types of households are missing, while there are too many of others.
- The data collection methodology changed in 2004. The key change is that household data only cover a specific month. This may lead to a misrepresentation of income and expenses with higher volatility in individual months and discrepancies in comparison with annual data.
- The 2004 household weight was stipulated based on the 2001 population census.

The goal of the analysis was to establish the average total tax burden in relation to gross income; households were grouped into deciles according to gross income generated by their economic activity (including pensions) or from property.

Taxes Paid in Percent – ranked according to the “market” income												
Decile	Income taxes		Social Contributions		Other taxes		Excise duties		VAT		Total	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
1	0.38	0.13	0.16	1.75	0.27	0.45	0.93	1.16	10.93	27.56	12.66	31.06
2	0.87	0.27	7.74	4.42	0.30	0.25	1.33	1.18	11.01	15.48	21.25	21.60
3	1.62	0.58	15.79	6.15	0.24	0.34	1.67	1.41	10.67	14.09	29.99	22.58
4	3.11	1.45	28.89	13.28	0.10	0.21	1.20	1.69	9.18	13.13	42.47	29.76
5	3.53	2.89	28.83	20.53	0.15	0.20	1.48	1.40	8.69	12.14	42.68	37.15
6	3.88	2.98	31.38	23.15	0.10	0.10	1.42	1.55	7.91	10.91	44.68	38.69
7	4.27	3.77	32.56	25.48	0.09	0.14	1.47	1.29	7.74	9.66	46.13	40.34
8	4.54	4.62	32.17	27.77	0.09	0.07	1.28	1.39	7.53	8.98	45.61	42.83
9	5.16	4.79	32.41	28.68	0.11	0.07	1.26	1.35	7.35	8.65	46.28	43.54
10	6.67	6.17	32.01	28.12	0.06	0.03	1.28	1.21	6.82	7.48	46.85	43.01

Source: Ministry of Finance of the Slovak Republic

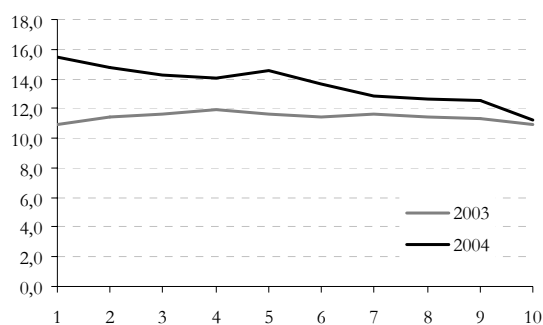
**Tax burden imposed on different households in the years 2003 and 2004 (in %)**



Source: Ministry of Finance of the Slovak Republic

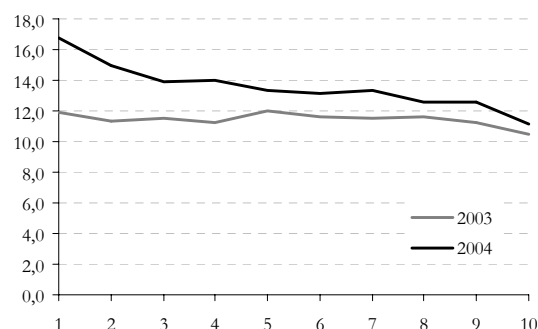
The presented results show a reduction in the total tax burden as compared to 2003 as a result of the income tax reduction. Together with the social contributions reduction, this more than offset the tax burden increase from excises and VAT. The low tax burden in the first three deciles is attributable to the low social contributions burden and low direct taxes. In terms of household structure, the lowest deciles mainly include retirees who pay no social contributions or income tax. The graph clearly shows total taxation progressivity. The result shows that in 2004, households in the first decile were subject to a high VAT burden. But the truth is that gross income does not include welfare benefits primarily collected by the poorest families. We believe that the dramatic increase was caused by the fact that Household Budget Survey did not have sufficient representation of this type of household in 2003. The graphs below show the VAT burden based on net income (i.e. including welfare and other state benefits) and there are no dramatic fluctuations. The fact is that taxation degressivity increased for lower income groups.

**Share of paid VAT in net household income – households classified based on gross market income (in %)**



Source: Ministry of Finance of the Slovak Republic, , Statistical Office of the Slovak Republic

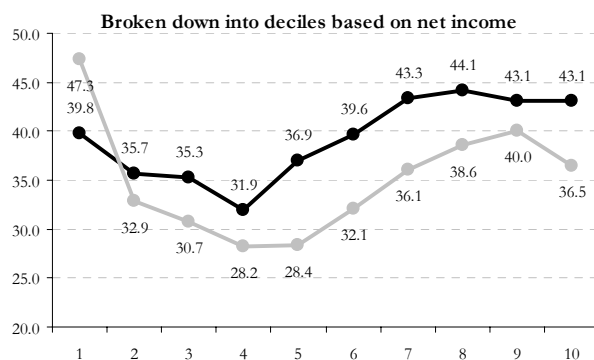
**Share of paid VAT in net household income – households classified based on net income including welfare benefits (in %)**



Source: Ministry of Finance of the Slovak Republic, , Statistical Office of the Slovak Republic

The second view of household classification into individual deciles is based on net household income. In this case, both net income from work and income from social aid, including unemployment or welfare benefits, have been considered. This approach better reflects the actual income situation of households because it works with their disposable income. In addition, net income was re-calculated using the standard OECD methodology<sup>34</sup> in order to ensure a level playing field.

**Tax burden imposed on different households in the years 2003 and 2004 (in %)**



Source: Ministry of Finance of the Slovak Republic

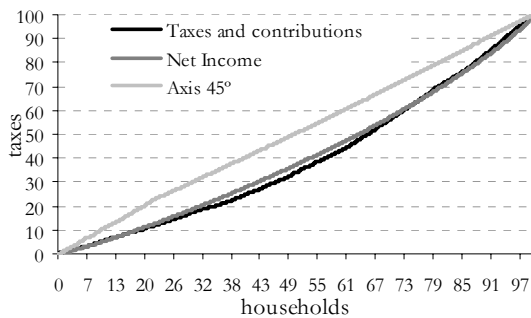
The results suggest slightly different development in the first four deciles. While the previous approach clearly indicates taxation progressivity, in this case low-income families are subject to a higher tax burden with a gradual reduction until the fourth decile, when the trend once again becomes progressive<sup>35</sup>. An overall assessment of progressivity shows that taxation progressivity increased between the years 2003 and 2004 as measured by the Kakwani Index.

<sup>34</sup> In general this means that larger families may achieve more efficient savings: SKK 1,000 for an individual is sometimes less than SKK 2,000 for a couple (e.g. heating costs are the same irrespective of the number of household members).

<sup>35</sup> This is primarily due to the fact that, based on these calculations, retirees are not among the poorest families.

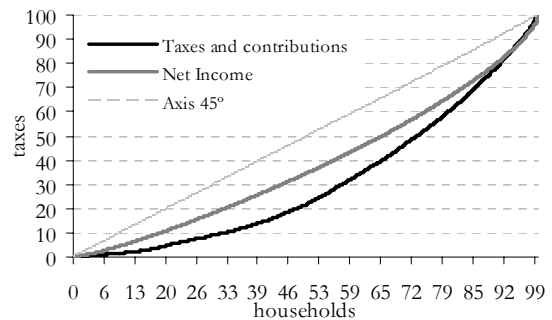


Distribution of net income and taxes in 2003



Source: Ministry of Finance of the Slovak Republic, , Statistical Office of the Slovak Republic

Distribution of net income and taxes in 2004



Source: Ministry of Finance of the Slovak Republic, , Statistical Office of the Slovak Republic

All results at the household level must be understood as indicative because there is a lack of sufficiently detailed and reliable data available from the years 2002 through 2004. **The available data show that tax reform itself did not cause any significant change in tax system progressivity at the household level. It seems that the child tax credit and higher standard deductions helped significantly to reduce taxes primarily for low-income categories.**

#### 5.4.4. Long-Term Perspective

From a long-term perspective, tax reform should clearly be beneficial owing to the higher employment that may, for example, result from greater foreign direct investment inflow as well as a reduction in the tax wedge imposed on low-income categories. World Bank analyses show that the population's social situation may significantly improve if at least one household member works. Estimating how many jobs tax reform may create in the future would represent pure speculation on the part of the Ministry of Finance of the Slovak Republic. But we are pleased that employment in selected economic sectors grew at a pace of around 4%<sup>36</sup> in the first half of 2005.

## 6 What Next?

Slovakia launched comprehensive tax reform in 2004. This significantly changed the country's taxation philosophy and attracted unusual attention and positive reaction from abroad. Members of the Slovak professional community see the tax reform as highly positive<sup>37</sup> and more than 50% of the lay public in different representative surveys expressed its support for the reform. Businesses also perceive the change as positive: the legislation index – the part of the business environment index<sup>38</sup> regulating taxes, social contributions, fees and investments – increased by more than 20% between the second 2004 quarter and the same 2003 period.

<sup>36</sup> The Statistical Office of the Slovak Republic periodically (monthly) publishes employment statistics in selected sectors (industry, construction, transport, wholesale, retail, post and telecommunications and market services). These statistics are important because they monitor most of the private sector.

<sup>37</sup> Reforms in Slovakia 2004-2005, INEKO

<sup>38</sup> This index is published by the Slovak Business Alliance (Podnikateľská aliancia Slovenska - PAS).

All this leads to a legitimate question: what comes next in terms of the tax system? Or in other words, is the present system optimal or are some additional adjustments needed? This chapter seeks answers from a professional perspective.

**Tax reform was designed based on the right economic principles and we believe that its basic philosophy requires no changes.** We have, however, identified some ways to improve the present situation. At first we provide a few examples which in our opinion would very quickly yield some improvement. In the second part of this chapter, we describe problematic areas that will require increased attention in the future. Since the tax burden consists of both taxes and social contributions, in some cases we could not avoid the issue of social contributions.

### **6.1. Harmonization of the Tax and Social Contributions Bases**

There are presently several ways natural persons can reduce their total tax and social contributions liability by switching from dependent activity (employment) to self-employment (doing business). This includes, for example, the well-known "Bulgarian constant"<sup>39</sup> used to calculate the assessment base of a self employed person (engaged in independent gainful activity) or the fact that no social contributions are paid on capital income.

It is a generally known fact that the tax base of a self-employed person is difficult to define and verify. Therefore, legislation (the Slovak legislation included) often offers the option of lump sum expenses deducted as a percentage of income. And we believe **that the social and health care social contributions assessment base should be set similarly as the tax base.**

An **annual social contributions settlement** (like in the case of health care contributions) would also be desirable. Finally, if all assessment bases are defined equally we will be able to consider their collection by one central organization, which would help reduce administrative costs. Last but not least, a further systemic step would be to include the so-called "armed forces" under the Social Insurance Agency system (in terms of both contributions and benefits) and make them equal to other employee benefits.

### **6.2. Taxation of Low-Income Categories**

International analyses suggest that high taxation of low-income categories may represent a rather large obstacle to job-seeking motivation, especially if accompanied by a relatively generous welfare system. In other words, the smaller the difference between the potential net wage after taxation and welfare benefits collected by an unemployed person, the lower this person's motivation to seek employment (the "unemployment and inactivity trap"). It is commonly known that the majority of Slovak unemployed are long-term unemployed with few qualifications, i.e. those with the greatest chance of finding only low-income jobs. Tax reform and the flat tax reduced the income tax burden for low-income population categories. Social system reform helped increase the difference between the potential net wage and welfare benefits and increased job-seeking motivation. However, tax reform itself could not significantly reduce the "tax wedge" between the total cost of labor and net wage, i.e. effectively reduce the tax burden on labor because social contributions represent the main part of the tax wedge.

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<sup>39</sup> The social contributions assessment base equals one half of the income tax base

A flat social contributions reduction in Slovakia would not only be too expensive (and mean a substantial reduction in general government revenues), but also inefficient (and not help significantly reduce unemployment). Nonetheless, we do see some room for an additional tax wedge reduction for low-income categories. This solution would not be accompanied by the disadvantage of a flat social contributions reduction and would help reduce unemployment. The document "Possible ways of reducing social contributions in Slovakia"<sup>40</sup> proposed, inter alia, three measures to help achieve this goal. This document details the third such measure:

Leave the standard tax deduction for a taxpayer, but transform the standard tax deduction into an employee tax credit (bonus) in the case of an employee (SKK 1,440 monthly).

Abolish the social contributions bonus per child, which tends to more help rich families, and increase the per-child tax credit (bonus) from SKK 450 to SKK 540.

Reduce the presently proposed monthly minimum wage for the year 2006 (starting from October 2005) from SKK 6,900 to SKK 6,630 per month. This measure would, on one hand, result in slower year-on-year gross minimum wage growth but at the same time, in combination with the first measure, would mean an increase in net income after taxation of these employees by an additional 2% above the currently proposed level. In other words, the gross minimum wage would drop, but the net wage would increase by an additional 2%.

The first measure would mean the standard taxpayer deduction remaining unchanged. However, in the case of an employee, it would be replaced by a tax bonus at an amount equal to the standard deduction. It would also be valorized in a similar manner (tied to an amount of 19.2-times the subsistence minimum). This would mean the tax burden effectively decreasing only for those who receive a relatively low wage. The principle would be the same as in the case of the existing tax credit on child (bonus): should the wage drop below a certain level, the employee will not only pay zero tax, as is the case now, but would receive a tax credit from the state in a proportional amount. It is true that such a measure would compromise horizontal tax fairness by only providing a tax benefit on income from work for the low-income category. On the other hand, should the tax credit apply for all taxpayers, there is a realistic risk of system abuse<sup>41</sup>. In the case of Slovakia this risk is high; therefore, at this time we prefer a measure that is efficient rather than theoretically just.

We believe the third measure is extraordinarily important because all parties involved will benefit from it. The net income of minimum wage earners will increase. In addition, the long-term unemployed will be further motivated to seek employment, which could yield economy-wide benefits in the form of higher economic growth including potential future higher revenue (taxes) and lower spending (welfare benefits) of the general government. This measure would provide a positive impulse on labor supply and on employer demand for workers. This in turn would lead to quite a significant total labor cost reduction, which is key when employing low-qualification workers. The following table shows that total costs incurred by employers for employees receiving the minimum wage would not increase 6.2% year-on-year, but only 2%, i.e. well below projected and long-term productivity growth.

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<sup>40</sup> Economic analysis No. 7, FPI, 2005

<sup>41</sup> For example, after the reform there were trends where people avoided taxation of revenue from savings up to the amount of the standard deduction per employee by filing tax returns on behalf of their own children.

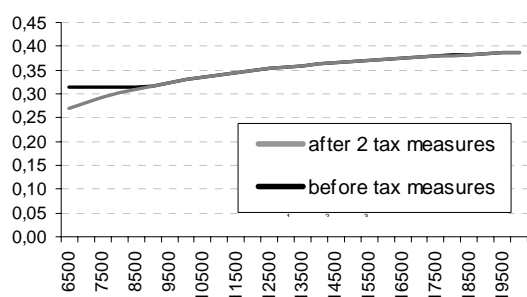
### Changes Resulting from the Introduction of Tax Measures

	Minimum wage	Net wage	Net wage growth	Total labor costs	Labor costs growth
	SKK	SKK	%	SKK	%
Actual minimum wage	6,900	5,975	6.1	9,329	6.2
Proposed minimum wage	6,630	6,091	8.2	8,964	2.0

Source: Ministry of Finance of the Slovak Republic,

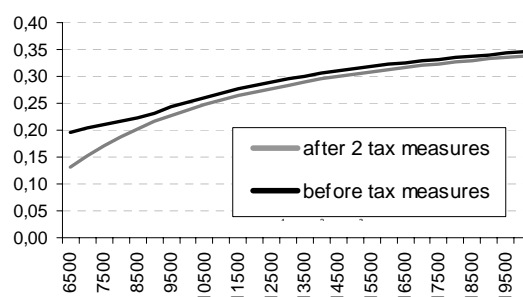
The adoption of the above measures would lead to a significant tax wedge reduction, in particular for low-income-category individuals. In other words, their net wage would increase.

Tax wedge exclusive of transfers to the second pillar (in per cent) - Individual



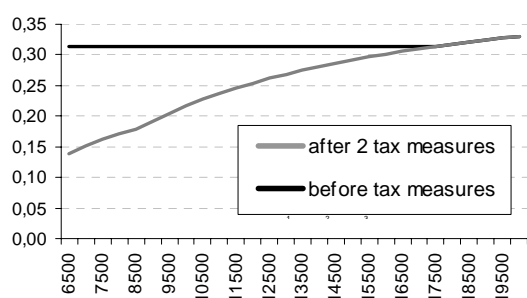
Source: Financial Policy Institute

Tax wedge exclusive of transfers to the second pillar (in per cent) - Individual with two children



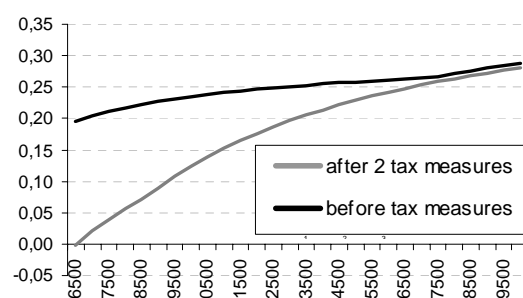
Source: Financial Policy Institute

Tax wedge exclusive of transfers to the second pillar (in per cent) - Individual with non-working spouse



Source: Financial Policy Institute

Tax wedge exclusive of transfers to the second pillar (in per cent) - Individual with non-working spouse + 2 children



Source: Financial Policy Institute

## 6.3. Health Insurance Contributions

Health insurance contributions are in fact a classic form of taxation **and in our opinion it would be desirable to transform them into the tax system**. Their total abolishment would cost the public finances approximately SKK 50 billion at 2005 prices, which would of course have to be compensated. Part of such compensation could come from higher taxable income (SKK 9 billion) resulting simply from the fact that the tax base would increase owing to lower contributions. Additional revenue (approximately SKK 4 billion) could be generated by widening the contributions calculation base (assessment base standardization). Social

contributions from the economically active population presently total approximately SKK 107 billion. Additional resulting tax collection<sup>42</sup> would reach SKK 20 billion (should we select the option of subjecting contributions to taxation and exempting pensions). Nonetheless, more is required. Should we theoretically increase VAT to 21% and increase some excise duties, total revenue could reach approximately SKK 13 to 15 billion. Another alternative is to increase the flat tax rate to 21-22%, which would actually transfer the labor taxation burden to capital taxation, at the same time increasing tax system progressivity. There would still be a gap of approximately SKK 3 billion, but that can be addressed via savings in other areas or from government priorities. Once again, we note that these calculations are provided for orientation purposes only and show the fiscal complexity of transforming health insurance contributions and including them in the general system of taxation, without considering the dynamic effects.

Another solution would be to abandon the principle of merit in the public finances and transfer a greater extent of personal financial responsibility from the state to the public. This would, inter alia, reduce public finance spending and the implicit state debt and create space for interesting ways to address the total tax burden including social contributions.

#### **6.4. Taxation of Pensions**

Another deformation exists. In its extent it has no comparison in the developed world and it must definitely be addressed. Although it arose in connection with social insurance reform, it relates to taxation because there was a lack of harmonization with the tax system. Private pension schemes in the rest of the world are subject to two types of taxation. Either the social contributions are tax exempt and are taxed when the pension is paid or, to the contrary, the pension insurance contribution is paid from income after tax. The first system is in operation in most OECD countries.

When the nature of the social contributions system in Slovakia became merit-based instead of solidarity principle-based, social contributions lost their taxation nature and became a forced saving. However, as is the case elsewhere, income from savings is subject to taxation in Slovakia. However, Slovakia forgot that income from forced savings should also be subject to taxation. Even pensions paid from the pension system's capital pillar are fully tax-exempt. Although this may seem to represent fair and equal treatment in comparison with the first pillar, it represents a tax deformation in relation to other types of savings and has no precedent in the developed world. There are cases in which a retiree receives an old age pension totaling SKK 20,000 and pays no tax and/or health insurance contributions.

**This situation may be resolved in one of two ways. The first is to tax contributions or benefits;<sup>43</sup> the second is the one more commonly used in the rest of the world.** It does not only apply for old age pensions, but also for sickness and unemployment benefits. This (second) solution is to abolish or significantly reduce the merit principle in the public finances.

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<sup>42</sup> Should contributions which are presently tax exempt be liable to tax.

<sup>43</sup> In real terms (due to the standard deduction) – this would only apply for pensions above approximately SKK 7,500

## 6.5. Standard Deductions

Tax reform reduced the number of standard deductions, which was definitely a step in the right direction. However, we believe that maintaining – and in particular raising – the **spousal deduction** creates problems. We need to realize that this has a de-motivating effect and discourages spouses from seeking employment, and this is not good when the population is ageing and discussion concerning the need to increase labor market participation is ongoing. It is even worse based on the empirical observation that the standard deduction has no effect on motivating women with high income but may have a significant impact on women with low income. The objective was meant to be the support of families and that can be done much more efficiently via the existing tax credit (bonus) or child allowance.

The table on page 49 shows that in terms of the inactivity trap, Slovakia is above the EU-19 average, primarily in the case of childless couples of which only one works. The proposed measures aimed at better motivating low-income categories will make the situation even worse. This is clearly attributable to the high standard deduction for a non-working spouse.

Similarly, though somewhat less problematic is **the standard deduction of so-called long-term savings**. Again, it has been empirically proven that tax benefits provided for saving schemes do not always increase total household savings in the economy (which are desirable due to the ageing population). They contribute to a change in the savings structure rather than increasing the total amount of savings. In addition, they cause allocation inefficiencies connected with market environment deformation. The answer to the question of who is the final recipient of benefits connected with such schemes is also very controversial and lacks clear empirical support. Is it financial institutions or taxpayers? A big part of the answer is certainly related to the level of financial market competition. In Slovakia, everyone can draw his/her own conclusion; we believe that the level of competition and the range of financial products is still not so good that we can omit this factor in our decision-making.

For now at least, the amount of this standard deduction – SKK 12,000 per year – is reasonable. We must also bear in mind that should this amount increase rapidly, those at whom it was directed would no longer benefit from it. The targeted category was potential retirees who presently have relatively low income and must be motivated to save. Other countries often failed to achieve their final aim, especially when they allowed supplementary health insurance as another tax deduction.

From the viewpoint of economic efficiency, canceling or significantly reducing the remaining standard deductions and just leaving the tax credits (bonuses) would be an ideal solution. The second, less decisive solution would be **to fix the nominal amount of standard tax deductions (for long-term savings and for non-working spouses) and to tie the latter to maternity leave**. In such a case (until the child is three), the spouse's motivation to seek employment does not need to be scrutinized.

## 6.6. Public Interest

The option to earmark 2% of personal and corporate income tax for public interest purposes is a tool designed to develop activities in the public interest. Originally, this tool was implemented in 2002 for natural persons only. Tax reform has abolished the non-systemic option to deduct the value of donations from the tax base. In order to ensure that support to

activities in the public interest is not reduced as a result of the reform, legal entities were also given the opportunity to allocate 2% of their own tax liability for activities in the public interest.

This tool undoubtedly has several advantages. In a society where, on one hand, there is substantial social demand for support of activities in the public interest but, on the other hand, a relatively under-developed culture of voluntary contributions for these purposes, it is reasonable for part of such activities to be funded from public sources. As compared to the alternative form of money flow via public spending, the form of the direct allocation of part of a taxpayer's own tax liability has a big advantage, namely in the fact that it is better earmarked, which is a key aspect of such a sensitive issue. In other words, the funding of these activities is targeted and based on the will and decision of the taxpayer himself/herself rather than on the decision of a state official, which, in principle, creates moral hazard.

This tool also has disadvantages. First is the fact that the taxpayer can decide how to use a part of his/her own tax liability, which represents a non-systemic element contradicting the substance of taxation itself. The optimum form of supporting activities in the public interest exists in societies which tend voluntarily to participate in charitable activities, so-called "donorship" (for example in the U.S.A.). In addition, the tool is very administratively demanding – financial authority officials can confirm this. Finally, in terms of transaction costs, costs incurred by the providers of activities in the public interest are also very important. Since sources are limited and demand is large, providers compete with one other (and generate costs in presenting and promoting their activities). Competition undoubtedly has its place in this arena, but marketing costs take too large a chunk of sources, especially when these are very limited in absolute amounts, which is the case in Slovakia.

**In our opinion, however, the above-mentioned advantages of this tool outweigh its disadvantages. Therefore, an alternative to abandoning it completely would be to leave the option to earmark part of the tax liability for natural persons only.** For legal persons, this option is not only non-systemic, but generally damaging. It loses the personal engagement component that exists when an individual decides on the use of part of the tax payable on his/her own income. Therefore, it is not surprising that in practice we find this tool is used (or rather abused) for purposes other than those intended by the legislators. Companies can establish their own not-for-profit organizations using their own taxes<sup>44</sup> and these organizations then provide the same services to company employees that used to be provided within the company.

## 6.7. Tax Burden on Labor and Capital

The most efficient method to use for a tax burden analysis is to break down the tax burden according to income source. We can say that tax is only effectively paid on income from work and income from capital. The comparison between the tax burden on labor and tax burden on capital can be evaluated from the perspectives of fairness and effectiveness. If equality is understood as equal income, we must admit that there is a certain compromise between fairness and tax effectiveness; in principle, this means that a greater degree of fairness automatically means less effectiveness, and vice versa. However, this boundary is not fixed, and differs in individual countries. One country may have a strong tax redistribution mechanism to the benefit of efficiency, while in another it may slow

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<sup>44</sup> (instead of paying 19% tax into the budget they only pay 18.6%)

development. In our opinion, Slovakia presently belongs to the second group and the reform was drafted with this in mind.

The preceding chapter shows that the tax burden on income from capital is relatively lower than the tax burden on labor; this further applies in an international comparison. The fact is that differences were highly significant prior to reform and have even increased since its implementation.

There are several scenarios and options for the future direction of the Slovak economy, a direction whereby convergence with developed countries occurs as quickly as possible in terms of the population's living standard. Whatever the recipe for the right path, at this time there is no doubt that the main impulse behind Slovak economic growth is inbound foreign investment. Without it, all other advantages, such as educated and relatively cheap labor, geographic location etc., are reduced to mere potential growth sources.

It has been proven that the question of capital income taxation is not decisive for foreign investors, though in the case of a country such as Slovakia it is very important. It is also known that Slovakia has been highly praised worldwide for its tax reform, which attracted the attention of foreign investors. The key point in the whole process is the ultimate synergistic effect of all the structural reforms that are of importance to the foreign investor.

Professional circles have remarked that low taxation of capital as compared to labor will attract primarily capital-intensive investments with relatively low labor added value, i.e. will have a minimal positive effect on employment. This risk does exist to a certain extent. However, we must also keep in mind current reality, and most importantly alternative options. In a short time, our primarily industrial economy and average development level will not transform itself, as a result of brilliant political decisions, into a highly developed economy based on advanced technologies and know-how. Reforms may accelerate this process, but economic miracles do not exist. Given the existing Slovak economic structure and the corresponding level of workforce qualification, it will be some time before automotive plant investment projects cease to be interesting for Slovakia.

Under current Slovak economic conditions, we believe that the tax burden distribution between labor and capital is appropriate from the perspective of economic development. In the short- and medium-term, we prefer efficiency over equality. At the same time, however, we think that space will be created in the future for a correction in the ratio between labor and capital taxation to the benefit of labor and that this space should be utilized. To what extent this difference can be reduced primarily depends on public finance spending side reforms. The total spending level is a threshold under which a responsible government should not go in the long term when reducing total tax burden. The second threshold is the capital income taxation level and trends on an international level. In the global economy, capital is much more "mobile" than work. Should Slovakia have a competitive disadvantage of high capital taxation, it would cause capital outflow and, given the existing structure of the Slovak economy, could represent economic suicide. Subsequently, our economic, budgetary and social goals would not be met. Since every country is well aware of these facts, in the last several decades there has been a clear tendency toward reducing direct taxes (in particular, corporate income tax) and shifting the tax burden toward indirect taxes. Thus despite the desirability of reducing the difference between the taxation of labor and the taxation of capital in the long term, complete equality is still not possible.



The conclusion is that the tax burden imposed on labor is much higher than the tax burden on capital. This tax burden distribution is appropriate at this time given that inbound foreign investment is the main source of economic growth. This ratio between the taxation of labor and of capital will, in our opinion, provide room for future adjustments to the benefit of labor; however, today there is only room and a need to reduce the effective taxation of labor in low-income population categories.

## 6.8. Investment Incentives

Offering investment incentives in the form of tax holidays is a controversial issue that attracts the public's attention. From the economic perspective, there is no simple answer, and that creates even more room for political negotiations and decision-making. On one hand, the theory is clear – selective business subsidies represent a textbook example of business environment deformations. But on the other hand, the Slovak economy exists in an environment of less than perfect competition where such practices are commonly used, and there is a question whether a possible principle-based approach would not in fact slow economic development.

This document does not attempt to provide recommendations in this matter; however, we will discuss some related issues which should be considered in the course of political decision-making. First, it is impossible accurately to determine and quantify the boundary for tax stimuli that Slovakia should and should not accept to ensure they provide long-term economic benefits for Slovakia. **But we can list some financial criteria that could play a key role in the decision-making process.** This process should be transparent and easy to review. Secondly, selective stimuli deform the business environment, especially free competition. Therefore, one important criterion for offering stimuli should be an analysis of whether an advantaged business has market competitors operating in the same sector. Even though this fails to address the question of inter-sector competition, it at least eliminates direct market distortion. Finally, we must not forget the praise that Slovakia received for its structural reforms. In a global economy, the good credit of a country undergoing reform does not only mean its good standing, but also represents political capital that is valued by the market even though it may not be perceived as such in the short term. **In our opinion, investment stimuli via the tax system are a bad tool. But, given the fact that neighboring countries also provide incentives, they are acceptable in justified cases and on the basis of a clear cost and benefit analysis.**

## 6.9. Capital Gains

Income tax has a big disadvantage as compared to taxing consumption, i.e. in some cases it is difficult to identify income and assess the tax base. Tax theory offers the Schanz-Haig-Somons definition of the general taxation of income. According to this definition, from the perspective of maximum efficiency and fairness, an optimum tax base is defined as the market value of consumption plus the change in the taxpayer's wealth for a certain period. But no country in the world applies this tax base definition in its tax legislation, mainly due to the associated high costs of computation on the part of the taxpayer and costs of control for the tax administration. For the purposes of this material, we will work with the fact that for the above reason, some income is either subject to a lower effective tax rate as compared to other incomes or is completely tax exempt. In practice this of course results in attempts by taxpayers to transform taxable income into non-taxable income and creates certain space for

tax evasion. We have already mentioned the problems experienced and costs incurred by the tax administration in connection with this issue.

Typical examples of such problematic income include remuneration in kind, imputed income or capital gain. For practical reasons, social contributions, for example, are also paid only from certain types of income from work. We must appreciate that the Slovak tax legislation took a standard approach to such types of income, and that applied both before and after the reform. Remuneration in kind is generally taxed like cash income – a standard system of valuation is available for this purpose. Imputed income, such as income from rent collected by apartment owners who are at the same time the apartment users, is not taxed at all. The real estate tax represents a certain supplement of this income taxation and this approach is commonly used in the rest of the world. Capital revenue is not taxed at the time of income realization (accrual basis) but at the time of cash payment.

Tax reform introduced measures that represented another step toward better efficiency in this area. As an example, we would like to mention the abolition of the tax exemption for social fund income in an amount of up to SKK 2,000 per year. The planned valuation of real estate for the purposes of calculating real estate tax is also a step in the right direction; however, the question remains of whether the related administrative costs will increase so much as to result in a net loss for the public finances. Regarding capital gains, we must also mention the abolition of the non-systemic provision that exempted capital gains from tax in cases where securities were held for longer than three years.

To a certain extent, the asymmetry that arose from the combination of the abolition of dividend taxation and the existing problem of double taxation of capital gains is problematic. The abolition of dividend taxation was motivated by the effort to eliminate double taxation and, in terms of the economy, there is no doubt that this measure was correct. But let us imagine a situation in which the taxpayer purchased stocks for the purpose of investment. If he/she decides to re-invest profit after taxation rather than collect it in the form of dividends, it is very likely that the market value of an enterprise that re-invests its profits will grow. On sale, the taxpayer will be liable to tax on the income representing the difference between the purchase and sale price of the stock (including capital gains). In other words, re-invested dividends, in contrast to collected dividends, are to a certain extent subject to taxation. In practice, it is often difficult to determine which part of the stock price increase is attributable to re-invested dividends and which to other factors (such as market appreciation). Therefore, this distortion cannot be effectively addressed with the ultimate goal of exempting dividend income at the level of natural persons from taxation irrespective of whether the dividends were re-invested or not.

For this reason the only approach is to maintain the present situation (which is similar to that existing in other countries). On the other hand, the situation could slow dividend re-investment, a potentially significant source of investment and development in Slovakia. With this fact in mind, another solution may be to abolish the taxation of capital gains from stocks. But this, too, may not be an optimal solution because it would provide a tax benefit for stock transactions as opposed to other financial and non-financial assets. There is also a third option – the total abolition of capital gains taxation. This option also has several disadvantages. It is obvious that, of the three, this solution would have the greatest negative budget impact. But there would be another and more important problem – exempting one type of income from taxation, and that would be in breach of the basic principles of reform and flat tax. In addition, it would further deepen the difference between taxation of income from work and income from capital.

**Thus there is no simple answer to this problem. In other words, we must start with an analysis of priorities from the viewpoint of Slovakia: 1. simplicity and relative fairness; 1. equality of dividend and investment taxation; or 3. equality of capital gains taxation. The solution represents a political decision. In our opinion, at this stage the second option, i.e. abolishing taxation of capital gains from stocks, would be best for Slovakia.**

## **6.10. Role of the Public**

In our opinion, it is important for the public to understand the principles of the tax reform. We do not mean that public opinion needs to be massaged, but we would like to point out that public opinion and public pressure are very important if we want to avoid the reform principles being overturned. Tax policy changes ultimately represent a political decision and therefore are legitimate. But real tax reforms have one significant weakness due to which they are only seldom implemented and, if they are implemented, small gradual "amendments" later creep in and ultimately the tax system slowly returns to its pre-reform status. This does not mean that unpopular reforms are not usually implemented. This is just the reason why reforms are often gradually eroded.

The reason is the concentration of benefits and costs among different economic subjects, while the reform costs<sup>45</sup> are borne by smaller groups with a relatively large degree of influence. In the long term, all citizens benefit from reform because reforms normally increase economic efficiency and establish conditions for higher economic growth. As a rule, however, people primarily perceive the short-term negative impacts on the living standard of some citizens. Nowhere in the world is a society so utterly disciplined as clearly to recognize and defend long-term benefits over short-term problems. However, one influential category, in particular – business – does not warm to the abolishing of different allowances and exemptions or even to a tax increase. In contrast to the public, businesses not only recognize their own reform costs, but can efficiently concentrate their influence and work toward change.

Tax reform redistributed the tax burden in the economy and created categories of winners and losers among economic subjects, including households (with a significantly higher number of winners). The fact that, in the course of the last year, the Ministry of Finance of the Slovak Republic received many requests for excise duty rate reductions is interesting, albeit not surprising. This pressure was and still is quite strong, and there are all kinds of supporting arguments. The most frequently used arguments include worries about employment, inflation and the population's living standard, if, for example, the excise duty on beer is not reduced. Any excise duty rate reductions will represent a reliable barometer of our abandonment of the sound foundations of tax reform.

## **6.11. Tax Administration Costs**

This document evaluated the impacts of tax reforms that are very important and that lay within the Ministry of Finance of the Slovak Republic jurisdiction. But one very important reform area was not evaluated: tax system efficiency from the perspective of tax administration costs, on one hand, and taxpayer costs incurred in paying tax, on the other. And this issue represents a key characteristic of reform that is very interesting for the

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<sup>45</sup> Or in other words, removing benefits of deformations

professional public abroad. The goal of tax reform is always to simplify and render more efficient the tax administration processes of tax collection and control. And the simplification of processes connected with tax payment on the taxpayer side is no less an important goal. The results of the analysis should show whether the tax administration is more effective in its activity and whether taxpayers can better concentrate on their own business because we have succeeded in simplifying the tax system. Finding out whether and to what extent tax reform improved taxpayer willingness to pay taxes is often the goal of similar analyses.

However, such analyses cannot be performed only one year after reform implementation. The results may be misrepresented, for example, by the fact that even system simplification is a significant intervention in the existing mechanism, which requires adaptation on the part of both the taxpayer and the tax administration. Therefore, start-up adjustment costs may exceed past operating costs. This in no way means we should not intensively monitor the situation at this time, but the tax administration or the academic sector should play a dominant role in this type of analysis. In the case of fundamental tax reforms, it is common for the practical implementation phase to reveal certain shortcomings that need to be “fine-tuned”. And it is the tax administration which plays an indispensable role in diagnosing shortcomings and which should initiate legislative changes to be adopted by the ministry.

## **6.12. Fight Against Tax Evasion**

The avoidance of tax obligations and tax evasion represent net loss from the public finance viewpoint which must be compensated by higher taxes to cover the given amount of spending. From the economic perspective, they also represent inefficiency because some subjects have a competitive advantage, not as a result of their higher competitive ability but as a result of cutting costs by avoiding taxes. And, finally, tax evasion increases vertical income inequality because it is most concentrated in higher income bands. Therefore, the government’s first priority should be to fight these practices.

The tax reform implemented in Slovakia attempted to reduce this problem by reducing the possibilities for tax evasion and increasing the motivation to declare tax, i.e. the reform focused on tax evasion. Tax evasion is a criminal activity and cannot effectively be addressed through tax legislation alone. Even more important in this area is tax administration efficiency and the overall legal awareness of the population. We need to keep in mind that EU accession introduced a new VAT and excises regime; therefore, to a certain extent illegal activities may become even easier.

Can Slovakia move forward in this area if supported by appropriate government policy? Without having any ambition to submit specific proposals, we believe that there is room to make tax administration more efficient and increase the population's tax payment “discipline”. In terms of the latter, the biggest problem is the deeply rooted passive support of tax evasion (purchases without receipts, etc.). When formulating these policies, we must not forget that investment in this area may pay for itself in the very near future.

Presently, we are not sure whether the tax evasion level in Slovakia is higher, lower or average as compared to comparable neighboring countries. However, like analysts comparing tax burden indicators on an international level, we believe that total Slovak general government budget tax revenue does not correspond with the total tax rates. To decide to what extent (if at all) is a challenge for analysts. For politicians and the tax administration, the challenge should be the question if anything can be done. We must not

forget that this area may be a potential source of additional budget revenue and/or may provide room for future tax reduction.

## **7 How Have Other Countries Evaluated The Tax Reform?**

At the outset we stated that the tax reform was implemented by the Slovak Ministry of Finance and that this document comprises an evaluation of this reform. For the sake of objectivity, in this part we submit opinions of foreign authorities on the reform.

This matter can be approached from several perspectives. Simplest would be to present several laudatory quotations from important authorities – and there were many of them. Every reader can judge the weight of such evaluations depending on how he/she views the significance and professionalism of each of the given persons and/or institutions. But this is an analysis, not marketing material, and therefore we will take a different approach to foreign evaluations of reform. In our opinion, when listening to an evaluation it is important to understand why the person is saying what he/she is saying and what his/her motivation is rather than just listening to what is said.

First of all, we must understand why not only domestic but also foreign assessments concede that the reform was indeed a reform in substance and not just in name. The answer may be quite surprising for some of us. Many, including “policymakers”, think that in the case of taxes, for example, a reform is always considered a reform when the system is changed in a significant manner, and primarily when the tax burden is reduced.

Such reform characteristics may often suffice for domestic needs, but never would they suffice for a professional assessment abroad. Slovak tax reform did actually overhaul the tax system in a fundamental way, mainly in the area of income taxes, but there was no significant tax burden reduction, as one of its goals was fiscal neutrality. But even if the tax burden were actually to have been reduced, these characteristics would still have nothing in common with reform. We need to remember, for example, that the tax burden in Slovakia was significantly reduced through 2004, and no one called that a reform.

Reform is a systemic change that establishes conditions for increasing either the dynamic or static allocation efficiency of sources in the economy. In more understandable terms, it reduces opportunities for profit which is not generated in the market and in a competitive environment, but which is guaranteed by the system to individual interest groups. And it is very important to reduce, not re-distribute, total benefits. This means that the tax reform’s main feature was not the flat tax itself, which in most cases reduced the tax burden on income and reduced the progressivity of taxation of individuals. Nor was it the shift of the tax burden from direct to indirect taxes or from capital to labor. Despite representing significant systemic changes, these changes only represented a tax burden re-distribution, albeit with a positive impact on efficiency and economic growth. What really made the tax reform a reform were measures such as the reduction in the number of tax exemptions, tax allowances, special regimes, etc. Mr. Val Koromzay, Director of the Economic Section for OECD Countries Studies, presented these thoughts and this definition of reform in March 2004 at an international conference in Bratislava.

In our opinion, foreign expert opinions about reform can generally be divided into three categories, depending on the aims pursued by these groups. The first group comprises experts, who analyze reform from the perspective of its economic efficiency and social

sustainability. The second group is the private sector, primarily foreign investors who evaluate the openness and quality of the business environment. Their goal, of course, is potential profit. The last group comprises politicians. They evaluate reform from their point of view while pursuing their own political aim. They express opinions on foreign reform that are in line with the intentions of their domestic political agenda. This is legitimate, on one hand, but on the other must be kept in mind.

The entire academic sector represents the expert group, but the analytical capacities of international institutions, such as the OECD, the IMF, the World Bank and the European Commission, are most significant for reform evaluation. In these cases, their international credit is based on professional evaluation.

All the foregoing institutions expressed positive opinions regarding Slovak tax reform. The OECD more so than the others, which is even more satisfying owing to the fact that the OECD has the highest academic credit of these institutions. The goal of the IMF and the World Bank is especially to monitor the social dimension of reform. Both these institutions stated that the tax reform and other structural reforms did indeed worsen the social situation of some population groups, but that these measures in most cases were necessary and were motivated by an attempt to reduce system abuse and increase the activity of the given groups. Social cohesion in Slovakia was not jeopardized; to the contrary, the real income of nearly all population categories increased in 2004.

Foreign investors make up the second group. We do not understand why their statements and acts are often perceived incorrectly. We need to understand that the main, if not only, goal of foreign investment is profit and that foreign investors see the business environment of individual countries from this perspective. When for example, Mr. Steve Forbes praised Slovakia for its reform, especially its tax reform, it meant nothing other than the fact that the reforms improved the investment environment in Slovakia and thus the country became more interesting for investors. But people have mixed feelings about investors who, on one hand, praise Slovakia for reforms that eliminated different exemptions and exceptions but who, on the other hand, solicit the government for various exemptions, in most cases for tax relief, if they do decide to invest in Slovakia.

This situation, at first glance paradoxical, often causes ill will against foreign investors among the general population. But this is caused by the fact that investors always have profit foremost in mind, and, given the option, will always seek tax relief, which is completely legitimate. In this sense there are no "bad" or "good" investors. We must not forget that, ultimately, it is the state which decides whether or not to provide selective tax incentive to investors.

The third important group is made up of politicians from individual countries. As mentioned earlier, their declarations must be understood in the context of their own aims and domestic political agenda. One frequent subject of complaint by some countries is the Slovak corporate income tax rate; they argue that it constitutes unhealthy tax competition. But we think that worries about preserving fair economic competition at an international level are not the only motivation for criticism. Another possible explanation may be the high level of re-distribution in their domestic economy and the inability to reduce the tax burden, and the related fears that investors would leave in search of more lucrative conditions.

We also think that sound economic competition is the basis for dynamic economic growth. But we have a slightly different opinion regarding so-called tax competition. We admit that

from the viewpoint of international efficiency in the production and consumption of goods and services, a certain rate of indirect taxes harmonization is necessary because they represent a direct price component. But should direct taxes also be harmonized, it would mean in practice that the tax burden would be the same in every state. And that is where we disagree. We mentioned earlier in this material that there are developed countries with a high tax burden, high general government spending-to-GDP ratio and high re-distribution rate in the economy, and yet things do work. However, we also think that poorer countries, including Slovakia, cannot afford this “luxury”. It is a proven fact that the acceptance of a higher rate of social empathy (i.e. including higher taxes) grows proportionally with economic development, i.e. with the higher overall living standard of the population. It is not difficult to prove that at the time when today's most developed countries grew the fastest, their total tax burden was significantly lower than it is today.

At the end of this chapter we would like to point out that the evaluation of domestic reform by foreign countries should not be overly emphasized or misused. Foreign opinion can provide a valuable, objective view, but we must understand and perceive the perspective and aims of the person offering an opinion.

## **Conclusion**

The tax reform attracted the attention not only of domestic, but also foreign, experts and laymen. In general, we can say that those supporting its idea prevailed over those who rejected it. Despite the fact that a clear evaluation will only be possible after several years, now - a year and a half since launching the reform - it is already clear that the positive effects exceed the reform costs. The following are the main conclusions of this analysis:

The principles on which the reform was built seem to be correct and are in line with recommendations of international authorities.

The reform brought a strong marketing effect for the country as a whole and already has positive consequences in bringing not only marketing but also substantive results. Slovakia became more attractive, investors are coming and that of course means new jobs are being created. It is interesting that in view of the Slovak reform several countries have adopted or considered adopting similar tax changes.

Tax revenue created more budget income than expected, but this factor is in part also attributable to faster than projected economic growth. Though to a certain extent, higher economic growth itself was generated by the reform's introduction. As compared to the non reform scenario, the total tax burden in 2004 dropped by approximately 0.5% of GDP. These costs will be offset in the future in the form of higher tax bases as compared to the non reform scenario.

Tax reform has relative winners and losers. But for most people, real net income did not decrease. The reform even increased direct taxation progressivity at the household level. The total tax burden also dropped in most household deciles. It seems that total tax system progressivity at the household level did not change much.

Everyone makes mistakes and, especially in the case of significant changes, not everything can be accurately estimated in advance. No one can claim that the present tax system is flawless. Therefore, we will definitely need to discuss improvements in the future, primarily

in three areas: the character of health insurance contributions, taxation of pensions and base harmonization. In addition, we will also have to address the taxation of labor and capital dilemma.

Slovak reform attracted attention abroad, inter alia by the fact that “everything is subject to a 19% tax rate”. The coming years will show how economically and politically sustainable this system is. But it would be a pity if the cornerstones of this system were to be changed before we can see the medium-term effects of the implemented changes.



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