CORPORATE TAX REFORM IN REPUBLIC OF MACEDONIA

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Abstract

The Direct Tax System in the Republic of Macedonia has always been subject of continuous reforms and additional improvements in order to achieve primary tax policy goals for simplicity and efficiency, especially in the period after the country became a candidate for membership in The European Union. The efficiency principle usually demands a tax structure with lower statutory tax rates and therefore, lower effective corporate tax burden that will not distort the investment decision. On the other hand, the simplicity principle requires a structure with less tax items and tax brackets, as well as lower administrative and compliance costs.

From this perspective, tax authorities in Republic of Macedonia have made great efforts to restructure and redesign The Corporate Income Tax System and ultimately produced some simple and interesting solutions. Therefore, the goal of this article is to describe the Corporate Income Tax System in the RM as well as the recent reform trends that included: introducing flat tax rates in direct taxing, implementing the Tax on Gross Revenues for small enterprises, restructuring the Corporate Tax Incentive System etc. Except the description, the intention is to evaluate the effect of these tax code derogations by using some of the reliable effective tax burden measures such as the marginal effective tax rates – METR, and its components.

The basic research method used in this article is the descriptive method. The rest of the methodology is consisted of: the comparative method, the empirical method, and the method of the METR. After reviewing the article, readers will have an illustration of the concept of the Macedonian Corporate Tax System and its recent trends and solutions that made it more effective over time. Therefore, it is highly recommended for researchers in the field of comparative tax studies, tax officials, investors as well as any other interested parties.

Key words: tax rate, tax base, tax entities, tax burden, dividends, capital gains, etc.
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1. General considerations

The tax reform can be described as a dynamic process of continuous improvement of the structures of the national tax systems in order to fulfill the general economic and tax policy goals. Each tax reform is generally consisted of some mutual and essential elements such as: the historical element (what were the economic conditions at the beginning of the reform), the cause element (what were the main drivers of the reform), characteristics (what were the distinctive features of the reform), and the success element (was it able to accomplish the primary policy goals). The experience confirms that some of the most powerful tax reform drivers from a domestic and international point of view are the general tax policy principals such as efficiency and simplicity.

The efficiency principle usually demands a tax structure with lower statutory tax rates and lower effective corporate tax burden that will not distort the investment decision. It is very difficult to define tax distortion because of its complex nature therefore it is desirable to be explained with reference to a neutral tax system. Theoretically, a neutral tax system generates equal tax burden across the economic agents, without any tendencies to change the relative prices between factors of production. However, the overall implications of these distortions depend on the response of economic agents: a given tax system will have large distortionary effects on the economy (i.e. high deadweight losses or excess burden) when the elasticities of substitution are high and small distortionary effects when the elasticity of substitution is low.\(^1\) There is strong evidence that all taxes are potentially distortive, but the majority of the experts agree that corporate tax has an exceptionally strong impact on the relative price of the capital, and therefore on the corporate firm’s finance and investment decisions.

The corporate tax system can affect the company’s behavior in a number of ways. First, it influences the choice of the sources of finance. Empirical studies confirm that high corporate tax rates could increase the cost of equity-financed investment because of the treatment of the interest payments as a deductible item on the tax base. Consequently, that will reduce the total amount of equity-financed investment of the firm. Also, there is evidence that certain types of taxation create a preference to more frequent use of retained

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earnings as a source of finance instead of equity (e.g. preferential tax treatment of capital gains over dividends; or taxation of capital gains upon realization). Secondly, if the corporate tax system generates excessively high tax burden, then it can depress the overall investment activities in the domestic economy. In international context, corporations might trigger tax planning activities to shift taxable income from affiliates in high tax countries to affiliates in low tax countries. Next, corporate tax can seriously affect market dynamics on mergers and acquisitions as well as the legal organizational form chosen by the firm. Except these, there are many other examples for corporate tax influence on the company’s behavior.

Another important factor that contributes for the corporate tax reform is the enormous complexity of contemporary tax systems. It results in high operating cost of the tax system. According to Sandford\textsuperscript{2}, operating costs represent an important concept for evaluation of the effectiveness of the tax system to collect sufficient amount of tax revenues. The larger amount of tax revenues per unit of operating cost are collected, the more the tax system is effective. The operating costs are consisted of the administrative costs (the costs that are generated by the tax administration to serve the national tax system) and the compliance costs that are usually of inherent nature (the costs above the actual tax liabilities generated by the tax entities in order to pay the taxes). Because the intention is to reduce the complexity of the tax system, every tax reform has to include certain measures that would improve its overall simplicity such as: simplifying the tax structure, lowering the statutory tax rates, implementing flat tax rates, lowering the number and the intensity of the tax incentive measures, cutting the number of deductible items etc. This can be realized through an extensive process of simplifying the national tax code, for example, according to the concept of “restructure, renumber, rewrite”.\textsuperscript{3} Actually, in most of the cases, tax simplicity may be complementary with tax efficiency and the biggest challenge of every corporate tax reform is to jointly accomplish the general tax policy goals.

2. The Corporate Tax System in Republic of Macedonia

Basic priority of the Corporate Income Tax (CIT) reform in the Republic of Macedonia (RM) is to maintain a tax structure that would enable a relatively simple and easy administration and at the same time would provide a comparatively lower corporate effective tax burden. Elementary, the development programs had to create more stable and much safer investment environment through improvement of the transparency of the tax system, as well as through elimination of the level of the corruption within the tax administration. Then, the CIT system had to be revised in every aspect of its basic elements. According to the latest National Corporate Income Tax Code\textsuperscript{4}, the elements of the CIT structure in the RM are as they follow:

Tax rate. The basic characteristic future of The Direct Tax System in the RM is the application of proportional tax rates on CIT base as well as on Personal Income Tax (PIT) base.\textsuperscript{5} This means that the RM has implemented a flat tax rate within its Direct Tax structure. Accordingly, the statutory (or the nominal) tax rate is 10% on taxable income for legal entities (companies and corporations), as well as on taxable income for individual entities. The concept of the flat tax rate in direct taxation was firstly introduced in 2007 when the tax rate of 12% was implemented in January, and then from the beginning of 2008 until now, the rate was reduced at 10%. This step was a clear proof of the major change in the overall tax policy for radical improvement on the tax structure in the RM. Before 2007, the tax structure was consisted of proportional tax rate on corporate income and progressive tax rates on personal income. The CIT rate at the beginning of the independence period was 30% and it was in force until the end of 1995. In the period 1996-2007 the rate was lowered to 15%:


\textsuperscript{3} This principle was firstly introduced by some of the leading reforming countries such as Australia and Great Britain. According to it, “restructure” refers to rebuilding the structure of the tax code with fewer tax rules, “renumber” refers to implementing numerical system with less numbers, and “rewrite” refers to cleaning from the unnecessary terms and simplifying the writing style of the tax code: Howe G.: “Tax law simplification in United Kingdom”, Further key issues in tax reform, Old coach house, Fersfield, 1998.

\textsuperscript{4} Here we describe the elements of the National Corporate Income Tax Code that is temporarily in force from 01. 01. 2012. In order to explain the evolution of the elements we refer to the National Corporate Income Tax Code in the period from 1993-2012.

\textsuperscript{5} We use the same practice for the elements of National Personal Income Tax Code.
(Table 1).

CIT rates in the RM in the period 1993-2012

<table>
<thead>
<tr>
<th>Period</th>
<th>Statutory CIT rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993 - 1995</td>
<td>30%</td>
</tr>
<tr>
<td>1996 - 2006</td>
<td>15%</td>
</tr>
<tr>
<td>2007</td>
<td>12%</td>
</tr>
<tr>
<td>2008 – 2011...</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: The National Corporate Income Tax Code of the RM.

On the other hand, the PIT structure in the period of 1993-2001 was progressive and included 3 marginal income brackets and 3 different progressive statutory tax rates (23%, 27% and 35%). Then, in 2001 there were implemented new tax code rules that reduced its overall level of progression. Firstly, there was a reduction in the number of the income brackets from 3 to 2, and secondly, the tax authorities decreased the nominal tax rates (15% and 18% additionally). Shortly after, the level of the progressivity was once again increased due to the implementation of the new tax codes in 2004 (3 income brackets with tax rates of 15%, 18% and 24% additionally), that lasted until the end of 2006, when the flat tax rate was primarily introduced.

From the evolution of the tax rate parameters, it is obvious to see the determination of the government for reform improvements, especially in a form of extensive tax rate cuts, not only to the CIT, but to the PIT as well.

Tax entities and tax administration. Tax entities (or tax payers) of CIT are resident legal business entities according to the National Trade Companies Code, that can take different forms of business organizations such as limited liability companies or corporations. Also, permanent affiliates and subsidiaries of foreign corporations are considered as tax entities formally, for the profit realized on the territory of the RM. The taxation year is identical with the calendar year, and companies must submit their annual corporate income tax return due to February 28th of the following year. All entities operating in Macedonia must make 12 advance payments of corporate profit tax by the 15th day following the end of each month. If, at the end of the taxation year, it is determined that the total of the advance payments exceeds the tax due for the year, the excess may be credited against future tax obligations or alternatively refunded.

Tax base. The generally accepted concept is that resident companies should be taxed on their worldwide income (i.a. the gross income realized from their regular business activities in domestic and foreign countries). Since April 2011, the tax base is defined as a sum of the taxable expenses (or payments subject to income tax) and the underestimated revenues. The first category, and that is “taxable expenses” refers to those expenses that are not excluded from taxation which actually form the tax base. By definition, it is considered that taxable expenses are not primarily connected with the firm’s regular business activities and therefore are subject to income tax. These tax items are clearly notified in the latest version of the National Corporate Income Tax Code. The second category, “underestimated revenues,” refers to the transactions between connected legal and individual entities and they include 4 basic items. The difference between the gross earnings book value and the tax on taxable expenses and underestimated revenues is subject of additional tax only in the case of distribution of the earnings (in a form of dividends or other forms of income distribution), when a withholding tax of 10% is applied. If the difference is negative, then a loss after taxes is generated, and in that case tax entities have a legal right to carry it forward in the next 5 (five) years.

Measures against erosion of the tax base. There are 2 basic measures involved in protecting the tax base from tax planning activities and income shifting: the thin capitalization rules and the transfer pricing rules. These measures were not fully developed in the previous versions of the tax code. According to the latest version, the thin capitalization rules regulate the treatment of interest payments for the purpose of taxation. Generally, interest payment on loans borrowed for the purpose of the regular finance activities are treated as a nontaxable expense, and therefore are not included in the tax base. On the other hand, interest payments that are not part of the regular business activities are considered as a taxable item and consequently, are included within the tax base. More precisely, the group of taxable interest payments is consisted of the following items: 1. interest expenses on delayed payments; 2. interest payments on loans

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6 The National Corporate Income Tax Code of the RM, article 11, and article 12.
7 See below in the next section.
from connected legal entities that are not considered as banks or other financial institutions, above the normal market interest rate; and 3. interest payments on loans from nonresident stockholders that hold minimum of 25% of the corporate equity, if the loan exceeds 3 times above the capital participation of the individual stockholder (as debt-to-equity ratio of 3:1). Rules that regulate the transfer of the profit between connected entities are based on the principle of the arm’s length prices. According to this principle, only the transfer prices that are comparable to the competitive domestic and foreign market prices are recognized for the purpose of taxation. Any difference between the transfer prices and the competitive market prices must be included within the tax base. As we can see from this article, these 4 measures are actually identical with the group of items known as “underestimated revenues” that take part of the tax base and also extend its dimension.

**Treatment of capital income.** Basically, if there is a decision for distribution of the profit after the calculation of the CIT (or the tax on taxable expenses and underestimated revenues), then corporations are obligated to withhold the tax on capital income. According to the tax rules, every form of income distribution from a domestic legal entity to any other domestic legal entity is free from taxation (zero rate withholding tax on the transfer of the profit). Resident legal entities are obligated to apply withholding tax on capital income only in the case of distribution of the profit to foreign legal and individual entities and domestic individual entities. The most common forms of income distribution that are subject of the withholding tax on capital income are dividends, interests, income from authorial rights, royalties from patents and know-how, fees for management, consulting, financial, research and development services, rent and payments under leases of immovable property, payments for telecommunication services and insurance premiums. Specifically, dividends are subject of the withholding tax on dividends. Here, the tax base is equal to the difference between the gross earnings book value and the tax on taxable expenses and underestimated revenues plus the amount of the undistributed accumulated earnings (if the management carries out decision for their distribution in a form of dividends). Also, if the company pays interest to the relevant entities, then it must withhold the tax on interest income due to the transfer. In these cases, the applied tax rate is 10%, as well as in any other case of income distribution. If transfer is made in favor of foreign residential entities, then the tax rate will be determined according to the tax treaties for avoidance of double taxation signed between the correspondent countries.8

**Treatment of capital gains.** Capital gains derived by resident companies and permanent establishments of nonresident companies are considered part of their regular gross earnings and they are exempt from tax until they are distributed. Individual stockholders must pay the capital gains tax only upon realization of the stocks. Tax base is identical with 70% of the difference between the share’s sales price and its acquired cost price (30% deduction on the tax base). As it is already noted, the tax rate is proportional and equals 10% on the base.

According to the tax code, the withholding tax rates on capital income (from interest, dividends and capital gains) in the previous period were 23% in the period 1993-2001, 15% in the period 2001-2006, 12% in 2007 and 10% in the period from 2008 till now.

**Foreign tax reliefs.** The residential tax entities who already paid their corporate income tax liabilities from the profit realized on the territories of the other foreign countries can qualify for the foreign tax relief. Actually, it’s a tax credit that gives relief on the tax liability of the qualified domestic entities in a value that is not higher of the national CIT rate. The purpose of this measure is to accomplish an effective relief from double taxation.

**Depreciation and inventories.** These two categories of expenses are defined as nontaxable expenses and do not enter into the tax base, because they come from the regular business activities. Code rules give open space for the Government to specify the details of the depreciation. Accordingly, the Government of the RM (or more precisely, the Ministry of Finance) has adopted The Act for the methods of depreciation on the assets in the RM and basically, it’s the primary regulatory frame in this area. Although the general tax code recognizes all of the standard depreciation methods (straight-line method and declining balance-method) and gives an opportunity for the specific functional method, The Act strictly restricts the choice to the straight-line method as the only relevant depreciation method. The rules of The Act requires that tangible and intangible assets must be capitalized according to their acquired cost price and they are

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8 About the withholding tax rates on capital income between the RM and some of the foreign countries see: Earnst&Young “The E&Y 2010 Worldwide Corporate Tax Guide”, Earnst&Young, April, 2010, p. 622.
subject of depreciation according to The National Nomenclature of depreciation (see table 2). In accordance with The Generally Accepted Accounting Principles, inventories are valued at cost.

(Table 2).

The National Nomenclature of depreciation

<table>
<thead>
<tr>
<th>No.</th>
<th>Group of assets</th>
<th>Annual deprec. rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Buildings:</strong></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>High structure buildings</td>
<td>2.5</td>
</tr>
<tr>
<td>1.2</td>
<td>Low structure buildings</td>
<td>3</td>
</tr>
<tr>
<td>1.3</td>
<td>Buildings with wooden construction</td>
<td>5</td>
</tr>
<tr>
<td>1.4</td>
<td>Other buildings</td>
<td>10</td>
</tr>
<tr>
<td>1.</td>
<td><strong>Equipment:</strong></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Machinery</td>
<td>5</td>
</tr>
<tr>
<td>2.2</td>
<td>Additional equipment</td>
<td>10</td>
</tr>
<tr>
<td>2.3</td>
<td>Furniture</td>
<td>20</td>
</tr>
<tr>
<td>2.4</td>
<td>Computer hardware</td>
<td>25</td>
</tr>
<tr>
<td>2.5</td>
<td>Other equipment</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Fruit and wine orchards, grain mills and other</strong></td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Herds</td>
<td>20</td>
</tr>
<tr>
<td>5.</td>
<td>Long term intangible assets</td>
<td>20</td>
</tr>
<tr>
<td>6.</td>
<td>Other assets</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: The Act for the methods of depreciation on the assets in the RM.

Tax on Gross Revenues (TGR). A specific future of CIT code of the RM is the existence of the so called Tax on Gross Revenues that was specially developed for the small enterprises. Trade companies that are classified as a micro and small enterprises according to The National Trade Companies Code are legal tax entities for the TGR instead for the CIT. According to the tax code, there are 2 types of small trade companies: 1. trade companies that are totally exempt from the obligation to pay the TGR; and 2. trade companies that could make a choice between the regular CIT and the TGR. The first category includes the enterprises with gross annual turnover of 3.000.000 denars or less (approximately 50.000 euro) The second category includes all trade companies (except the ones involved in banking, finance, insurance, gambling and entertaining businesses) with gross annual turnover between 3.000.000 and 6.000.000 denars (approximately 50.000 to 100.000 euro). If one model of taxation is chosen, then the companies are forbidden to change it for the next 3 years. The tax rate of the TGR is 1% on the annual gross revenues. Companies must submit their annual TGR balance due to 31st of May of the following year while payment of tax liabilities must be completed due to 30th of June.

Although the reason for promotion of the TGR was purely simplification of the tax procedure, a justified criticism has occurred among the experts and the business community. Accordingly, in the period when it was firstly introduced (2006) until the end of 2011, the code had not predicted the possibility for tax exemption for the smallest enterprises nor the option for the model of taxation, and therefore, the obligation for the TGR for every company was mandatory without any exception. Because the TGR is calculated on the annual gross revenues, regardless the amount of the annual gross expenses, enterprises were obliged for the TGR even in case of realization of a negative financial results. So, it was interpreted that the smallest companies of the entrepreneurship sector were discriminated against in comparison with the bigger companies and from that point of view the concept of the TGR was a step further from the general tax policy principals. But from the beginning of this year, this anomaly was corrected together with the implementation of the measures stated above.

The Tax Incentive System. The Corporate Tax Incentive system in the RM has gone under a substantial reduction of the number and the intensity of the available tax incentive measures. As a result of the drop of the number and the variety of the tax incentive instruments, there has been a trend of significant broadening of the national CIT base, which is in accordance with the general international tendencies. The primary aim was to minimize the risk of possible excess loss on the potential budget revenue account. For that reason, tax authorities had to make a transition from a policy based on narrow tax base and numerous targeted tax incentives to a policy based on wide tax base with small number of general tax incentives. This transition in the tax incentives policy area is also in accordance with the general tax policy principles for
simplicity. More precisely, tax entities are faced with less tax measures and have a clearer path for qualification of the instruments. On the other hand, the tax administration procedure is faster, easier and the process of determination of the tax base is more precise. In order to illustrate this process we present below table 3. This table compares the available tax instruments in 2012, and the instruments that were available in the previous period.

(Table 3).

Tax incentive measures in the RM

<table>
<thead>
<tr>
<th>Tax Incentives in the RM</th>
<th>1995-2012</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax holiday (CIT exemption)</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Partial profit exemption</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Preferential CIT rate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Accelerated depreciation</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Tax allowance</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Reinvested allowance</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Tax credit</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tax exemption on undistributed earnings</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Preferential tax zones</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>


The two possible direct outcomes from this reform are: 1. the increasing level of the marginal corporate tax burden; and 2. the increasing amount of collected public revenues from direct taxes (especially from CIT). There are some indicators that the presented policy has contributed for slight, but continuous increment of the corporate METR, despite the determination of the government to decrease the statutory tax rates. The data shows that the METR was -5.42% in the period from 2000-2005, 11.52% in 2006, 9.12% in 2007 and 11.77% in the period 2008-2011. Regardless the higher marginal tax burden, it should be noticed that the effect was not negative to the domestic efficiency, because the level of investment grew continuously from year to year. According to the State Statistical Institute of the RM, the level of domestic investment grew for nearly 2,5 times in 2008 compared to 2001 and nearly 2,4 times in 2010 compared to 2001. Also, in the period of the last decade, the RM has managed to improve the overall performance to collect tax revenues. The relevant data from the Ministry of finance indicates that revenues from direct taxes in 2008 had grown for 1,7 times compared to 2001. Within their structure in 2008, revenues from PIT had been increased for 1,2 times compared to 2001 and the revenues from CIT manifested a record increment of nearly 3,3 times compared to 2002 (from 2.624 million to 8.579 million denars). Concerning the relationship between the CIT and the METR, this growth rate can’t be insignificant and we can conclude that the increased level of the marginal corporate tax burden has a positive effect on the level of collected public revenues. Generally, we may conclude that the effect of the extension of the CIT base has been much stronger from the effect of the reduction of the CIT rate. Observed from that perspective, the CIT reform in the RM has effectively managed to achieve a formal balance between the fundamental tax policy principals.

3. Tax efficiency considerations

The most relevant parameters for determination of the potential efficiency effects are: the CIT rate, the capital income tax rates, and the character of the CIT system. From the previous sections we already determined the CIT rate as parameter (t). The capital income tax rate parameters are the withholding tax

9 Although indirect taxes (especially VAT) contribute the largest amount of tax revenues, they are not included in this analysis because they are not part of the CIT system, nor their effect is connected with the methodology of METR.

10 These are the author’s calculations of the relevant METR according to the methodology of King and Fulerton (1984); Assumptions: real interest rate 5%, inflation 2% and economic depreciation of the assets is 11.85%.

11 State Statistical Institute of the RM.

12 Ministry of Finance of the RM.

13 It should be noted that this conclusion is relevant only in stable macroeconomic environment since from 2008 there had been a drop on the CIT revenues due to the international economic crises.
rates on capital income (from interest, dividends and capital gains) and they will be determined additionally. The character of the CIT system (parameter $\theta$) is the level of the integration between corporate and personal income taxation. If the tax system is characterized as a classical CIT system ($\theta = 1$), then it means that there is no integration between corporate and personal taxation. In that case, the CIT is paid on the corporate profit and the PIT on dividends is paid upon distribution of the profit. When the system is characterized as an integrated CIT system, then ($0 > 1$), and in that case the CIT is paid on the corporate profit, but upon the distribution of the dividends a tax credit or tax allowance is granted on the stockholder’s PIT liability. Therefore the value of $\theta$ is higher than 1 for the value of the tax credit (c) or $\theta = 1/(1 - c)$. There is also a special case of so called “full integration” tax system where the amount of distributed gross dividends is deductible from the corporate profit base and in that case the value of the parameter $\theta$ is transformed to $\theta = 1/(1 - t)$.

Tax efficiency effects depend on the level of the marginal corporate tax burden and the relevant methodology used for its calculation is METR.\(^{12}\) The coefficient of METR is defined as:

$$\text{METR} = (p - s) / p$$

where $p$ represents the investor’s (or the company’s) rate of return before taxes and $s$ represent the saver’s rate of return after taxes. The parameter $p$ can be evaluated through the expression:

$$p = [(1 - A) (p + \delta - \pi) / (1 - t)] - \delta$$

where $A$ is the tax incentives net-present value, $p^{15}$ is cost of the capital (or the discount rate), $\delta$ is the rate of economic depreciation, and $\pi$ is the inflation rate. On the other hand, the parameter $s$ can be calculated as:

$$s = (1 - m) (r + \pi - \pi)$$

where $r$ is the real interest rate, $m$ is the personal income tax rate on interest income and $\pi$ is the inflation rate.

The term from the expression $(p - s)$ is also called “tax wedge” and it is an expression of the difference between the preference to invest and the preference to save. This term (the total tax wedge) can be divided into 2 parts: a) the investment tax wedge and b) the savings tax wedge.\(^6\) The second term is measured as $(r - s)$ and it represents the effective tax burden on the saver’s income. The first term which is crucial for our analysis is measured as a difference between the investor’s rate of return before taxes and the real interest rate $(p - r)$ and it’s an expression for the effective tax burden on the investor’s (or company’s) capital income. More precisely, if the effective tax burden is positive $(p > r)$, then the tax system depresses the investment activities. If the effective tax burden is equal to 0 $(p = r)$, then the tax system is neutral to the investment decision. And if the effective tax burden is negative $(p < r)$, then the tax system supports the investment.

There is only one more thing to define before the analysis, and that is the relation between the discount rate (cost of the capital) and the interest rate. In perfect economies without presence of taxes the cost of the capital is identical with the real interest rate $(p = r)$ and the economic agents are completely indifferent between the investment decision and the decision to save $(p = s)$. The existence of the national tax system diverges the difference between the cost of the capital and the interest rate and therefore creates a positive tax wedge $(p > s)$. In this case the key factor for the investment decision becomes the discount rate, because it can have different values according to the different sources of finance (debt, new share issues, or retained earnings).

**Calculating the effects of taxation on investment.** If we take into account all these considerations, we might evaluate the effects from the evolution of the tax structure through the methodology of METR. For that purpose we assume that the tax incentives net-present value is 0 $(A = 0)$, there is no inflation in the economy $(\pi = 0)$ and the rate of economic depreciation is equal to 0 $(\delta = 0)$. In that case the expression (2) transforms into:

$$p = p / (1 - t)$$

and the effect from the tax structure on the domestic efficiency (the level of domestic investment) can be expressed through the coefficient of the investment tax wedge:

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15 It is advisable to make difference between $p$ (the investor’s rate of return) and italic $p$ (the discount rate).

p - r……………………………………………………………………….(5);

**Debt.** The discount rate by the methodology of METR, in case of investment financed with debt, under the assumptions stated above is measured with the expression:

\[ p = r (1 - t) \]  

As we already noted, the value of \( t \) may have different value depending on the character of the corporate tax system. Therefore, in the case of investment financed with new share issues, we might consider every possible option of \( t \).

**Classical corporate tax system (\( \theta = 1 \)).** In the option of a classical CIT system the value of the parameter \( \theta \) is 1. So, it is obvious that term for the discount rate (7) turns into:

\[ p = r \]  

As we already noted, the value of \( \theta \) may have different values depending on the character of the classical CIT system in the country.

**Full integration system (\( \theta = 1/(1 - t) \)).** Let us analyze the effect of the other extreme option - the implementation of the full integration system. In that option the value of the coefficient \( \theta \) is \( 1/(1 - t) \) and the cost of the capital becomes: \( p = r / [1 / (1 - t)] \) or more exactly:

\[ p = r \]  

By inserting term (9) into term (4), the value of the investors rate of return \( p \) will become: \( p = r (1 - t) \) / (1 - t); and the investment tax wedge: \( p - r = r - r = 0 \).

This means that a fully integrated CIT system generates a neutral effect on the investment decision and, in that case, is totally identical with the option in which investments are financed with debt. Also, this can be interpreted as that the application of this system creates equal tax treatment between debt and equity and eliminates the possibility of tax distortion.

**Integrated tax system (\( \theta > 1 \)).** Between the both extreme options is the integrated tax system where the value of \( \theta \) is higher than 1. Therefore, the cost of the capital becomes:

\[ p = r / \theta \]  

If we insert term (10) into term (4) the investors rate of return will become: \( p = (r / \theta) / (1 - t) \); and the investment tax wedge: \( p - r = (r / \theta) / (1 - t) - r \); or more exactly: \( p - r = r [1 - \theta (1 - t)] / \theta (1 - t) \).

The term \( c = t \) (full integration tax system) from the expression above indicates the irreversibility, that the tax burden and \( \theta \) on tax system. It was determined that \( \theta \) has a value of \( 1/(1 - c) \) where \( c \) is the value of the tax credit granted to the stockholders. If we consider this into term (11), then the term will transform into (1 - t) / (1 - c). Assuming that there is no tax credit (classical tax system \( c = 0 \)), then term (11) will become (1 - t) and the investment tax wedge will generate the exact value as the option of the classical CIT system. On the other hand if we assume that \( c = t \) (full integration tax system) then term (11) will have a value of 1 and the investment tax wedge will automatically generate a value of 0. From this we may conclude that the higher the \( \theta \) coefficient, the lower the investment tax burden is.

If we analyze the evolution of the tax structure of the RM, we may say that the CIT system was a classical one until the end of 1996. In the period of 1996 – 2006, the RM had implemented an integrated CIT system with an imputation rate (or tax credit) of 50% on the base. This measure reduced the effective tax rate on dividend income for 50% as well. In 2007, this measure was abolished and the classical form of taxation was reintroduced and was never changed again. So, the tax burden on investment financed with equity was positive during the relevant period *ceteris paribus*. Only in the period of integration the positive burden was lowered by some extent but the treatment of equity was never equalized with debt.
**Retained earnings.** In the case when investors cover the investment with retained earnings, if we consider the proposed assumptions, than the discount rate is measured through the expression:

\[ p = r \left[ (1 - m) / (1 - z) \right] \] .................................(12);

If we consider term (12) for the investors rate of return \( p \) and if we calculate the investment tax wedge, then:

\[ p - r = r \left[ t + z(1 - t) - m \right] / (1 - t) \] .................................(13);

where \( z \) represents the effective tax rate on accrued capital gains, and the rest of the symbols have the same meaning. The term \( t + z(1 - t) \) (14), from the expression above, is the combined corporate tax bill and the personal capital gains tax liability resulting from an extra unit of corporate profits which is retained in the corporation.12 It is clearly seen from the expression that if this combined liability exceeds \( m \) (or the personal tax liability on interest income) then the tax burden will be positive. If the combined tax liability is lower than \( m \), then the tax burden will be negative (positive effects on the investment decision). Only in a situation where the combined tax liability is equal to the tax liability on interest income the corporate system will be neutral to investment.

"Comprehensive" personal income tax rate \((z = m)\). Empirical studies determine that usually, the tax burden on investment financed with retained earnings is much lower than the tax burden on investment covered with equity. This will discriminate new companies that require larger proportion of equity to finance their business activities compared to the old mature companies that more commonly use retained earnings as a source of finance. In order to level “the playground rules” authorities may implement a “comprehensive” personal income tax rate within the classical CIT system. This means that the effective tax rate on capital gains is identical with the tax rate on interest income \((z = m)\). If we incorporate this assumption in term (12), then the discount rate will be calculated as: \( p = r \left[ (1 - z) / (1 - z) \right] = r \); the investors rate of return will transform into: \( p = r / (1 - t) \); and the investment tax wedge: \( p - r = rt / (1 - t) \).

This means that the tax treatment of retained earnings becomes identical with the treatment of equity.

**Zero effective capital gains tax rate** \((z = 0)\). Some countries often imply zero tax rates on capital gains income, which, of course, will have certain repercussions on taxation. If this assumption is incorporated in term (12), then the discount rate will be measured as: \( p = r \left[ (1 - m) / (1 - 0) \right] \); or more precisely: \( p = r \left[ (1 - m) \right] \). If we calculate investor’s rate of return it will become: \( p = r \left[ (1 - m) / (1 - t) \right] \); and the investment tax wedge: \( p - r = r \left[ (t - m) / (1 - t) \right] \).

The term \((t - m)\) (14); clearly shows that the implementation of zero capital gains tax rate creates an effective tax burden that will primarily depend on the relation between the CIT rate \( t \) and the PIT rate on interest income \( m \). From that aspect, if \( t > m \), then the effective tax burden is positive; if \( t = m \) than the tax burden is 0; and if \( t < m \), we will have a situation with negative tax burden on investment income.

**Flat tax rate** \((t = m)\). First we must notice the difference between the effective tax rate on capital gains income \( z \) end the statutory tax rate on capital gains income \( z_c \). The effective tax rate is usually lower than the statutory tax rate because the tax liability occurs only upon realization of the capital gain. There is a developed methodology for calculation of \( z_c \), but it would be sufficient to present it. What is important is that if we reject the taxing rule for realization of the capital gains (or we suppose that the realization will never occur), then the effective tax rate \( z \) will generate value of zero \((z = 0)\). If all these assumptions are included within term (13), than the investment tax wedge with a flat tax rate structure will automatically transform into zero \((p - r = 0)\). This means that imposition of a flat tax rate structure generates a zero effective tax burden and a neutral effect on investment when it is financed with retained earnings.

If we use this analysis in context of the evolution of the tax structure of the RM, we may say that in the period of 1993-1996 the CIT produced positive tax burden on investment covered with retained earnings. Because the CIT rate \( t \) was higher than the PIT rate on interest income \( m \) (30% > 23%), this situation probably produced negative effect on this sort of investment, just like term (14) indicated. Then, in 1996, the CIT rate \( t \) was reduced to 15%, while the PIT rate on interest income was still 23%. This created a situation where \((t < m)\) and according to term (14) the tax burden was negative and the tax system probably supported investment with retained earnings. This condition lasted until 2001 when the parameter \( m \) was 17 Leibfritz W., Thornton J., Bibbie A.: “Taxation and economic performance” An OECD study, OECD, 1997, p. 98.
reduced to 15%. From that year on, the parameter \( t \) was equal with the parameter \( m \) (\( t = m \)) and this condition probably generated a zero effective tax burden and accordingly, a neutral effect on investment financed with retained earnings. If we take into account the fact that there is a 30% deduction available on the capital gains tax base, then we can confirm that retained earnings are one of the most preferred sources of finance in the RM.

In general, from this analysis we may resume that the CIT system of the RM is reformed in a manner that improved its overall efficiency performances. The tax structure does not create any distortions on investment with debt and retained earnings, but there is some excess tax burden on investment with equity due to the existence of the classical form of corporate taxation. Of course, these conclusions are drawn under the assumptions stated above and therefore, represent a theoretical framework that can be different from the real “playground.” In reality, as we can see from the presented methodology of METR, the corporate tax burden as well as the investment decision can depend on a large number of variable parameters such as the capital structure, the inflation, the economic depreciation, the implemented tax incentive measures, etc., that can really produce different results if they are taken into consideration.

Conclusions

The tax reform can be described as a dynamic process of continuous improvement of the structures of the national tax systems in order to fulfill the general economic and tax policy goals. It has been confirmed that some of the most powerful tax reform drivers from a domestic and international point of view are the general tax policy principals. Basic priority of the Corporate Income Tax reform in the RM is to maintain a tax structure that would enable a relatively simple and easy administration and at the same time would provide a comparatively lower corporate effective tax burden. Therefore, the tax system had to be revised in every aspect of its basic elements and this process produced some specific futures such as: the flat tax rate structure, The Tax on Gross Revenues and a Tax Incentive System with small variety of available instruments.

This transition in the tax policy area is also in accordance with the general tax policy principles for simplicity and efficiency. More exactly, the administration service is much faster and the tax payers spend less time and resources for the procedure. Also, there is evidence that the overall efficiency performances are generally satisfactory. According to the analysis, the tax structure does not create any distortions on investment with debt and retained earnings, but there is some excess tax burden on investment with equity. Of course, these conclusions represent a theoretical framework and therefore, are limited only on the assumptions stated above.

References:

[10]State Statistical Institute of RM;