

# IS TAXATION A DETERMINANT OF CAPITAL STRUCTURE? AN ANALYSIS OF THE IMPACT OF INTEREST SYSTEMS ON TAX LAWS

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*This paper is an analysis of how the companies in building and constructions use tax liabilities in order to finance their assets. We start from the assumption that tax liabilities are an important source of financing their assets and, thus, the introduction of the new mechanism of “reverse charge” in the field of value added tax generated difficulties in their financing, difficulties that forced the companies to change their capital structure. Then we investigate whether or not they constituted in an interest system that determined the change of the law back to its initial state*

*Keywords: taxation, interest systems, capital structure, corporate governance*

## 1. Introduction

This paper is trying to add a page to the answer to a fundamental question in financial economics: “What are the determinants of the firm's capital structure?” Among these determinants the most frequently mentioned are taxes, the cost of financial distress, agency costs, and the firm's product and input market strategies<sup>47</sup>. The relation between capital structure and taxes has been the subject of extensive theoretical analysis<sup>48</sup>. These analysis specify particular relations among the optimal capital structure, corporate tax rates, nondebt tax shields, and personal tax rates.

The first element that was considered by the theory was the corporate tax rate. Thus, Modigliani and Miller (1963) stated that the corporate income tax makes debt more attractive than equity in financing a company due to the deductibility of the interests, which will generate a decrease in the cost of capital.

Then, it was considered the effect of nondebt tax shields on leverage. DeAngelo and Masulis (1980) suggest that there is substitution between debt and other deductions in shielding corporate income from taxes

The effect of personal tax rates is viewed through the taxation of debt income or equity income (Miller (1977)). If debt income is taxed more favorable than equity income, than individuals will have more incentives in investing in debt instruments than in equity instruments.

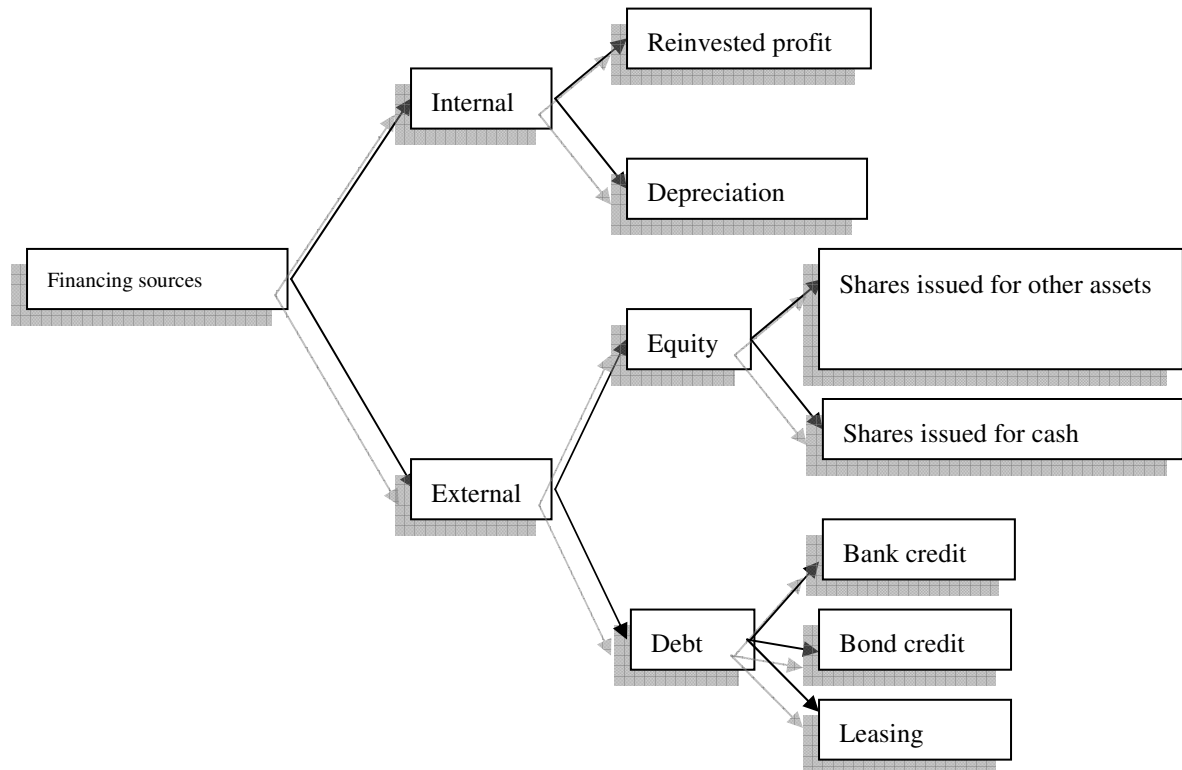
We will investigate the possibility that an increase in tax accruals, due to VAT legislation changes may have an impact on the capital structure.

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<sup>47</sup> Givoly D., Hayn C., Ofer A. R., Sarig O., (1992), “Tax and Capital Structure”, The Review of Financial Studies, Vol. 5, No. 2, pp. 331-355

<sup>48</sup> For an extended list of these studies see Givoly D., Hayn C., Ofer A. R., Sarig O., (1992)

## 2. A short review on the financing sources of a company

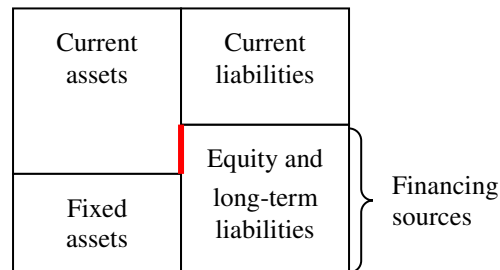


*Fig. 1. The financing sources of a company*

Source: Dragota V., Ciobanu A., Obreja L., Dragota M., (2003) "Management financiar", Editura Economica, Vol. 2, pag. 120

In order to analyze the capital structure of a company is necessary to identify the financing sources that a company may use in financing its asset. The theory identifies two main types of sources:

So, where do tax liabilities interfere? It is true that they can not be seen in this figure, as they are a part of the current liabilities of the company which are used to finance the current assets of the company.



*Fig. 2. The classical financial equilibrium of a company*

In figure 2 it is shown how the financing sources are used in order to finance the fixed assets of a company and the net-working capital of a company.

## 3. The reverse charge system

The reverse charge system in the field of VAT was introduced in 2005 and means that the tax-payers that will apply it will no longer collect VAT at the sale of the product under this system but will have the right to deduct it. In order to apply this system both the seller and the buyer must be registered for VAT purposes. At the beginning of 2005 this was applicable to the sale of metal scraps, lands, buildings, wooden

materials and live animals. After some changes in the list of goods for which this system shall apply in January 2007 the reverse-charge system was introduced for the selling of construction works<sup>49</sup>. This affected a large market that was estimated in 2006 to 10 bln. euros<sup>50</sup>, and for which had a growth rate in 2006 of 23,5%<sup>51</sup>.

So what happens when there is an increase in tax assets due to the increase of input value added tax (VAT) to be deducted, which does not turn into cash as there is no output VAT and the amount must be recovered from the state? So the question is what happens when a company is affected by a change in the taxation policy of the state by not collecting VAT anymore, but accumulating deductible VAT, as it happens in the case of the reverse charge system?

We illustrate this situation in the following two-stage example:

Company A is a company working in the building field. Before the introduction of the reverse charge system a typical transaction would have been:

- buy raw materials: 1.000 lei + VAT 190 lei
- sell building works: 2.000 lei + VAT 380 lei
- cash-in clients and pay suppliers

After paying the VAT liability, the company will remain with a profit of 1.000 lei turned into cash.

Cash 1.190 lei	Profit 1.000 lei
	VAT liability 190 lei

After the introduction of the reverse charge system, a typical transaction becomes.

- buy raw materials: 1.000 lei + VAT 190 lei
- sell building works: 2.000 lei + No VAT
- cash-in clients and pay suppliers

After paying the VAT liability, the company will remain with a profit of 1.000 lei which is turned into cash only for 810 lei, and for the remaining

190 lei there is a tax accrual that should be cashed in from the state.

Cash 810 lei	
VAT accrual 190 lei	Profit 1.000 lei

Normally, this tax accrual should not have a very important impact on the company's financing policy. It should require, at most, a short-term bank credit in order to finance the short-term cash gap until the VAT is recovered from the state.

In order to recover for this VAT a company must make an option on its VAT return. After making this option, according to the current tax laws<sup>52</sup> the taxpayer will be included in a risk category. There are three risk categories:

- a) taxpayers with a low risk, for which the decision of VAT reimburse will be issued;
- b) taxpayers with a medium risk, for which a documentary analysis is needed prior to VAT reimburse;
- c) taxpayers with high risk, for which a tax inspection is needed prior to VAT reimburse.

In all cases the procedure should not exceed 45 days from the date of the VAT reimburse request. This is in theory, because if the Tax Administration needs any additional information, the period shall be prolonged with the time needed to provide the additional information<sup>53</sup>.

Thus, in practice, the period in which a company may recover the input VAT may be more than 6 months. Taking into account that during this period new input VAT is accumulated we may conclude that this

<sup>49</sup> Law No. 571/2003 the Tax Code, published in the Official Journal No. 927/2003, with the subsequent changes

<sup>50</sup> Stoica G. – "Piata constructiilor a depasit pragul de 10 miliarde euro", Săptămâna financiară, No. 106, April 16th 2007

<sup>51</sup> Buletin statistic lunar, Nr. 2/2007, Institutul National de Statistica, pag. 59

<sup>52</sup> Law No. 571/2003 the Tax Code, published in the Official Journal No. 927/2003, with the subsequent changes, OMFP No. 967/2005 regarding the Methodology for solving the VAT returns with negative VAT sums with an option for return, published in the Official Journal No. 698/2005 with the subsequent changes, and OMEF No. 1857/2007 regarding the Methodology for solving the VAT returns with negative VAT sums with an option for return, published in the Official Journal No. 785/2007 with the subsequent changes

<sup>53</sup> According to the Tax Procedure Code, art. 70

system generates a level of the tax accrual that can be considered as a long term asset and not a short-term asset, for which the company must find financing resources.

#### 4. The impact of the reverse charge system on the capital structure

For analyzing the impact of the reverse charge system on the capital structure we studied the case of a company working in the field of construction works.

Our company buys raw materials and sales construction works to other registered for VAT companies. Thus, in 2007 all its acquisitions will incur input VAT, but its sales will be made with the reverse charge system.

In the following table we present the situation of VAT in 2006 and then consider that in 2007 the value of VAT taxable acquisitions and supplies remains constant, in order to see the impact of VAT reverse charge system:

**RON**

	<b>2006</b>	<b>2007</b>
Aquisitions (VAT taxable)	13.158.000	13.158.000
Input VAT	2.500.020	2.500.020
Supplies (VAT taxable)	17.520.000	17.520.000
Output VAT	3.328.800	0
Tax liability	828.780	-
Tax accrual	-	2.500.020

Thus, in 2007, the company needs additional financing sources of 2.500.020 RON. Considering a short-term bank credit to finance this loan, at an interest rate of 15% p.a. this will generate additional interest expenses a a higher cost of capital. The cost of capital will increase with exactly  $15\% \times (1-16\%) \times q$ , where q is the percent represented by the new short-term loan into total financing sources.

Of course that the company should analyze the possibility of not paying VAT to the supplier. In this case, if the penalty required by the supplier will be lower than the interest paid for the new loan, probably the company will have some incentives in not paying this VAT. Yet, this type of behaviour can generate serious commercial difficulties, so the company must thoroughly analyze whether or not to take this decision.

#### 5. The interest system in the construction works field

An interest system may be defined as a „set of individuals or groups with common interests on the long term, which have the potential of generating pressure groups with methods specific to the goal pursued and the force they have”<sup>54</sup>

We may say that the entrepreneurs in the construction field may constitute an interest system which made pressures in order to change the reverse charge system. So this system was change with the beginning of 2008. We fail to bring documented evidence on whether or not this interest system influenced this decision. Taking into account the substantiation note of the Finance Ministry on the change of the reverse charge system for the construction works, the reason was „an unfavourable delay of receipts from VAT to the state budget”, „the difficulties of the taxpayers to apply correctly this system” and „the increased number of requests for VAT reimburse”<sup>55</sup>

#### 6. Conclusions

This paper tried to reveal the impact of a new system of tax rule in the field of VAT may influence the capital structure of a company. We gave evidence that this new system had an important impact and that this negative impact generated the change of the law back to its initial state. Thus, a sentiment of uncertainty in the tax field was created and we believe that the possible effects of such a system should have been more thoroughly analyzed before their implementation in order to avoid an uncertain situation.

<sup>54</sup> Moşteanu T., Stoian A., Catarama D., Campeanu E., Gyorgy A., Miricescu E., (2006), pp. 25

<sup>55</sup> The substantiation note on the draft Ordinance to modify the Tax Code on January 1<sup>st</sup> 2008, [http://discutii.mfinante.ro/static/10/Mfp/legislatie/Transparenta/notafundam\\_proiectmodif\\_codfiscal.pdf](http://discutii.mfinante.ro/static/10/Mfp/legislatie/Transparenta/notafundam_proiectmodif_codfiscal.pdf)

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