

FINANCIAL STATE OF THE CHEMICAL INDUSTRY

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ABSTRACT

The present paper is devoted to the analysis of the state of the material and technical base of the branch under consideration as well as to the formed financial policy of the economic entity. Both parts of the financial resource - equity capital and borrowings are studied. Inferences for the state of the property-capital resource are discussed. This provides possibilities for the innovation and financial policy of the economic units to be improved. Hence, the effectiveness of the chemical industry in Bulgaria should be increasing.

Keywords: chemical industry, financial state, financial resource, financial policy.

INTRODUCTION

The Chemical Industry (CI) is a part of the manufacturing industry of Bulgaria. This industry includes the production of cellulose products (paper, cardboard, and publishing business), of chemicals, and of finished plastic and rubber goods. The period of our study covers the data published until December, 31, 2004.

One of the basic characteristics of the CI is the fact that prevailing part of the commercial companies belongs to the private sector, which involves 95,93 % of the number of all working persons. The assets of CI are 16,21 %, and the working persons 11,24 %, of the those in the manufacturing industry. From the above data it follows that attention has to be paid to the problems of the CI so that the effective development of this industry be assured [1-3].

The state of the possession structure of the CI

The decision of the investors to choose the kind of investment in the area of CI depends on the state of the possession and the asset structure. The state of the dynamics of the asset and liability leads to certain incomes and expenses as the result of manufacturing. Thus,

a particular property or capital' structure of the trading companies (TC for short) which achieves some liquidity, creditworthy, indebtedness and profitability can be established.

The financial stability of the trading companies and CI is determined as a state, such that they would be able to meet and discharge some emerging liability with respect to their contractors in every moment at the same time settling optimal property and capital structure with the goal to reduce to minimum the eventual financial risk.

The assets of CI are characterized by an exact material-substance form of its resources. There exist both non-current assets and current assets. The efforts of the management staff of the trading companies through the control of the assets must be focussed mainly on:

- The control of the dynamics and the structure of the non-current assets by introducing a strategy of the economic unit.
- The control of the ratio and reciprocal relationship between non-current and current assets.

The control of the non-current assets is based on the developed and accepted for a realisation investment policy. This requires a clear investing process and supply with a sufficient quantity of capitals. For the TCs it

Table 1. State of the assets and liability of CI as of December 31, 2004.

Assets	%	Liability	%
Non-current assets	57,00	Equity capital	52,43
Current assets	43,00	Non-current liability	17,28
		Current liability	30,29
All assets	100	All liability	100

is preferable to invest small assets with assured high incomes. The problems arising in the economic entity with respect to the profitability of the economic activity can be easier solved by changing of the quantity and structure of the current assets rather than by changing of the non-current assets.

One of the basic questions in the control of the non-current assets is that of their inner structure, i.e. the correlation between the material and non-material, and also financial non-current assets.

It is clear from the data in Table 2, that the share of the non-current material assets is too high. This share is approximately the same in the TCs of paper and cardboard manufacturing (PCM) and publishing activity (PA) and higher for the rubber and plastic's manufacturing (RPM) companies. The control process with respect to non-current assets must achieve a limitation of the (passive manufacturing funds, and increase of the active ones which are mainly machinery and technology. It is necessary also to reduce the relative part of the assets, that create conditions for extensive economic growth.

In the area of CI a very important task is the increasing of the share of the non-current non-material assets and their development, because. This create conditions for increasing of the competitiveness and efficiency of the manufacturing. In the conditions of a market

economy the dynamics and structure of non-current financial assets (securities and partnership) has to be approached more fearlessly.

In the field of the financial theory there exists an idea that if one would like the non-current assets to function effectively it is necessary their quantity to be less than that of the current assets, i.e.

$$k = \frac{NCA}{CA} < 1,$$

where *NCA* denotes non-current assets, and *CA* is current assets.

One can see in Table 1 that for the CI the above stated condition is infringed. The non-current assets have higher relative share than the current assets, i.e. the difference is 14%.

The control of current assets of the economic entity of CI requires effective manufacturing policy that can assure perfect control of their dynamics and structure.

The current assets of the TCs are in the sphere of manufacturing as well as in the sphere of circulation in the form of finished goods, financial assets and receivables. Number of factors influences the quantity of the current assets, such as:

- The kind of the business

Table 2. Structure of non-current assets in the CI by subbranches.

Types of assets	Manufacturing of paper, cardboard and publishing activity	Manufacturing of chemical substances, products and fibers	Rubber and plastic manufacturing goods
Non-current assets	100 %	100 %	100 %
Tangible non-current assets	87,5 %	87,9 %	93,2 %
Intangible assets	1,3 %	2,1 %	0,4 %
Non-current financial assets	9,9 %	9,9 %	5,8 %
Other assets	1,3 %	0,1 %	0,6 %

Table 3. Structure of the current assets in CI by subbranches.

Types of assets	Manufacturing of paper, cardboard and publishing activity	Manufacturing of chemical substances, products and fibers	Rubber and plastic Manufacturing goods
Non-current assets	100	100	100
Inventory	34,5	32,4	48,4
Current receivables	45,5	51,6	40,4
Current financial assets	0,4	1,2	0,2
Cash	18,4	12,9	10,2
Deferred expenses	1,2	1,9	0,8

- The magnitude of the economic entity
- The rate of the sales, etc.

The methods and approaches for the control of the current assets in the branch of manufacturing are mainly technical and economical.

In the circulation sphere the methods have mainly financial and economical character. The effective style of control of the current assets leads to a low level of the value of the current assets. The goals are as follows:

- Setting the working capital free
- Ensuring a short cycle of circulation
- Achievement of lower expenditure and higher revenue
- Higher return of the invested capital to be assured.

A good deal of the working capital of the TCs of the CI is engaged in the inventory. In the above stated 3 subbranches they amount to 34 %, 32,4 %, 48,4 % of the entire quantity of the current assets, respectively. This calls for a flexible control of the working capital mainly by optimizing the frequency of the delivery. The management staff of the TCs must optimize an implicitly contradictory task, i.e., on the one hand a necessary quantity and quality of the inventory has to be assured, and on the other hand their size has to be diminished to the possible minimum that can guarantee a rhythmic manufacturing process.

The receivables from the customers in the area of CI have a highest relative share of the general quantity of the current assets, that is, 45,5 %, 51,6 % and 40,4 %, respectively. The question for the control of the receivables of the TCs is a question of interest at the present time not only for the companies of the CI but also for the manufacturing industry as a whole. The re-

ceivables from the customers result from the sales of goods and services of credit. They accomplish by them by the so called “investing in the customers”. Actually, the control of the receivables of the economic entity is a control of the customers’ lending. In the conditions of the market economy they are inevitable but as an investment they must ensure a return not less than the return of the alternative investment in cash. There are a lot of questions for the management connected with the receivables of their companies. Above all the terms of postponement of the payment have to be optimized. Also it is necessary an adequate system for already arised receivables to be established.

The cash of 18,4 %, 12,9 % and 10,2 % stay on the third place by relative have in the global size of the current assets in the CI. They ensure the creditworthiness of the TC. Speaking precisely one could say that they express the final result of the control of the property and the capital of the companies. The effective control of the cash provides a better financial state of the economic entity. In the control of the cash the management staff has to take into account the following:

- The state of the bank system for the entire country;
- The control of the liability to the business partners;
- Inventory turnover, etc.

From the above outlined state of the property structure of TCs in the CI it becomes clear that the control of this structure has a very important meaning for the good financial state of the TCs. The dynamics of the net assets of the TCs ia a synthesized expression of the control of the property structure [3]. The dynamical increasing of the net assets is an indicator for the increasing of the equity capital as a consequence of the positive financial result.

Table 4. The state of the net assets of TCs of the CI.

Indicators	Manufacturing of paper, cardboard and publishing activity	Manufacturing of chemical substances, products and fibers	Rubber and plastic manufacturing goods
All assets	100	100	100
Net assets	44,73	61,37	37,11

Table 5. State of the capital of TCs in CI.

Indicators	Manufacturing of paper, cardboard and publishing activity, %	Manufacturing of chemical substances, products and fibers, %	Rubber and plastic manufacturing goods, %
All capital	100	100	100
Equity capital	44,7	61,4	37,1
Borrowings	55,3	38,6	62,9
Long-term liability	43,6	33,1	32,5
Current liability	56,4	66,9	67,5

Taking into account the above stated data in Table 4 our basic conclusion is that the stock of the assets of the TCs is supported by the equity capital.

The companies in the branch of the Chemical Manufacture (making products, fabrics and fibres) stay on the best level, and the companies manufacturing rubber and plastic products stay on the worst level. The reason for this situation is in the relatively little weight of the equity capital in comparison with that of the liabilities in the global capital resource. This shows a high financial dependence of the companies by the creditors.

The state of the capital structure of CI

The control of the capital of the companies by the management requires a control of:

- The equity capital
- The borrowings
- The ratio between them, that is, a control of the capital structure [2].

The control of the capital includes the control of the dynamics and the internal structure of the equity capital and borrowings.

From the data in Table 5 one can conclude that:

The stock of the equity capital is small in the general capital resource, which inevitably leads to a privilege place of the borrowings in the development of the TCs, hence-to a greater financial dependence from the

creditors. According to the financial science in the state of optimum are the companies, whose equity capital is about 65-70%. In the state of optimum by this indicator are the economic entity in the branch of Chemical manufacturing (chemical products and fibres), and the companies in other subbranches are in a bad financial state. The latter is notably strongly underscored in the branches of the rubber and plastic's manufacturing.

In the structure of the borrowings in all TCs in the CI the relative stock of the current liabilities is pointedly big in the comparison with that of the (long-term) liability. Such a situation is watched and even it is more emphatically expressed in the branch of the manufacturing industry at all.

We observe a high indebtedness of the companies to the creditors and insufficient collateral of the borrowed credits. The capital structure of the companies is unfavorable.

The stock of the debt of the companies in the value of their subsidizing is great one. In some literature sources it is recommended the borrowings to amount to about 30-35% on the general capital resource. In the worst state on this indicator are the economic entity in the branch of the rubber and plastic's manufacturing, and in the best state are those in the branch of chemical manufacturing (of chemical products and fibres).

Scheme of the property and capital structure of the companies of the CI.

Manufacturing of paper, carton and publishing activity			Manufacturing of chemical substances, products and fibers			Rubber and plastic's manufacturing		
ASSET	LIABILITY		ASSET	LIABILITY		ASSET	LIABILITY	
Non-current asset 60%	Equity 44,7%	Constant Capital 68,8 %	Non-current asset 56,9%	Equity 61,4 %	Constant Capital 74,2 %	Non-current asset 52,8%	Equity 37,1%	Constant Capital 57,6 %
	Long-term liability 24,1%						Long-term liability 20,5%	
Working capital net 8,8%			Working capital net 17,3%	Long-term liability 12,8%		Working capital net 4,8%		
Current asset 40%	Current liability 31,2%		Current asset 43,1%	Current liability 25,8%		Current asset 47,2%	Current liability 42,4%	

State of active/liability balance ratio

The given investment and financial policy, as well as the current control of the cash flows in the companies materialize in their active/liability ratio. The economic dependence in the structure of the balance sheet of the economic entities is the correlation (connection) between non-current and current assets from one hand and between the equity capital and borrowings from the other hand [1].

From the stated data in the above scheme it follows that:

- From the sources of the resources of long-term financing of the companies (that is the constant capital) are financed 68,8 %, 74,2 % and 57,6 % of the general sum of the assets, correspondingly. In the best position by this indicator stay the economic equities of the Chemical products and fibres manufacturing.

On the contrary in the most unfavourable position stay the companies manufacturing rubber and plastic's goods. The latter have utilized greatest sums

for financing of the proper assets by current sources, that is, 42,4 %.

- In all TCs the non-current assets are funded entirely by funds coming from the constant capital.

- Of little importance is the stock of the current assets funded by funds coming from long-term sources, so called net-working capital – 8,8 %, 17,3 % and 4,8 %, respectively. The rest of the value of current assets- 91,2 %, 82,7 % and 95,2 %, respectively, are funded by funds of the short-term sources. Therefore, in the best position by that indicator stay the economic entities of the manufacturing of chemical substances, products and fibres. On the contrary, in the worst one stays the manufacturing of rubber and plastic's goods.

- In no one of the above stated subbranches of CI, the TCs have no equity capital. This is a clear sign for perturbations in the current manufacturing process due to some financial reasons. The stable companies of financial point of view fund greater part of non-current assets by equity capital and one part of the current as-

sets as well by resources of the equity capital. This situation in the CI is a result of the low capital structure of the TCs, that is, the little relative stock of the equity capital in the general capital resource.

CONCLUSIONS

The present study of the financial state of the TCs in the branch of the CI results in the following basic conclusion: *The financial state of the economic entity is differentiated.*

On the one hand the companies in the branch of the manufacturing of chemical substances, products and fibres work in stable financial state. The reason for this conclusion is:

- The high rate of the equity capital in the general sum of the invested capital, that is, 61,4 %, which made it to be a first-rate source of forming the property of the companies.
- The existence of some relatively high share of net working capital, that makes the manufacturing process to be stable.
- The positive capital structure in which the equity capital has higher relative share than that of the borrowings.

On the other hand the companies in the branch of the manufacturing of paper, carton and publishing activities and ones in the branch of manufacturing of rubber and plastic goods are in unstable financial state due to: a) the fact that a main source of funding the acquisition of assets is the borrowings, and the equity capital plays subordinate role; b) the low rate of the net working capital – 8,8 % and 4,8 %, respectively; c) unfavourable capital structure in which the relative share of the borrowings dominates over that of the equity capital makes the economic entity to be of dependent financially on their creditors.

The overcoming of this state requires the efforts of management staffs to be directed to the following:

- The investment strategy in the companies needs being up-to-dated through a direction of improving as of the general structure of assets (the ratio between both non-current and current assets) as well as their inward structure. This must result in the increasing of the turnover of the assets.
- The formed financial strategy of the TCs needs an assessment. The capital structure especially in some of the subbranches of the CI (stated in this paper) needs of a basic reconsidering in a direction of increase the relative share of equity capital in the entire capital resource.
- One has to approach very precisely to the receiving of credits. The credits must lead to increasing the profitability of the equity capital as well insurance of higher share of the realized profit for satisfying needs of the companies.
- The labour's productivity of the occupied persons must be sensibly intensified for increasing profitability of the realized economic activity.

As a conclusion we would like to note that our analysis here does not exhaust all the questions about the state of the CI. This study must go deeper and range over much more sides of the activity.

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