

## ANALYSIS OF OPERATIONAL AND INVESTMENT ACTIVITIES OF LOCAL ADMINISTRATION

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### **Abstract**

*In this paper the authors describe how the analysis of operational and investment activities in conjunction with the financial policies of firms subordinated to county councils in the North-West of Romania.*

**Keywords:** *net trade cycle, liquidity, collection period*

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### **1. Introduction**

The financial analysis of assets tries to show their transformation into cash as a result of their participation in the economic cycle. A company's working capital requirements are affected by its desired inventory investment and the relation between credit terms from suppliers and those extended to customers. These considerations determine a company **net trade cycle**.

For most companies selling on credit, accounts and notes receivable are an important part of working capital. In assessing liquidity, including the quality of working capital and the current ratio, it is necessary to measure the

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quality and liquidity of receivables. Both quality and liquidity of accounts receivable are affected by their turnover rate.

*Quality* refers to the likelihood of collection without loss. A measure of this likelihood is the proportion of receivables within terms of payment set by the company. Experience shows that the longer receivables are outstanding beyond their due date; the lower is the likelihood of their collection. Their turnover rate is an indicator of the age of receivables.

This indicator is especially useful when compared with an expected turnover rate computed using the permitted credit terms. *Liquidity* refers to the speed in converting accounts receivable to cash. The receivables turnover rate is a measure of this speed.

Inventories often comprise a substantial proportion of current assets. The reasons for this often have little to do with a company's need to maintain adequate liquid funds. Reserves of liquid funds are seldom kept in the form of inventories. Inventories are investments made for purposes of obtaining a return.

This return is derived from the expected profits resulting from sales to customers. In most companies, a certain level of inventory must be kept. If inventory is inadequate, sales volume declines below an attainable level. Conversely, excessive inventories expose a company to storage costs, insurance, taxes, obsolescence, and physical deterioration. Excessive inventories also tie up funds used more profitably elsewhere.

Due to risks in holding inventories, and given inventories are further removed from cash compared to receivables, they are normally considered the least liquid current asset. This is not always the case since items like commodities and raw materials enjoy ready markets and can usually be sold with little effort, expense, or loss. Yet fashion merchandise, special components, or perishable items can rapidly lose value unless sold on a timely basis.

Our evaluation of short-term liquidity and working capital, which includes inventories, must include an evaluation of the quality and liquidity of inventories. Measures of inventory turnover are excellent tools for this analysis.

In our paper we made an examination of the analytical tools of the financial manager, I have looked at the source and use of funds statements, common size and index analyses, the cash budget, and pro forma statements.

The source and use of funds statements gives the financial analyst considerable insight into the uses of funds and how these uses are financed over a specific period of time. Funds-flow analysis is valuable in analyzing the commitment of funds to assets and in planning the firm's intermediate- and long-term financing. The flow of funds studied, however, represents net rather than gross transactions between two points in time.

Additional insight often is obtained when balance sheet and income statement items are expressed as percentages. The percentages can be in relation to total assets or total sales, or in relation to some base year. Called common size analysis and index analysis, respectively, the idea is to study trends in financial statements items over time. In this regard, a rich understanding of the underlying funds movement of the firm as well as of its profitability is possible with these two types of analysis.

A cash budget is a forecast of future cash receipts and cash disbursements of a firm. This forecast is particularly useful to the financial manager in determining the probable cash balances of the firm over the near future and in planning for the financing of prospective cash needs. In addition to analyzing expected cash flows, the financial manager should take into account possible deviations from the expected outcome. Analysis of the range of possible outcomes enables management to better assess the efficiency and flexibility of the firm and to determine the appropriate margin of safety.

Finally, we considered the preparation of pro forma balance sheets and income statements. These statements give the financial manager insight into the prospective future financial condition and performance of the firm, giving him yet another tool for financial planning and control.

## **2. Method and results**

### **2.1. Analysis of operational activity**

Indicators used in assessing operational activities targeting our view, stock rotation issues, claims, liabilities to capital providers and rotation, and are shown below.

a) Inventories turnover (KS), performed using inventory turnover situation, evaluate (measure) the efficiency with which stocks are renewed.

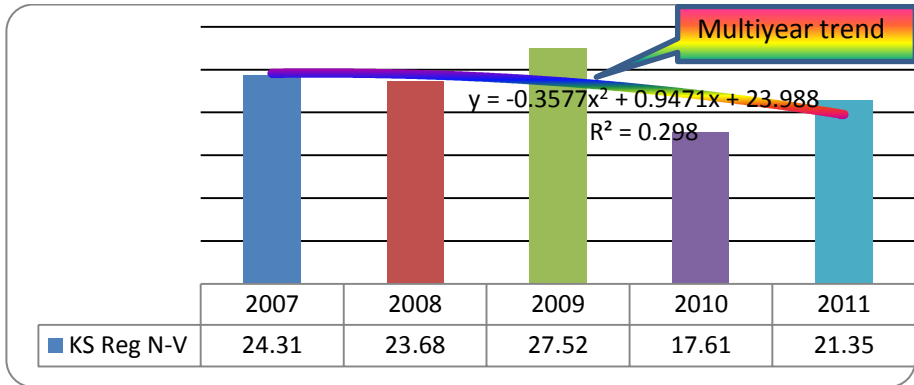
This indicator is calculated as a ratio of income from economic activities (VAEC) and stock reflected in the balance sheet (S) as follows:

$$(1) \quad KS = \frac{VAEC}{S}$$

A high level of the indicator suggests that the stocks do not remain in storage or shelf, but quickly turns into goods sold. This indicator is affected by the accounting method used to evaluate stocks.

County administrations Northwest region mentioned indicator development is illustrated by the data in the chart below.

**Figure 1: Evolution county governments inventories turnover in the North-West**



The data table and graphical representation above is observed, a slow rotation of stocks between 2007 - 2011, from 24.31 to 21.35 rotations per year rotations per year, with negative effects on the funds.

**Table 1: Situation counties of inventories turnover**

Indicator		Year				
		2007	2008	2009	2010	2011
Inventories turnover	Reg. N-V	24,31	23,68	27,52	17,61	21,35
Inventories turnover	BH	29,98	29,47	31,41	18,04	26,93
Inventories turnover	BN	10,52	10,67	15,23	14,53	18,92

Inventories turnover	CJ	42,31	40,92	444,93	25,60	25,26
Inventories turnover	MM	13,26	14,61	14,21	12,74	12,71
Inventories turnover	SJ	14,99	16,76	14,56	13,03	19,29
Inventories turnover	SM	27,95	20,30	19,22	13,17	21,97

Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

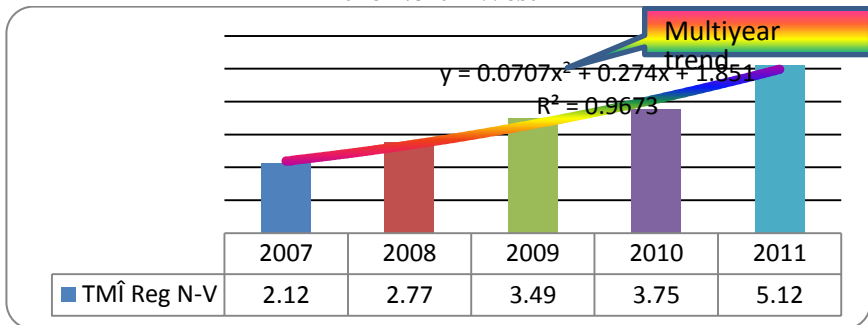
The data table and graphical representation above is observed, a slow rotation of stocks between 2007 - 2011, from 24.31 to 21.35 rotations per year rotations per year, with negative effects on the funds. The indicator is part of the same evolutionary and coordinated in each county.

b) Another indicator evaluation for county administration is the average collection period (TMI), calculated as the ratio of sales of business (VZAE) and claims administration (CR):

$$(2) \quad TMI = \frac{VZAE}{CR} \times 365$$

County governments in the region to the northwest state of this indicator is shown in the figure below.

**Figure 2: Evolution of average collection period in county government in the North-West**



Source: own illustration

**Table 2: Situation counties of evolution claims in county government**

Indicator		Year				
		2007	2008	2009	2010	2011
Average collection period	Reg. N-V	2,12	2,77	3,49	3,75	5,12
Average collection period	BH	6,39	7,99	-	2,66	2,32
Average collection period	BN	10,97	4,52	5,28	4,07	10,44
Average collection period	CJ	4,53	3,72	0,52	3,66	4,83
Average collection period	MM	3,91	5,06	4,71	28,48	40,52
Average collection period	SJ	0,15	0,62	44,55	5,58	1,64
Average collection period	SM	1,85	0,42	0,50	0,22	6,22

Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

It is therefore apparent that the indicator means proper administration of funds in each county. Measure the rotational speed claims: efficiency trade policies of territorial entity; claims needs to maintain its sales.

Rotational speed of claims should be calculated using only the numerator trade receivables to assess operational performance of the entity. Financial claims (only the customer not from sales) and investment activities (eg receivables from the sale of an investment) should be excluded as not part of operational activities. If the entity has made claims during the period, adjustments may be necessary. From the graphic above county administrations northwest region experienced a slowdown in annual rotation speed of receivables from 2.12 days in 2007 to 5.12 days in 2012. Positive aspect because it means a faster recovery in the value of products sold to customers.

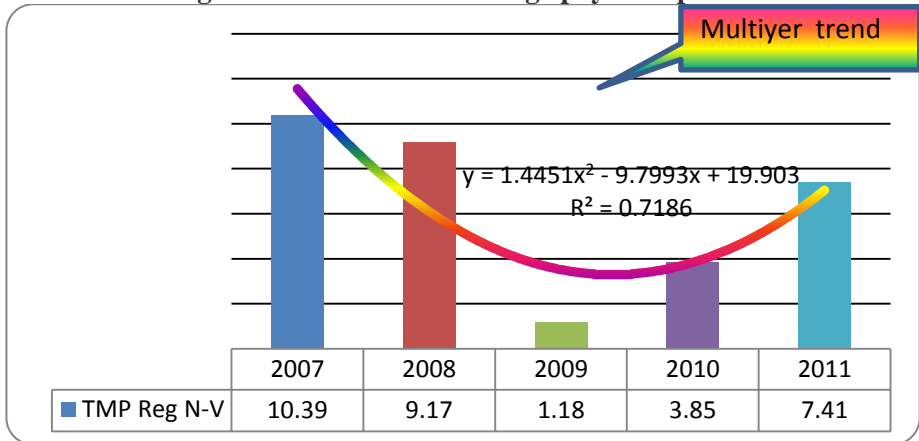
c) Another indicator for the assessment of county government activity is the average payment period (TMP), which is determined as the ratio of sales of business (VZAE) and trade payables administration (DC):

$$(3) \quad \text{TMP} = \frac{\text{VZAE}}{\text{DC}}$$

Although obligations to suppliers are liabilities rather than assets, their development is significant as an important source of financing operational activities. The elapsed time between when the obligations payable to suppliers and when payments are collected from customers is critical for the entire activity.

Graphic situation velocity supplier obligations are as follows:

**Figure 3: Evolution of average payment period**



Source: own illustration

From the above analysis shows that rotation obligations to suppliers, had a sinusoidal evolution, ranging from one rotation per year in 2007 to 10.39 rotations at 7.41 revolutions in 2011. Positive aspect in terms of financing operational activities as trade credit received by county governments in the region northwest of the suppliers is not interest bearing and therefore, its cost tends to zero.

**Table 3: Situation counties rotation county government obligations supplier**

Indicator		Year				
		2007	2008	2009	2010	2011
Average payment period	Reg. N-V	10,39	9,17	1,18	3,85	7,41
Average payment period	BH	17,94	15,32	3,44	3,48	1,36
Average payment period	BN	6,16	5,12	11,74	3,47	8,86
Average payment period	CJ	-	-	-	10,20	6,71
Average payment period	MM	91,14	55,63	1,91	4,93	6,49
Average payment period	SJ	8,81	9,70	5,05	10,06	12,93
Average payment period	SM	1,70	1,30	0,20	0,11	10,01

Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

And in the counties evolution is similar to the level recorded in the analyzed region.

d) Another indicator for assessing the activity is the working capital turnover, defined as:

$$(4) \quad \text{Working capital turnover} = \frac{\text{Turnover}}{\text{Working capital}}$$

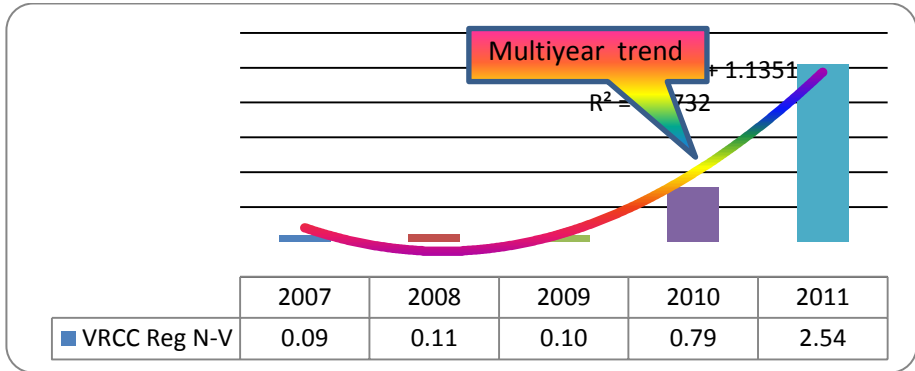
$$\text{Working capital} = \text{Current Assets} - \text{Current Liabilities}$$

Is an indicator that reflects the amount of capital required to maintain a given level of sales. Short-term debt and excess cash should be excluded because they are not required for operational activities.

County governments in the region to the northwest state of this indicator is shown in the figure below.



**Figure 4: Working capital turnover from county governments in the North-West**



Source: own illustration

**Table 4: Situation counties working capital turnover of county governments**

Indicator		Year				
		2007	2008	2009	2010	2011
Working capital turnover	Reg. N-V	0,09	0,11	0,10	0,79	2,54
Working capital turnover	BH	0,20	0,32	0,36	1,09	0,29
Working capital turnover	BN	0,14	0,11	0,04	0,38	26,48
Working capital turnover	CJ	0,01	0,01	0,00	0,60	1,19
Working capital turnover	MM	0,13	0,15	0,18	2,12	4,68
Working capital turnover	SJ	0,04	0,06	0,06	1,40	1,86
Working capital turnover	SM	0,07	0,08	0,13	0,14	18,50

Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

The data table and graphical representation above that, although slow, financing operational activities is provided, own the remaining activity, registering growth of 0.09 revolutions per year in 2007 to 2.54 revolutions per year in 2011.

Capital rotation indicators are declining, indicating a long period of storage and / or slow collection of receivables could mean a reduction in demand for finished products or sale to customers whose ability to pay is uncertain. This may indicate one or more of the following:

- Profit entity may be exaggerated because reserves are required for compulsory stocks or unpaid claims;
- May be required future production decreases;
- There could be liquidity problems.

In case the activity indicators are in decline, statement of changes in equity component of financial reporting helps to establish the possibility that the company has a profit overestimated relative to assets convertible into cash.

## **2.2. Analysis of local investment activity**

This group of indicators, on the one hand it is envisaged rotation fixed assets, and on the other hand, rotation of total assets.

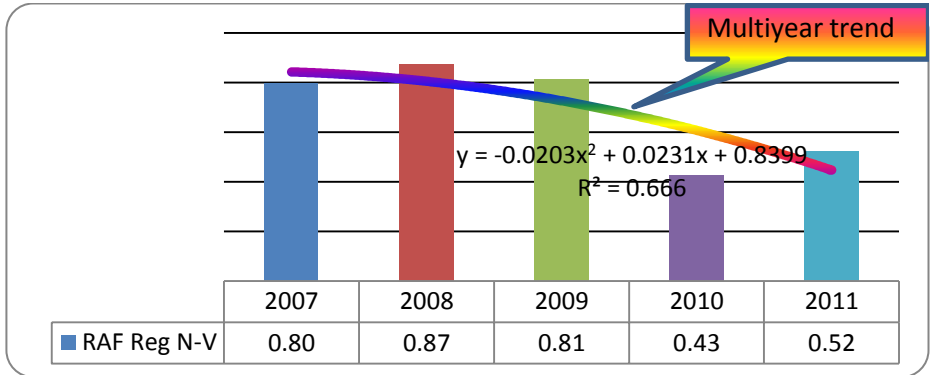
a) The fixed assets turnover measures the rotation long-term effectiveness of capital investments. Indicator defined as:

$$(5) \quad \text{Fixed assetsturnover} = \frac{\text{Turnover}}{\text{Fixed assets}}$$

and reflects the level of sales generated by investments in productive capacity.

Level and evolution of this indicator are influenced by the characteristics of its components. First, sales growth is continuous, though variable. Increasing the capacity of the company to increase sales depend on many factors, such as new production facilities, warehouses, shops and so on. To county governments in the region northwest dynamic situation of this index is as follows:

**Figure 5: Evolution of rotation fixed assets county governments in the North-West**



Source: own illustration

From the graphic above, there is a slowdown in the indicator turns from 0.8 in 2007 to 0.52 in 2011, the negative aspect, in terms of recovery of fixed capital in fixed assets.

**Table 5: Situation counties rotation of evolution county government fixed assets**

Indicator		Year				
		2007	2008	2009	2010	2011
Fixed Assets turnover	Reg. N-V	0,80	0,87	0,81	0,43	0,52
Fixed Assets turnover	BH	1,39	1,44	1,37	0,79	1,20
Fixed Assets turnover	BN	0,37	0,99	1,37	0,25	0,29
Fixed Assets turnover	CJ	3,92	3,47	3,09	0,71	0,81
Fixed Assets turnover	MM	0,57	0,60	0,56	0,54	0,59
Fixed Assets turnover	SJ	1,66	1,41	1,14	0,23	0,31
Fixed Assets turnover	SM	0,24	0,19	0,17	0,15	0,26

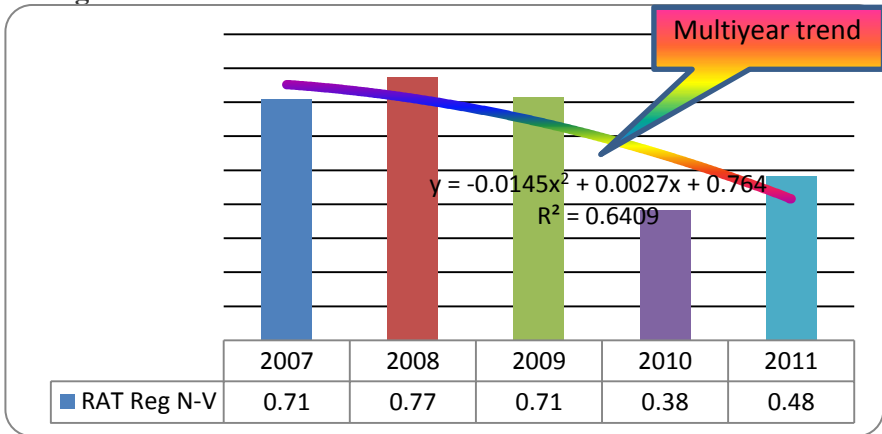
Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

b) Rotation of total assets (RAT) measure overall activity, reporting sales to total assets:

$$(5) \quad \text{Total assets turnover} = \frac{\text{Turnover}}{\text{Total assets}}$$

This relationship facilitates the overall efficiency of investment analysis, cumulating influence short and long-term assets. To county governments in the region northwest remembered indicator development is as follows:

**Figure 6: Evolution of rotation of total assets in the North-West**



Source: own illustration

**Table 6: Situation counties rotation of the evolution of total assets**

Indicator		Year				
		2007	2008	2009	2010	2011
Total Assets Turnover	Reg. N-V	0,71	0,77	0,71	0,38	0,48
Total Assets Turnover	BH	1,20	1,29	1,25	0,70	1,07
Total Assets Turnover	BN	0,34	0,80	0,92	0,23	0,28
Total Assets Turnover	CJ	2,45	2,30	2,12	0,61	0,73
Total Assets Turnover	MM	0,52	0,54	0,52	0,46	0,52
Total Assets Turnover	SJ	1,12	1,05	0,82	0,21	0,28

Total Assets Turnover	SM	0,23	0,18	0,17	0,14	0,25
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Source: own calculations based on proprietary balance sheet and income statement of county government in the North-West

From the graphic above county administrations northwest region have been analyzed during a slowdown slight rotation of total assets, current and noncurrent. This is significantly negative in terms of how county government information system provided evaluation of the whole county administration.

### 3. Conclusions

From research conducted following aspects:

- consistent with short-term financial policy, the company can evaluate the effectiveness of operational activity with indicators of rotation;
- investment policy is reflected in terms of efficiency, with indicators of rotation of capital invested in fixed assets;
- arrangements for resource management in the short and long term is reflected directly in performance both entities and the ability of economic entities to produce cash and cash equivalents.

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