

## ANALYSIS UNDERLYING EFFICIENCY FUND

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### INTRODUCTION

Regardless of the particular branches and form of ownership, any economic productive activity is impossible without the use of labor, the existence and reproduction depends largely on two factors:

- concrete forms and systems of remuneration;
- fund size and average salary salary of the staff carrying out the program provided.

The first factor expresses the principles of payment of labor and the second factor specific amount of money received by a group of employees for work actually done by a method of remuneration in the enterprise data. If the forms of remuneration or salary provide specific conditions to calculate salaries for worked time and the amount of work and performed services, and the salary as a concept which is an amount of money received by a person in a work period (month, quarter, year) and bonuses, compensation and allowances granted under collective agreements and legislation. So content and changes in fund depends on salary pay, bonuses awarded under the volume and quality of work performed and the final output obtained during the year, awards of benefit and other sources, facilities (aid) work and social production and other payments subject to supporting laws and regulations.

An important task of labor and wage analysis is to discover shortcomings in the organization and use of labor resources, working conditions and rest, discovering reserves fund salary increase. The analysis of remuneration fund acquired a significant, both overall appreciation of the effectiveness of using this fund and each department related to wages in hand.

### 1. ANALYSIS OF REMUNERATION FUND AND STRUCTURE OF THE FOLLOWING CATEGORIES OF WORKERS DYNAMIC

In the production of material goods, including agricultural ones the workforce has a decisive role. With additional production potential of the human form, the cost of production and seeing

relationships are established rational use of labor resources.

Citizens' right to work is determined by the Constitution, which states that every citizen has the right to use his skills as he wants to choose that profession, such as labor, specialization, etc.. Labor relations of all workers and businesses are legal regulation of the labor code.

Income from work of each worker are not limited maximum and minimum size of monthly salary is determined by the government and is used extensively in determining wages, fines, etc.. Remuneration system aims to create conditions to stimulate further raising the qualification of workers. Increase productivity and compliance with fair correlations average remuneration in the sense that the growth rate of remuneration to be permanently exceeded the growth rate of labor productivity. The essence of remuneration in agreement is that work pay is based on the level of implementation of tasks by establishing a means to pay for the unit of work or to meet a standard work. Remuneration in the agreement itself can take many forms:

- remuneration in direct agreement;
- remuneration in line gradually.

Agreement is the form of direct salaries and wages in the payment (price) per unit of work or product is directly proportional with the performance of labor standards. Direct labor wages (per unit of time) is characterized in that the size of remuneration is subject to the length of time worked and qualified workers. Remuneration in directing payment applies to staff, technical and administrative agricultural units, and also to payment of permanent workers in certain branches. In the current period are known two types of remuneration:

- basic;
- further.

At the basic salary workers are reported amounts calculated for the time worked, quantity and quality of work performed. Wages may be made under rules and payment rates established at the enterprise, taking into account existing deviations from the normal work (work performed at night, pay parking, etc.). Additional remuneration for time not worked are reported payments under

employment law (vacation pay, pay cuts for nursing mothers children, adolescents and hours prevelegiate other children up to 18 years). The organization of labor remuneration in agriculture, the system represents the most important element, including the basic rules according which is done the labor remuneration of the workers. With the tariff system, remuneration is differentiated according to the degree of skill, the specific conditions of employment. Tariff system as a whole is composed of three elements: the network tariff, basic salary, qualification tariff indices. Network tariff consists of a number of tariff categories. It is a group of workers on tariff categories according to their skill level, etc. Basic salary - reflecting the remuneration of workers for each category of network tariff. Qualification specified price indices theoretical knowledge and practical that a worker must possess to be classified in a particular category of network tariff.

Need the human factor analysis shows the following:

1. existence of unemployment and labor markets;
2. increasing number of workers employed in trade and service sphere n;
3. reducing the number of workers employed in agriculture.

Tasks as payroll analysis serve the following:

- determine the number and remuneration of the main groups of workers;
- structure analysis to determine salary fund;
- to determine the influence of the deviation of the average annual wage of a worker in agriculture;
- to determine the influence of the deviation of the total consumption on the article "Payment of work" to produce a kind of product.

Next we analyze the salaries and wages from the main groups of workers.

**Table 1.** Salaries and wages from the main group of workers in the LTD "Gareanca - Agro".

Groups of workers	Number of workers		In total labor remuneration		Thousand average annual salary an employee	
	2009	2010	2009	2010	2009	2010
1	2	3	4	5	6	7
1. Permanent	11	10	203	254,4	18454,5	25440
2. Servants	3	4	67	115,6	22333,3	28900
3. Seasonal	-	-	-	-	-	-
In total	14	14	270	370	19285,7	26428,6

Applicable to the absolute differences, simple version:

1. Determine the influence of factors (14-14) x 19285.7 = 0 lei;

2. Determine the influence of factor II (26428.6 to 19285.7) x 14 = 100,000 lei.

Balance the influence 370000 - 270000 = 100000 (lei). 100.000=100.000. Fund of remuneration in the period increased by 100,000 lei. This increase was influenced by the average annual wage increase of one worker, who conditioned the growth of the indicator result by 100.000 lei, the influence of the first factor is zero. As the number of workers during the years 2009-2010 remained constant, that is not changed. Annual average salary of a worker is a positive for entity and enterprise analysis shows that performance tends to us.

The next stage of analysis is studied the influence of the deviation of the average annual wage of a worker, resulting of the following factorial indicators:

- number of man-days worked by a worker per year;

- remuneration of man-days, lei.

Applicable to the absolute differences, simple version:

1. Determine the influence of other factors:

(207.2 to 181.7) x 106.14 = 2706.57

2. Determine the influence of factor II:

(127.55 to 106.14) x 207.2 = 4436.15

Balance the influence 26428.6 to 19285.7 = 2706.57 + 4436.15 (lei). 7142,9 = 7142,9

Average annual wage of a worker increased during 2010 compared to 2009 to 7142.9 lei. Both indicate factors have increased the indicator result, where mentioning:

- Increase the number of man-days worked by a worker per year has increased the result to 2706.57 lei indicator;

- Also increase payment indicator of a man-day increased the result to 4436.15 lei indicator. Next we analyze the influence of the deviation of the total consumption per article pay cereals and legumes labor grain production.

**Table 2.** Baseline data for determining the influence of deviation it has an annual average wage worker in LTD "Gareanca - Agro".

Indicator	2009	2010
1	2	3
Factorial:		
1. Number of man-days worked by a worker per year, days.	181,7	207,2
2. Remuneration of a man-day, lei	106,14	127,55
Resultative:		
3. Average annual wage of a worker, lei	19285,7	26428,6

**Table 3.** Baseline data to determine the influence of deviation of the total consumption in the article "Payment for work" in the production of cereals and legumes grains in LTD "Gareanca - Agro".

Indicator	2009	2010
1	2	3
Factorial:		
1. Overall yield, q.	5966	4635
2. Direct consumption of labor, man hours.	7039,9	5793,8
3. Work at 1 q inputs grain, man-hours.	1,18	1,25
4. Remuneration of man-hours, lei.	27,56	28,13
Resultative:		
5. The total amount of consumption on „The labor remuneration” to produce grain, thousand lei.	194	163

**Table 4.** Factor analysis of the consumption article "employment remuneration" to the production of cereals and leguminous beans.

Number of line	Number of substitution	Factorial indicator			Indicator result (n)	Calculation of the influence factors	Influence size	Causes deviations
		1	2	3				
1	2	3	4	5	6	7	8	9
1	0	5966	1,18	27,56	194000	-	-	-
2	1	4635	1,18	27,56	150733,9	150733,9-194000	-43266,1	I f ↓
3	2	4635	1,25	27,56	159675,8	159675,8-150733,9	+8941,9	II f ↑
4	3	4635	1,25	28,13	163000	163000-159675,8	+3324,2	III f ↑

**Table 5.** Analysis of fund wage structure LTD "Gareanca - Agro".

Indicator	2008		2009		2010	
	Amount, thousand lei	Weight, %	Amount, thousand lei	Weight, %	Amount, thousand lei	Weight, %
1	2	3	4	5	6	7
1.Total wage bill in the enterprise including:	254	100	299	100	370	100
a) Workers employed in agriculture of which:	254	100	299	100	364	98,38
- in plant production	240	94,5	289	96,7	358	96,76
-in livestock production	14	5,5	10	3,3	6	1,62
b) For services to the market	-	-	-	-	6	1,62

Apply the method of substitution in chain. Based on the data table 4 we see that in 2010 took place this article on reducing consumption of grain production with 31 000 lei more than in 2009. Decrease in productivity in 2010 led to a reduction of the indicator result by 43266.1 lei, remuneration of man-hours in 2009 increased the result to 3324.2 lei indicator. Also in 2010 there is a slight increase in consumption of grain work on a q which is characterized as a positive factor for the household, thereby increasing the result by 8941.9 lei indicator. Consumption growth to the article "Payment for work" in 2010 is influenced mostly by higher remuneration of man-hours that led to average annual wage entity (Table 5).

Balance the influence:  $-43266.1 + 8941.9 + 3324.2 = 163000 - 194000 - 31000 = -31000$ .

Analyzing the structure of wage bill, we see that the largest share of workers employed in agriculture has the share of which in 2008-2010 ranging between 100 and 98.38% accordingly. Workers employed in crop production is 94.5 respectively, 96.7 and 96.76%, and that workers employed in the livestock sector - 5.5, 3.3 and 1.62%.

## 2. THE ANALYSIS OF LABOR REMUNERATION AND STRUCTURE OF REMUNERATION FUND AFTER PAYMENT TYPES

In all branches of national economy (industry, agriculture, construction, transport, trade, etc.). Apply two specific forms of remuneration:

a) agreement;

b) after the time worked (or overheads), which in some cases combined with various forms of wards for quality and timely fulfillment of the tasks.

If forms of remuneration or wage labor provide specific conditions for the calculation of time worked and salary worker the amount of work and services performed, and salary as a concept and economic category, is a sum of money received by a person in work a period of time (month, quarter, year) and bonuses, compensation and allowances provided under the collective labor contracts and labor laws in force for time not worked.

In this regard, ie time worked and not worked to pay employees fall into the following groups:

- Basic salaries, calculated for time worked and not worked, wages agreement, awards, bonuses, additions to working hours and overtime compensation for training students in production and business management practitioners during practice and performance, etc. diploma thesis;

- Additional salary, payable in accordance with labor laws and collective bargaining for time not worked (holidays, vacations unpaid, job seniority, public obligations, the hours worked by minors, workday interruptions for objective and other compensation);

- Allowances are amounts of money that is granted outside staff wages to cover expenses incurred by an employee to perform a service task.

In any economic activity and consumption expenditures for labor settlements consist of all cash and payment as may be direct or indirect. In the case of this study is evaluated by type of payment structure (Table 6).

**Table 6.** Dynamics and structure of labor expenditures in LTD "Gareanca - Agro".

Indicator	2009		2010		Deviation, (±)	
	Amount, thousand lei	Weight, %	Amount, thousand lei	Weight, %	thousand lei	%
1	2	3	4	5	6	7
1. Fund staff salary, Including:	239	79,93	299	80,81	+60	0,88
- wages and salaries directly;	215,8	72,17	272	73,51	+56,2	1,34
- payments for time not worked;	-	-	-	-	-	-
- prizes and cash rewards;	3,2	1,07	5,9	1,59	+2,7	+0,52
- remuneration in kind.	20	6,69	21,1	5,71	+1,1	-0,98
2. For social rewards, total of which:	60	20,07	71	19,49	+11	-0,88
- employer's contribution for mandatory state social insurance of employees;	52	17,39	61	16,49	+9	-0,9
- the first mandatory medical insurance paid for employees.	8	2,68	10	2,7	+2	+0,02
Total expenses for labor.	299	100	370	100	+71	×

The data of Table 6 shows the changes in the structure of labor costs for maintenance. Main share of these expenses must occupy the first group: Fund to pay staff in 2010 compared to 2009 increased by 60 thousand, and total labor costs for the period increased by 71 thousand, which proves that the fund of remuneration for labor during the analysis does not have an efficient structure, it proves the fact that the share of direct wages should represent about 60% while salaries and wages in the enterprise direct time is 72.17 and 73 51 respectively for the years 2009 and 2010. Direct wage structure is not satisfactory and that there is an increase in 2010 compared to 2009 with 1.34 percentage points or absolute size of 56,200 lei.

A slight increase in labor expenses recorded for the welfare expenditures by 9 thousand for the years analyzed. It should be pointed out that in 2010 wages in kind fell to 0.98 percentage points since 2009. An essential increase of labor costs to a record cash prizes and emoluments or 0.52 percentage points in absolute value by 2.7 thousand in 2010 compared to 2009.

### 3. CALCULATION OF WORK AND INFLUENCE FACTORS FACTOR ANALYSIS UNDERLYING FUND

To analyze the influence of work on the company's core business using the following generalize indicators:

1. global output, which expresses all the goods produced at the enterprise (VPG);
2. turnover, which expresses the total amount of income from commercial operations by undertaking a period of time (CA);
3. value added, expressing new value created by the business entity that was added to the value of goods and services purchased, the materials used in production;
4. profit before tax, which expresses the total amount of profit obtained from both commercial operations and from outside to achieve.

Based on need assessment analysis that can be done at different levels, given by the following relations link factorial calculation:

$$VPG = LxW_e$$

where:

- $L$  - number of workers per enterprise;
- $W_e$  - the annual productivity of a worker.

This has the general form of relation between work factors and VPM. The following factors are systems based on it. indicators to analyze more succinctly, we analyze the data in Table 7.

Calculation of analyzing the influence of VPG is working out a number of systems based on factors such as:

1.  $VPM = L \cdot WL$ ;
2.  $VPM = M \cdot Wm$ ;
3.  $VPM = L \cdot P\%m \cdot Wm$ ;
4.  $VPM = M \cdot Z \cdot WZ$ ;
5.  $VPM = A \cdot Z \cdot Wo$ ;
6.  $VPM = To \cdot Wo$ .

**Table 7.** Baseline data to determine the influence of shift work in global production.

Indicator	Sign factor	2009	2010
1	2	3	4
1. The total number of workers in household, persons including:	L	14	4
- workers employed in agriculture, persons.	M	14	14
2. Annual average productivity of all workers, lei.	Wl	84214,3	116214,3
3. An annual average productivity worker employed in agriculture, lei.	Wm	84214,3	116214,3
4.The share of workers employed in agriculture in the total number of household workers, %.	P% <i>m</i>	100	100
5. The number of days worked by a worker, days.	Z	181,7	207,2
6. Daily productivity of a worker, lei.	Wz	463,48	560,88
7. Number of hours worked per day by a worker.	O	8	8
8.Productivity per worker hour, lei.	Wo	57,93	70,11
9.Total man-hours worked by all workers per year.	To	20350,4	23206,4
Resultative:			
10.The value of global production, lei.	VPG	1179000	1627000

Determining the influence of the above systems is performed using the procedure absolute differences:

1.  $VPG = L \cdot WL$ , where the influence of these factors to determine the absolute differences in procedure use, simple method.

$$VPG \Delta = 1627000 \text{ to } 1179000 = 448\ 000$$

$$VPGL \Delta = (14 - 14) \times 84214.3 = 0$$

$$VPGWl \Delta = (116,214.3 \text{ to } 84,214.3) \times 14 = 448\ 000.$$

Balance the influence:

$$= 0 + 448000 + 448000$$

$$+448000 + 448000.$$

From these calculations we see that the change in global output in 2010 compared to 2009, with 448 thousand increase was influenced differently by both factors. Labour productivity of a worker led to the increase of the indicator result to 448,000 lei.

2.  $VPG = M \cdot Wm$ . Also in this case the absolute differences applicable to the simple version:

$$VPGM \Delta = (14 - 14) \times 84214.3 = 0$$

$$VPGWm \Delta = (116,214.3 \text{ to } 81,214.3) \times 14 = 448\ 000 \text{ lei.}$$

Balance the influence:

$$1627000 \text{ to } 1179000 = 448\ 000$$

$$448000 = 448000.$$

Based on data obtained note that VPG in 2010 increased by 448,000 lei to 2009. Factor that increased the VPG is the average productivity of a worker employed in agriculture to score growth indicator result by 448,000 lei. The other indicator remains constant.

3.  $VPG = L \cdot P\% m \cdot Wm$ . For the calculation applicable to the influence of absolute differences, the variant comprising:

$$VPGL \Delta = ((14-14) \times 100 \times 84214.3):100=0\text{lei}$$

$$VPGP\% \Delta m = ((100 - 100) \times 14 \times 84214.3):100 = 0.$$

$$VPGW_m \Delta = (116,214.3 \text{ to } 84,214.3) \times 14 = 448\ 000.$$

Balance the influence:

$$1627000 \text{ to } 1179000 = 448\ 000.$$

$$448000 = 448000.$$

Analyzing data from case 3 we see that increasing VPG was influenced by a factor. Annual average productivity growth in agriculture of a worker employed indicator led to the result in 2010 increased from 2009 to 448,000 lei, while the total number of workers and the share of workers employed in agriculture remained constant.

The data in Table 7 we see that most data in 2010 increased compared to 2009, which is a positive element for the household. The company is

now moving towards reducing production consumption and cost, raising labor productivity of workers, there is the purchase of new means, which shows that the household has analyzed the future prospects. Factorial analysis is practical to study Statistics reflected multiplicative models, ie the indicator result can be presented as the product directly on the factors influencing its changes. Thus, fund fee is calculated as the product of the average annual number of workers (NMSS), the average number of days worked by a worker per year (Z), working day in hours (h) and average hourly wage of a worker (Sh). For a determination of these factors influence the relationship given by  $Fr = NMSM \cdot Z \cdot h \cdot Sh$  using the following table.

Following the calculations in Table 8 we see that the indicator has a positive resultative change the average number of days worked by a worker per year in 2010 than in 2009, which increases the indicator result (fund payment) with 20 359 , 2 lei. Negative influence on the fund pay lower average number of workers decreases 14506.92 indicator result by the average hourly wage lei and a slight increase worker who caused the fund to pay 16,244.48 lei. A neutral impact on salaries fund has work hours during the day. Such indicators give influence on the size of the fund's pay increase by 22.1 thousand lei in 2010 compared to 2009.

## CONCLUSIONS

1. The analysis shows that the fund of remuneration in the period increased by 100,000 lei. This increase was influenced by the annual average salary of an employee.

2. Positive action on remuneration fund changes in the number of days worked by a worker per year, which increased in 2010 compared to 2009 in absolute expression with 25.5 days or 14.03% relative expression.

Based on the conclusions made above we propose the following:

3. It is necessary for increased average number of employees and workers because the last time it was considerable reduced.

4. Need for increased average hourly wage of a worker that they may be interested in work that they do.

5. Requires improvement fund fee structure by type of payment.

**Table 8.** Calculation of the influence of details of remuneration fund changes in LTD "Gareanca - Agro".

Number calculation	Number substitution	Influence factor				Fund fee, lei	Calculation influence factors	Influence of size, (±)	Causes deviation
		NMSM, person	Z, days	H, h	Sh, lei				
1	2	3	4	5	6	7	8	9	10
1	0	11	181,7	8	9,98	159576,2	-	-	-
2	1	10	181,7	8	9,98	145069,28	145069,28-159576,2	-14506,92	↓
3	2	10	207,2	8	9,98	165428,48	165428,48-145069,28	20359,2	↑
4	3	10	207,2	8	9,98	165428,48	165428,48-165428,48	0	-
5	4	10	207,2	8	10,96	181672,96	181672,96-165428,48	16244,48	↑
Total		x	x	x	x	x	x	22096,76	x

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