CASE STUDY OVER THE EMPLOYEE'S BENEFITS AND PENSION PLAN ACCOUNTING

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Keywords: benefit-determined pension plans, contribution-determined pension plans, short-term employee benefits, long-term employee benefits, benefit-determined obligation's actualized value.

Abstract: The study indicates in its introduction IAS 19's and IAS 26's objectives continued by a detailed presentation of the employee's benefits and pension plans. The essay represents a study over the benefit-determined pension plans, emphasizing, as a result of a comparing analysis, the main differences between the two major pension plans categories. At the end of the essay one can observe the conclusions that have been drawn as a result of the conducted study regarding the obtained results.

1. Introduction

Romania, as a result of adhering to the E.U., has wide-opened its gates for the foreign investors, which obtained supplementary guarantees regarding the business environment in our country.

As economic agents succeed to obtain the profits they had estimated at the beginning of their activities, their welfare will also be felt by the employees. An employee that is satisfied by the advantages awarded by the employer will have two reasons for working more determined: he realizes that his work is fairly appreciated and as a result, he wishes to repay the trust the employer invested in his staff. Therefore, the employee is relaxed and will channel his energy at a larger rate towards completing his tasks, the employer also gaining from this.

The adopted measures for stimulating the employees, depending on the possibility of not requiring high costs for the employer, will determine a direct and positive effect over the agent's situation.

IAS 19: "employees' benefits" has its objective in recommending the right accounting and actualizing method of the information regarding the employees' benefits.

IAS 26: "accounting and reporting the pension plans" stands for accounting and reporting the operations that are being carried all throughout a pension plan in relationship with all of its participants, considered as a group, and it is applied regardless to a pension plan (that may or may not be a distinct judicial entity, that may or may not be administrated, that contains contributions and out of which the pensions are being paid) being created and regardless to the existence of administrators.

2. Presentation of the pension plan's and employees' benefits

Employees' benefits sum:

1. Short-term benefits consist in employees' benefits (others than compensations for participating at creating the agent's equity) that are to be integrally awarded within 12 months from the end of the time period in which the employees have maintained their jobs.

The short-term benefits consist of compensations, wages and social security contributions, compensated short-term absences (annually-paid rest vacations and medical vacations), percentages from revenues and bonuses to be paid (if awarded within 12 months from the end of the time period) along with other benefits (medical help, accommodation, cars, assets and services offered for free or at a lowered price) for its current employees.

2. Benefits offered for terminating (or expiring) the labor contracts are benefits that are to be awarded to the employees as a result of the following:

- the decision adopted by the enterprise consisting in terminating an employee's work contract before the usual retiring date
- the decision belonging to the employee and according to which he voluntarily chooses unemployment for gaining other benefits

3. Compensations as a result to participating to the enterprise's equity are benefits awarded to the employees, consisting in:

- the employees have the right to be awarded financial instruments emitted by the enterprise from its own equity

or

- the value of the enterprise's obligation toward its employees depends on the future price for the financial instruments released by the enterprise from its equity

4. Benefits after ending the contract (after retirement) include pensions, other retirement-based benefits, life insurance and medical assistance after retirement, which can be determined contributions plans and determined benefits plans.

5. Other long-term benefits are the employees' benefits that aren't to be integrally awarded within 12 months from the end of the period in which the employees maintain their jobs.

They consist in payments to be made as a result of long-term absence with or without the guarantee of maintaining the job, other long-term benefits, benefits for long-term unavailability and if these are payable after 12 months or more after the end of the time periods, postponed compensations to be paid after 12 months of more from the end of the period in which they were gained.

Employee's short-term benefit's accounting is somehow simple due to the lack of actuarial hypothesizes for establishing the obligations or cost and because statistical losses or incomes aren't possible.

An enterprise must acknowledge *the benefits from ending a work related contract* as a debt and as an expense, **only** when it can be proved that the enterprise is committed to either:

- terminating the contract of a single individual or of an entire group of employees before the normal retiring term

or

- awarding termination benefits as a result of any offers being made to encourage the employee to voluntarily chose unemployment

The contract termination benefits represent payments but can rarely include:

- raising the pensions directly or indirectly through a benefit plan

and

- offering the wage until ending a specified time period, if the employee doesn't perform supplementary labor that grants the enterprise financial benefits

Compensation benefits awarded from the enterprise's equity take the form of:

- shares and share options and other instruments released from the shareholder's equity for the employees, excluding the just value of those instruments if emitted by a third party.
- Currency payments, the value for which they will depend on the enterprise's share's future commercial prices

Compensation benefits out of the shareholder's equity can affect:

- an enterprise's financial position, by requiring the emission of financial instruments from the shareholder's equity or covert the actual financial instruments, like when the employees or the compensation plans for the employees are based on share options or have partially satisfied investment commissions that allow them to acquire future options
- performance and cash-flow of an enterprise by reducing the currency's value or the value of the employee's benefits that the enterprise grants the employees in exchange for their labor.

Benefits after terminating the labor contract

Pensions represent the employees' benefits that are to be paid after terminating the employment contract.

The contracts through which the enterprise grants benefits after the contract expires, are called pension plans.

The pension plans represent contracts through which the enterprise grants its employees benefits, upon or after terminating their employment contracts (as an annual income or as an anticipated payment), when this kind of benefits or the owner's contribution can be determined or estimated in advance by consulting certain documents or out of the enterprise's experience.

The contribution determined pension plans consist in pension plans that establish that the amount of currency to be paid are obtained as a result from contributing to a fund and from incomes granted by prior investments.

The contribution determined pension plans are pension plans meant to establish that the enterprise pays exact contributions to a different entity (fund) and will not have a legal obligation to pay supplementary obligations if the fund will not count the required amount of assets to cover the payment of the employee's benefits regarding his current or prior services.

The contribution determined pension plans accounting is simple because the enterprise's obligation for each time period is determined by the amount the enterprises has contributed with during that period of time. No actuarial hypothesizes are required for evaluating its obligations or expenses as a result of the lack of possibilities regarding actuarial losses or incomes.

The benefit determined pension plans represent the plans through which the amount that is to be paid as pensions is determined by using a formula that is most commonly based on the employees' earning and/or their years of service.

Financing represents the assets' transfer to an entity (fund) that is separated from the enterprise in order to satisfy the future pension payment obligations.

The tangible net assets of the benefits represent a plan's assets, excluding the debts, others than pension's promised actuarial value.

The pension's promised actualized value is the actualized value of the commissioned payments done through a pension plan for the enterprise's current and former employees that is grantable to a completed labor conscript.

The actualization rate reflects the time-expressed value of currency, but not the statistical and investment risks. The actualization rate does not reflect the enterprise's specific risk when crediting, risk that exists due to the enterprise's creditors.

The determined benefit plans' accounting is complex because actuarial hypothesizes are required in order to determine the expenses and obligations and there is no possibility regarding actuarial losses or incomes. The obligations are determined on a basis that is not actualized due to the fact that the obligations can be established many years after the employees complete their work.

Other long-term benefits require a simplified accounting method, compared to the one used in pension plans accounting, meaning:

- actuarial earnings and losses are immediately recognized and no "corridor" is applied
- the prior services' cost is immediately and integrally recognized

3. Study on the accounting of the determined benefits plans

"ALTEO" enterprise offers its personnel a retirement pension of 1,7% from the actual salary for each accounted year at the firm up to retirement. The following pieces of information are known:

- the average employee age in the enterprise is 35 years;
- retirement age is 60 years;
- average life span is 70 years, therefore 10 years after retirement;
- in order to benefit from retirement pension, an employee must have worked in the enterprise for at least 4 years;
- staff of 100 employees;
- average wage at employment is 2.000 lei;
- annual average growth rate of wages and pensions is 3%;
- actualization rate(the rate of the binding market) is 5%;
- the proportions of the social contributions is 32%;
- ALTEO's obligations towards employees and retired staff members at 01.01.N is 2.560.000 lei with an actualization rate of 5.05%;
- ALTEO's obligations towards employees and retired staff members at 01.01.N is 2.592.000 lei with an actualization rate of 5%;
- ALTEO's obligations towards employees and retired staff members at 31.12.N, before imputation 3.035.000 from labor conscript
- ALTEO's obligations towards employees and retired staff members at 31.12.N, after imputation of 306.000 lei from labor in N:2.729.000 lei;
- financial expenses: 128.000 lei;
- labor costs: 315.000 lei;
- unaccounted labor costs at 01.01.N: 57.600 lei;
- the favorable unaccounted actuarial deviation at 01.01.N: 280.000 lei;

The pension fond that "ALTEO" subscribes to is "LONG VIV" and it manages its assets with the following characteristics:

- the value of the funds at 31.12.N: 2.640.000 lei;

- the value of the funds at 01.01.N: 2.400.000 lei;
- recovered interests and dividends in N: 318.000 lei;
- profit tax in N: 132.000 lei;
- fund managing expenses: 12.000 lei;
- subscription from “ALTEO” to “LONG VIV” in N: 234.000 lei;
- subscription from “LONG VIV” to “ALTEO” in N: 306.000 lei;
- latent values over fund assets in N: 90.000 lei

In order to determine the elements that are to be presented in the balance sheet or the profit and loss account, it is required to go through the following steps:

- **Estimate the cumulated advantage of the employees for their labor,** that presumes determining the value assigned for the current and prior time periods, realizing estimations referring to demographical variables(personnel rotation and rate of mortality) and financial variables (future medical costs and wages growth) that will influence the costs of the benefit.

If we take in consideration the case of a new employee that only has 5 years until retiring, he will gain benefit of an annual pension of 8,5%(1,7%*5 years) from his estimated salary upon retiring.

Table 1

The calculation method for the pension compensation

No.	Elements	N	N+1	N+2	N+3	N+4
1	Estimated wage at the end of the year	2.000	2.060	2.122	2.186	2.252
2	Wage at the end of the career	2.252	2.252	2.252	2.252	2.252
3	Rights at the end of the career	8,5%	8,5%	8,5%	8,5%	8,5%
4	Compensation upon retiring	191.42	191.42	191.42	191.42	191.42

(1)$W_{N+1}=W_N*3\%$

(4)$C_R=W_{EC}=R_{EC}$ where W_{N+1} = estimated wage at the end of the year “N+1”

W_N = estimated wage at the end of the year “N”

C_R = compensation upon retiring

W_{EC} = wage at the end of the career

R_{EC} = rights at the end of the career

- **Bring up to date the benefit by utilizing the method of the projected credit factor** to determine the value of the obligation regarding the determined benefit and the current cost of the labor. The method regarding the projected credit factor is based on the principle that every work period leads to a supplementary benefit unit. The average up to date value of the obligation per employee is UCP pondered with the coefficient with the up to date debts (CUD). The probable actual value (PAV) for an employee is determined as follows: **PAV= Compensation upon retiring * actualization coefficient * probability coefficientș**

The actualization rate that is being used to bring the obligations regarding post employment benefits up to date is determined by referring to the interest rate on the market, at the date of the balance sheet, for the low-risk corporation’s obligations.

Table 2

The Probable Actual Value calculation

No.	Elements	N	N+1	N+2	N+3	N+4
1	Compensation upon leaving	191.42	191.42	191.42	191.42	191.42
2	Actualization coefficient 1,05	1,05	1,05	1,05	1,05	1,05
3	Probability of decease or leaving the firm before retiring	0,09	0,07	0,05	0,03	0,01
4	Probability coefficient	0,91	0,93	0,95	0,97	0,99
5	PAV	182.90	186.92	190.94	194.96	198.98

- The actualization coefficient is determined based on the market's output at the date of the balance sheet
- Data established from statistical basis
- The coefficient is the probability of reaching the age of 60 while working for the company and is calculated considering the rate of mortality and the probability of leaving the company.

The enterprise's commitment, according to the projecting credit unit's method, represents the proportion from the probable actual value that corresponds to the past activity, and it is determined as follows: UCP = PAV * actual seniority / total seniority.

Table 3

Projected credit units calculation method

No.	**Elements**	**N**	**N+1**	**N+2**	**N+3**	**N+4**
1	PAV	182.90	186.92	190.94	194.96	198.98
2	Actual seniority/Total seniority	1/5	2/5	3/5	4/5	5/5
3	UCP	36.58	74.76	114.56	155.96	198.98

The *actualization debts coefficient* by pondering the average lifetime after retiring and the social contribution coefficient:

$$ADC = \frac{\left(\frac{probability\ coefficient}{actualization\ coefficient}\right)^{number\ of\ years\ until\ retiring} - 1}{\left(\frac{probability\ coefficient}{actualization\ coefficient}\right) - 1} * (1 + social\ contribution\ rate) = \quad (1)$$

$$ADC = \frac{(1{,}03/1{,}05)^{10} - 1}{(1{,}03/1{,}05) - 1} * (1 + 0{,}32) = 11{,}88$$

The average value of the obligation for each employee (AVO) is UCP pondered with the actualized debts coefficient (ADC) as follows: AVO = UCP * ADC

For year N, the average actualized obligations value for each employee is obtained as follows: AVO = 36,58*11,88=434,57 lei

This method of calculation is used for every 100 employees of "ALTEO". The enterprise's commitment at 01.01.N counts 2.592.000 lei, while at 31.12.N it counts 3.035.000 lei, therefore 443.000 lei differences that represents the performed labor costs equaling 315.000 lei and financial expenses counting 128.000 lei.

- **Determine the correct assets value for the pension plan**. These assets, from a legal point of view, must be registered by another entity instead of the enterprise, they heaving to honor the enterprise's commitments. In accordance to IAS 19: there are assets registered for long periods of time by funds, distinct from a legal point of view by the enterprise and the insurance contracts emitted by a company and whose incomes are to be utilized for personnel advantage financing only. All these assets are to be evaluated at a just value. At the end of the financial exercise N the estimated output will be calculated along with the actual output of the fund's assets.

The estimated output of the assets is determined as follows:

Interests and dividends318.000 lei	
Additional accomplished or latent values	90.000 lei
Administrative expenses	(12.000 lei)
Taxes	(132.000 lei)
Just value for estimated output	264.000 lei

The actual output of the assets is determined as follows:

Just value at 31.12.N	2.640.000 lei
Just value at 01.01.N	(2.400.000 lei)
Paid subscriptions	(234.000 lei)
Received labor conscription	306.000 lei
Just value of the actual output	312.000 lei .

- **Actuarial deviation accounting.** IAS 19: An entity will recognize a percentage from its actual income and loss as an expense or income, if the cumulated unrecognized actuarial incomes and expenses at the end of the prior referring period of time exceed the higher value of:
  - 10% of the actualized obligation value regarding the determined benefit at the given time period(before deducting the plan's assets)
  - 10% of the just value of each asset of the plan at that time

The percentage from the recognizable actuarial incomes and losses for each determined benefit plan is given by the calculated surplus, according to the above requirements, divided by the predicted average period of work left until retirement for the employees included in the plan.

For example:

10%*2.560.000 = 256.000 lei

10%*2.400.000 = 240.000 lei

⇨ the maximum value is 256.000 LEI

The cumulated net actuarial incomes, unrecognized at the end of the prior time period count 280.000 LEI and they exceed 256.000 LEI. Therefore, the 24.000 LEI surplus, divided by the predicted average period of work left until retirement for the employees included in the plan, set at 25 years, must be acknowledged as an income, counting 960 LEI.

- **Calculate the past labor conscript costs**. Presuming ALTEO decided at 31.12.N to improve its retired staff member's advantage by 0,3%, for former employees who had worked for more than 5 years within the company. At 31st of December N-1, the actualized average commitment grew from 2.000.000 lei to 2.400.000 lei. Within the sum of 400.000 lei, we must distinguish the status of the former employees having worked for more than 5 years for the company(the minimum time period needed to gain access to the 0.3% growth), from that of the employees who have worked for least than 5 years for the company(the sum of 57.600 lei). The 342.400 lei represent the difference between 400.000 lei and 57.600 lei corresponds to the former staff members who have earned these benefits and it is immediately recognized as expenses. In opposition, 57.600 lei correspond the rights that are yet to be received as part of the expenses during the average period of time remaining upon these rights being awarded. As the required period of time for these rights is 5 years, the average time to be realized is 2,5 years. Therefore, from the 57.600 lei, only 23.040 lei will be recognized as expenses and correspond to the rights that haven't yet been earned.

• **Presenting data into the financial situations**

The balance sheet sum is calculated as follows:

The net actualized value of the obligation at 31.12.N	2.729.000lei
The just value of the plan	(2.640.000lei)
=Surplus for the plan's financial coverage	89.000lei
+/- Unrecognized actuarial incomes or losses	295.040lei
- Unrecognized past labor conscript costs	(38.400 lei)
=Pension commission at 31.12.N	345.640lei

The sum from the profit and loss account is established as follows:

Past labor conscript costs	315.000lei
+financial expenses	128.000 lei
-estimated output for the fund's assets	(264.000 lei)
+/- recognized actuarial deviations	(960) lei)
+recognized past labor conscript costs	19.200 lei
=Expenses	197.240 lei

Verification:

Calculation method for the pension commission at 01.01.N:

Actualized value of the labor conscript at 31.12.N-1	2.560.000 lei
-the plan's assets just values at N-1	(2.400.000 lei)
+unrecognized actuarial income	280.000 lei
-past unrecognized labor conscript costs	(57.600 lei)
=pension commission at 01.01.N	382.400 lei

Calculation method for the pension commission at 31.12.N:

Pension commission at 01.01.N:	382.400 lei
+expenses	197.240 lei
-paid subscriptions	(234.000 lei)
=pension commission at 31.12.N:	345.640 lei

4. Conclusions

** By analyzing the calculations that were made throughout the study, we found the following:

- the modification in the actualization rate from 5,05% to 5% determined the increase in the enterprise's debt at 01.01.N from 2.560.000 lei to 2.592.000 lei. The 16.000 LEI represent an unfavorable actuarial deviation.
- the difference between the estimated retirement fund's assets output and the actual output counts 48.000 LEI and it represents a favorable actuarial deviation
- at 31.12.N the unaccounted actuarial deviation sums 295.040 lei, being under the 10% limit of the enterprise's obligation value towards its employees and former employees

At 31.12.N the unaccounted actuarial deviation will consist of 295.040 (280.000 - 960 + 48000 -32000), being part of the 10% of ALTEO's obligation values towards its employees and retired staff members at 31.12.N.

- the sum of 342.400 lei (400.000 lei – 57.600 lei) corresponds to the staff members that have access to these rights and it is immediately recognized as an expense. The sum of 57.600 lei corresponds to the rights that are yet to be gained and must be recognized as expenses on the average time period left. The average period of time is 2,5 years, depending on the required time period that guarantees these rights (5 years). Only 23.040 lei out of the 57.600 lei will be recognized as expenses.

**By analyzing the contribution determined and the benefit determined pension plans, we realized there are differences between them, as follows:

1. **the contribution determined plans**

- the enterprise's legal obligation is limited to the value that is established for contributing to the fund. The employee's benefits value, received upon terminating the contract, is determined by the value of the contribution payments made by the enterprise to a pension plan or to an insurance society, along with the income obtained as a result from investments made by using the contributions.
- the statistical risk (benefits will be lower than expected) and the investment risk (invested assets will not generate the expected benefits) will fall on the employee

2. **the benefit determined plans**

- the enterprise has the obligation to grant the established benefits to its employees and former employees
- the statistical risk (the benefits will cost more than forecasted) and the investment risk will fall on the employer.

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