

# **LIABILITIES AND THEIR MEASUREMENT IN THE GREEK BUSINESS: THE CASE OF PENSION COSTS AND OBLIGATIONS**

**TAHINAKIS Panayiotis, LECTURER, (tahi67@uom.gr), UNIVERSITY OF MACEDONIA, THESSALONIKI, GREECE**

**PROTOGEROS Nicolaos, LECTURER, (proto@uom.gr), UNIVERSITY OF MACEDONIA, THESSALONIKI, GREECE**

**GINOGLOU Dimitrios, AS. PROFESSOR, (ginogl@uom.gr), UNIVERSITY OF MACEDONIA, THESSALONIKI, GREECE**

## **INTRODUCTION**

The growth and expansion of firms into foreign markets has resulted in the aggregation of financial information that includes non homogeneous elements. This issue has become bigger with the development of large firms through mergers and acquisitions.

Liabilities can be defined<sup>1</sup> as probable future sacrifices of economic benefits arising from present obligations of a particular business to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Pension plans<sup>2</sup> are long-term commitments possessing some characteristics like each employee upon reaching a specified age can retire and receive a determinable amount during each year of retirement by a company.

The purpose of this paper is to examine the framework of identification as well as the disclosure requirements of pension costs and obligations as they have been set by articles of commercial law and recognized professional accounting institutions. Emphasis will be given in analyzing the existing accounting recognition and measurement difficulties deriving from reporting pension costs in the light of applying the International Accounting Standards in the Greek environment.

## **PENSION COST IDENTIFICATION AND DISCLOSURE REQUIREMENTS**

An obligation arises from a contract where the amount and time of payment of the obligation are specified from the conditions of the contract. Thus, an obligation should

be classified as a liability if it can be reasonably measured or if a meaningful range of values or probabilities can be assigned to it.

Liabilities can not be included in the balance sheet as separate items unless they can be quantified. However, an inability to quantify an obligation does not imply that it is not a liability and it must be disclosed by footnote rather than by listing among the liabilities in the balance sheet. Specific characteristics<sup>3</sup> of liabilities would include, among other, the following:

- (a) the obligation must exist at the present time and arise out of some past transaction or from acquisition of goods or services or from losses already sustained for which the firm is liable, or from the expectation of losses for which the firm has obligated itself;
- (b) equitable obligations should be included if they are based on the necessity of making future payments to maintain good business relationships or if they are in accordance with normal business practice;
- (c) the amount is not necessary to be recorded with certainty so long as future sacrifice is probable;
- (d) there should be a determinable maturity value or the expectation that payment of an amount determined by reasonable estimation will be required at some specific time in the future, even though the exact timing is not known at the present;
- (e) the payee would be known or be identifiable either specifically or as a group. The payee should be identifiable by the settlement date.

In the past, the general accepted practice had been to charge pension costs in the profit and loss account on the basis of funding payments made to the pension scheme. In addition, most companies gave only limited information in their financial statements about obligations to pay pensions to which they were committed and the assets which had been built up in their pensions funds to meet these obligations.

Today, the measure of pension cost is no longer simply the amount of contributions paid to the fund. The pension expense is derived from actuarial valuations of the scheme, although the changes in these valuations are to be recognized only gradually, by amortizing them over a number of years, so as to reduce the volatility which would otherwise result.

There are different types of pension schemes<sup>4</sup>. In the contributory one the cost is shared by both employees and employer, whilst other are non-contributory which means that the whole cost falls on the employer. Also, there are funded or unfunded schemes.

In the case of funded contributions are paid into a separate fund account which is usually administered by trustees, who have the right to invest these contributions and meet the pension commitments. The contributions are invested in a portfolio of property or securities either directly or indirectly by the purchase of insurance policies. On the other type contributions are not placed in a separate fund account but are re-invested in the employer's business and pensions are subsequently paid on a 'pay-as-you-go' basis.

Another distinction is between defined contribution and defined benefit schemes<sup>5</sup>. Under the defined contribution schemes the contributions are determined and the employees receive pensions on the basis of whatever amounts are available from those contributions and returns are earned from their investment. The amount of pension payable to the employee is not guaranteed and it depends on the investment earnings of the funds contributed. It is clear that as the contributions are fixed the amount to be charged as the cost of providing pensions is clearly determinable as the amount payable by the employer in respect of a particular year. Under the benefit scheme the retirement benefits are determined on the basis of average salary over a period of service but more often on the basis of salary in the final year or years before the retirement. In this case it is not clear in advance that the regular contributions will generate a fund sufficient to provide the benefits. The employer may be obliged for legal reasons, or in the interest of maintaining good employee relations, to make good and deficiency in funding. If this is the case, then the cost of pensions in a particular year is much more difficult to determine.

The disclosure, generally, should provide adequate information to users of financial statements. The disclosure requirements are intended to improve the financial reporting of business combinations. This can be achieved by enabling users of financial statements to gain a better appreciation of the business acquired of the extent to which the results of the combined entity are attributable to trading performance. Thus, disclosures should include at least the subject to any necessary modifications for pension arrangement to enable users to gain a broad understanding of the significance of the pension arrangements<sup>6</sup>:

- (a) the nature of the scheme (i.e. The company XCV plc operates a defined benefit pension for its employees which is funded self administered arrangement)<sup>7</sup>;
- (b) whether it is funded or unfunded;
- (c) the accounting policy and the funding policy (i.e. In the company's XCV plc pension scheme payments made to the scheme and charged in the financial statements

- comprise current and past service contributions. Independent actuarial valuations on a going concern basis are carried out every three years)<sup>8</sup>;
- (d) whether the pension cost and provision (or asset) are assessed in accordance with the advice of a professionally qualified actuary and, if so, the date of the most recent formal actuarial valuation or later formal review used for this purpose. If the actuary is an employee or officer of the reporting company, this fact should be disclosed. (i.e. The total pension cost for the company XCV plc was €11m the cost relating to the scheme is assessed in accordance with the advice of a qualified actuary using the attained age method. The pension cost charged to the profit and loss account is such as to spread the cost of pensions over employees' working lives with the company)<sup>9</sup>;
- (e) the pension cost charge for the period together with explanations of significant changes in the charge compared to that in the previous accounting period. (i.e. The pension cost has been based on the latest full valuation of the scheme which was conducted as at 31 December 2003. The assumptions which have the most significant effect on the results of the valuation are those relating to the rate of return on investments and the rates of increase in salaries and pensions. It was assumed that the investment return would be 12% per annum, that the general level of salaries would increase at the rate of 10% per annum and that present and future pensions would increase at the rate of 8% per annum)<sup>10</sup>;
- (f) any provisions or prepayments in the balance sheet resulting from a difference between the amounts recognized as cost and the amounts funded or paid directly (i.e. At the date of the latest actuarial valuation, the actuarial value of the assets of the scheme was € 520.7m with a market value of €462.7m. The actuarial value was sufficient to cover 128% of the benefits that had accrued to members, after allowing for expected future increases in earnings. This surplus should be eliminated by 2008 at the current employer's contribution rate at 14% of pensionable earnings.)<sup>11</sup>;
- (g) the amount of any deficiency on a current funding level basis (a 'discontinuance' basis) indicating the action, if any, being taken to deal with it in the current and future accounting periods. Where there is more than one pension scheme, it is not permitted to set off a surplus type arising on one scheme against a deficiency of another. (i.e. A prepayment of €30m has been included in debtors representing the excess of the contribution paid to the scheme over the accumulated pension cost.)<sup>12</sup>;
- (h) an outline of the results of the most recent formal actuarial valuation or later formal review of the scheme on an ongoing basis. This should include disclosure of:

- (i) the actuarial method used and a brief description of the main assumptions. This should include the assumption made regarding new entrants unless it is apparent from the description of the method used. If there has been a change in the method, this fact should be disclosed and the effect quantified;
- (ii) the market value of scheme assets at the date of their valuation or review.;
- (iii) the level of funding expressed in percentage terms;
- (iv) comments on any material actuarial surplus or deficiency;
- (v) the effects of any significant post-valuation events.
- (i) any commitment to make additional payments over a limited number of years;
- (j) the accounting treatment adopted in respect of a refund made under deduction of tax, where a credit appears in the financial statements in relation to it;
- (k) details of the expected effects on future costs of any material changes in the company's pension arrangements;
- (l) the way in which the transitional provisions have been applied;
- (m) any other matters in relation to pension provision which are considered necessary in order that the employer's financial statements may disclose a true and fair view.

Generally, the degree of disclosure is something that should be decided by managers and are allowed not to disclose any information if they consider it to be seriously prejudicial to the interests of the reporting company. The level of disclosure depends mainly upon three concepts<sup>13</sup>, adequate, fair and full disclosure of material financial information. The adequate disclosure means a minimum amount of disclosure fitting with the negative objective of making the statements not misleading. Fair disclosure implies an ethical objective of providing equal treatment for all potential readers. Full disclosure implies the presentation of all relevant information. However in a case of full disclosure we have to consider that the presentation of too much information hides the significant ones and makes the financial reports difficult to interpret. Also, the level of disclosure depends on the level of disclosure available from other outside sources such as there are numerous trade publications, financial press or numerous specialists covering industries in depth.

In the US the principle standards which deal with the examining issue are SFAS No. 87-88 'Employer's Accounting for Pensions' as well as 'Employer's Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits' respectively.

SFAS No 87 requires<sup>14</sup> a particular actuarial approach to be used for measuring cost, and tightly draw rules as to the computation and disclosure of pension figures in the financial statements. It also breaks down the cost to be charged into six components, and has detailed provisions dealing with how these are to be calculated. Also, the pension cost to be attributable to a period is that which accrues in respect of the period under the terms of the pension scheme. This means that for the final salary schemes, the statement requires that the cost be calculated using the projected unit method. Moreover, the standard requires that each of the significant assumptions made in valuing the scheme should be the best estimate, in relation to that individual aspect in isolation. The discount rates depart from normal actuarial practice by requiring that these should reflect the rates at which the pension benefits could be effectively settled. In other words a market rate at each valuation date should be used, rather than a long-term rate estimated by the actuary.

SFAS No 88 requires<sup>15</sup> immediate recognition of certain previously unrecognized amounts when certain transactions or events occur. The statement prescribes the method for determining the amount to be recognized in the profit and loss account when a pension obligation is settled or curtailed.

The relevant International Accounting Standard is IAS No.19 'Accounting for Retirement Benefits in the Financial Statements of Employers'. The requirements of this Standard are similar to those of SSAP No.22, except that the international standard discusses more the actuarial methods as well as specifically states that either an accrued benefit valuation method or a projected benefit valuation method should be used.

## **ACCOUNTING CONTROVERSIES IN MEASURING PENSION COST**

The determination of pension liability involves both valuation and timing aspects. The timing and valuation of pension liabilities are determined simultaneously and coincide with the period accrual of pension expense. A company receives employee labor services before the payment of pension benefits to employees and the revenues of these services are available for general company purposes at no explicit interest cost over the intervening years. An accurate presentation of the pension liability at the end of each period requires that future gross pension payments derived from employee labor-services exchanged in each period be present-value by the application of an appropriate discount rate. Implicit interest, the remaining component of the pension liability,

accrues each period on the outstanding pension liability. The outstanding pension liability at the end of any period consists of accumulated labor services exchanged for pension benefits plus accumulated unpaid accrued interest. The appropriate discount rate for calculating period pension expense and the end-of-period pension liability can be chosen from among<sup>16</sup>: (a) the actuary's estimate of the average earnings rate on pension fund investment. (b) The expected long-run average corporate bond rate for the company under consideration. (c) The cost of capital to the company under consideration.

The cost of capital represents<sup>17</sup> the average expected cost of all components financing. Also, it is the implicit interest rate of discounting future pension payments in both unfunded and funded plans. Because the funds that operate from revenues produced by employee labor-services exchanged for pension benefits are available to the company for reinvestment in projects that promise some earn of return in excess of the minimum required rate of return. These funds remain at the disposal of the company and can be reinvested many times until the day the employee services are received. The availability of these funds for general corporate investment purposes at a rate at least equal to the cost of capital has the effect of reducing the current financial burden of future gross pension payments. Moreover, the cost of capital represents<sup>18</sup> the opportunity cost of funds which are remain frozen in pension fund investments. The cost to the company of this funds is the return lost on the best alternative investment opportunity.

A negative pension cost figure arises<sup>19</sup> when the amount of interest and/or variations credited to pension cost exceeds the regular cost. This can be the case when the surplus in the scheme is so large that it would not be eliminated even by a pension holiday for the whole of the average working lives of the employees in the scheme. However, it could be the result of using a 'front-end' loaded amortization method of releasing variations to the profit and loss account. The question that arises is whether it is legitimate to recognize negative pension expense.

One view states<sup>20</sup> that it is designed to allocate the total cost of providing pensions to the years of employment of the eventual pensioners, and because the total cost will be positive, it does not make any sense for the amount allocated to any individual year to be negative. Thus, the credit arising from interest or variations should be restricted to the amount of the regular cost, so the minimum cost is zero and no credit is taken for any negative amount. The alternative case<sup>21</sup>, consider more into the pension scheme and

tries to see the benefits and risks from the employer's point of view. In this case, negative pension cost is recognized and it represents a limitation on recognition of interest and variations would in many cases be arbitrary. However, it is necessary to ensure that the recognition of negative pension cost does not give rise to an asset does not represent a source of benefits to the employer. Recognizing a pension credit in the profit and loss account requires the recognition of a corresponding asset in the balance sheet and it is necessary to consider how the employer will recover that asset.

Last, one indirect difficulty of pension cost is connected with the auditors responsibility which is to obtain sufficient materials in order to assess the credibility of the financial statements presented by the management. In this regard, there are many audit problems including, the problem of materiality and the application of materiality criterion in the audit of the financial information disclosed for each pension scheme and especially the use of market base and the allocation of cost. The auditors' task is, therefore, difficult because there is no clear guideline by which they are able to evaluate the management decisions. Also personal judgement is required as to the point at which inter-dependence is so great that pension cost is not meaningful.

## **CONCLUSIONS**

The adoption of actuarial cost as the basis for pension expense and liability determination is a questionable practice for many reasons<sup>22</sup>. First, accountants might tend to lose sight of their primary responsibility of matching expenses with revenues. Second, actuarial cost methods were developed to provide alternative pension fund deposit patterns and not to determine the proper matching of pension expense with revenues. Third, actuarial cost methods incorporate the estimated earnings rate on the pension fund as the appropriate implicit interest rate to determine period pension expense and end-of-period pension liability.

The purpose of disclosure pension fund assets, pension liabilities and fund earnings, is to assist the readers of financial statements to evaluate the business as a whole and predict the future as much as possible. This assistance means extensive disclosure, which in most cases will increase the firm's operating cost in terms of expense, collecting and processing the new materials. In this regard there are audit problems, including the problem of materiality and the application of materiality criterion in the audit of the financial information disclosed for pension. It is worth pointing out that the

level of new expenses connected with the quality and quantity of the data required and with the company's internal control system, may not be that great. Mainly, management will gather all these data for its own internal purposes and these data can be readily adapted for external users. The best solution, what to disclose, is to know the needs and characteristics of the users. Whatever accounting procedure is finally adopted, the disclosure of the amounts of expenditures by year will enable the financial analyst using the information to make the adjustments that he sees fit.

In conclusion, this study indicates that there are accounting and auditing problems of defined, measured and disclosed pension cost to users of financial statements. Despite these difficulties the importance of such liabilities will increase, as the Greek capital market grows and there is a constant need to supply reliable accounting information.

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**NOTES:**

- <sup>1</sup>. AICPA Professional Standards, para. 1230.028, USA.
- <sup>2</sup>. Dewhirst, J. (1971), 'A conceptual approach to pension accounting', *The Accounting Review*, April, pp.365-373.
- <sup>3</sup>. Dhaliwal, D. (1986), 'Measurement of Financial Leverage in the Presence of Unfunded Pension Obligations', *The Accounting Review*, October, pp.651-661.
- <sup>4</sup>. Lewis, R. and Pendrill, D. (1995), 'Advanced Financial Accounting', Pitman, London. UK, pp.633-634.
- <sup>5</sup>. Ibid., note 4, p.634.
- <sup>6</sup>. SSAP No.24, 'Accounting for Pension Costs', London, UK.
- <sup>7</sup>. UK GAAP – 'Pension Costs', London, UK.
- <sup>8</sup>. ACCA 'Advanced Financial Accounting –3.1', London, UK.
- <sup>9</sup>. Ibid., note.8, p.172.
- <sup>10</sup>. Ibid., note.8, p.172.
- <sup>11</sup>. Ibid., note.8, p.172.
- <sup>12</sup>. Ibid., note.8, p.172.
- <sup>13</sup>. Ibid, note 7, pp.856-858.
- <sup>14</sup>. SFAS No. 87, 'Employer's Accounting for Pensions', USA.
- <sup>15</sup>. SFAS No.88, 'Employer's Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits', USA.
- <sup>16</sup>. Ibid, note 2, pp.365-373.
- <sup>17</sup>. Ibid., note 2, pp.365-367.
- <sup>18</sup>. Ibid., note 2, p.368.
- <sup>19</sup>. Ibid., note 7, p.818.

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<sup>20</sup>. Ibid., note 7, p.819.

<sup>21</sup>. Ibid., note 7, p.820.

<sup>22</sup>. Ibid., note 2, pp.372-3.

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