THE EMPEROR'S NEW CLOTHES – REPORT ON THE VALUE OF THE BENEFITS TO EXECUTIVES IN RESPECT OF CAPITAL GRANTS

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1. Introduction

The American standard APB 25, which was the first standard to put the accounting treatment for the issuance of options to employees into order, was published in the year 1972. The standard determines three guiding principles:

A. The company that is issuing options to its employees under a compensatory plan is to record an expense in its statement of income at the level of the benefit to the employees.

B. The benefit is to be measured in accordance with the intrinsic value of the option, in other words, in accordance with the difference between the market value on the day of the granting of the options, and the additional payment that will be required on the exercise of the options in the future.

C. The value of the benefit is to be measured only once – at the time of the granting of the plan. The amount, which has been measured at the time of the grant, is to be reflected as an expense over the length of the vesting period, without any connection to future changes in the actual value of the options.

From among the three guiding principles that are described above, the principle that caused the biggest argument was the second principle, according to which the benefit is to be measured in accordance with the intrinsic value of the options. In effect, in many cases, principle B left principle A meaningless, since in many cases companies distributed benefits to their executives and senior employees, which were worth millions of Dollars, without this being recorded at all as an expense in their statements of income. It was sufficient that at the time that the measurement took place the exercise price of the options was higher or equivalent to the market price of the shares (the base asset) in order for there to be no need to record any expense whatsoever. This was despite the fact that it was clear to everybody that the options that were being issued to the employees without charge had a significant economic value and that they were being granted as an alternative to salary.

Since the publication of APB 25 and for some thirty years, there is an on-going argument over the question of the measurement of the benefit that is rolled up in the issuance of options within the business - professional community and the bodies that are responsible for the issuance of accounting standards.[2] It was already in the year 1973, one year after the publication of APB 25, that the learned Myron Scholes and Fischer Black published ground-breaking articles, which proposed an analytical model for the calculation of the valuation of the options. Despite this, the argument on the question as to whether the employee benefit should be measured in accordance with the fair value of the options or in accordance with their intrinsic value, has only been finally resolved in recent years, with the publication of the amended American Federal Accounting Standard FAS 123R, and International Financial Reporting Standard 2 "Share based payment."

However, there is a fly in the ointment: for indeed, the state of the art accounting standards do unequivocally set the principle that the value of the benefit to the employees/executives is to be measured in accordance with the fair value of the options. However, the guiding principle, which was set all the way back in APB 25, according to which the fair value of the grant is to be measured only once – at the time of the granting of the options (hereinafter: "The principle of the timing of the measurement"), was not considered at all, it was accepted as being self-evident, and it continues to survive. Therefore, we continue to measure the value of the benefit at the time of the granting of the plan, and we continue to reflect the said amount as an expense over the course of the vesting period, without relating at all to changes in the value of the options (and the benefit that is derived from them) over the course of the vesting period until the exercise of the options.

In our opinion, the growing public interest in the remuneration plans for management mandates a re-examination of the principle for the timing of the measurement. The objective of this article is to call into dispute the principle and to show that at its very accounting-theoretical basis – it is a mistake.

Just like in the story of the Emperor's new clothes, the reporting companies are in the habit of attaching to their reports, each year, the component of the value of the benefits in respect of the granting of options in the past (which is calculated in accordance with their fair value at the time of the grant) for the other components of salaries, most of which represent salaries and benefits that have been paid in kind. The financial analysts check the reasonableness of the overall amount by making comparisons, and they often even rank the executives in accordance with size of the overall salaries that we attribute to them. But the Emperor is stark naked: we sometimes find out that the value of the shares in the company has fallen and the options are to be found far out of the money for most of the vesting period and that they may even expire at the end of it. However, the company continues to report a large expense, in accordance with the measurement made on the day of the grant. As a result of this, we continue to rank those same executives at the very top of the comparative salary tables. As compared with this, in many other cases, the opposite scenario can be found, where, as a result of the increases in the process of the shares, the value of the option that the executive is holding has risen significantly. However, the company continues to report the expense in accordance with the relatively modest amount, which was determined at the historical time of the granting of the option, and nobody even ponders what the real benefit in kind of that executive is actually worth.

And it is precisely the adoption of the principle of the timing of the measurement that also leads to the games involving the timing of the granting of the option (backdating) being played. The executives who were involved in the criminal actions involved in the timing games have been excoriated, however can it be said that there is nothing in those scandals that requires a renewed examination of the principle for the timing of the measurement? In other words, maybe we should not hang the executives for what they did but rather we should get rid of the conditions that made this possible?

The continuation of the article is as follows: in the following section we will discuss, in a brief and critical manner, the theoretical justification, the professional literature from which it can be learned, for the recording of the expense in accordance with the fair value at the time of the issue, and we will explain why, in our opinion, this should not be accepted. In the third part of the article we will point to the other alternative proposals that have been brought up, over the course of the years, for the accounting reporting for capital grants to employees.

Our contribution to the discussion will be detailed in the fourth part of the article. We will propose an alternative principle for measurement, which, in our opinion, from the theoretical accounting perspective, is more correct. It responds to the economic logic that lies behind the economic reasoning underlying the capital grants, which is the creation of a direct link between the contribution of the employee to the company's performance and the level to which they are remunerated. A short summary will be presented in the fifth part of the article. For the convenience of the readers, we have added an appendix to the article in which we have included a simplified numerical example, which details the accounting records and which illustrates the differences between the existing method of reporting, the method of reporting that we are proposing and an additional alternative method of proposing that was proposed by Landsman et al. (2006), and which is detailed in the third part of the article.

2. The theoretical justification for the measurement of the value of the benefit on the day of the grant

The professional literature that deals with the subject focuses primarily on the question of the justification to the very recording of the expenses in the financial statements at the level of the fair value of the options that have been granted, whereas too little attention has been paid, so we allege, to the question of the timing of the measurement of the benefit.

A number of explanations have been proffered, which complement each other, to justify the principle for the timing of the measurement:

A. Bodie, Kaplan and Merton (2003)[3] raised the claim that at the time of the issue the company had the alternative of raising funds by means of the issuance of those same options to a third party. Therefore, the measurement of the benefit to the executives must reflect the amount of the alternative cost to the company, in other words, the waiving of the consideration from the raising of capital under the same terms.

B. Another intuitive explanation is that we relate to the remuneration for the executives as if it they were wearing two hats: wearing one hat they are senior employees of the company and wearing the other hat they are shareholders by force. With the granting of the options, the executives become shareholders by force, and just as a change in the value of the shares in the hands of the shareholders is not a change to which the company is a party, so too it is appropriate that a change in the valuation of the option during the course of the vesting period should not constitute a reportable change for the company.

C. The two transactions approach argues that at the time of the issue, two theoretical transactions take place at the same time: One transaction is the payment of salary in advance to the employee in cash, and the second transaction is the issuance of capital to that same employee in the same amount. The measurement of the benefit in accordance with the fair value on the day of the grant reflected the fair value at which those two theoretical transactions are, prima facie, carried out.

D. According to this approach, the value of the benefit on the day of the grant does in effect constitute a sort of pre-paid salary expense, which is to be spread over the period of the benefit. As is well known, in accordance with generally accepted accounting principles, both the prepaid salary expense and the issuance of shareholders' equity are measures in accordance with their cost − in other words at the fair value at the time of the grant. It would seem that accounting logic has been adopted by the bodies responsible for the publication of the standards.

Does this accounting logic, which effectively breaks the connection between the value of the grant that the executive will receive in the future and the value of the work and management services that he is extending to the company and which is reported as an expense in its statement of income, appear to be correct and appropriate?

The problem is that the bodies responsible for the standard were themselves put off by an overall adoption of the two transactions approach, and they did not give instructions for the recording of the value of the management/work services that would be provided in the future as an asset (pre-paid expense) in the balance sheet of the company against the increasing of the shareholders' equity. And to be precise, the increase in the shareholders' equity is recorded only at the end of each reporting period, and this is done on the basis of the actual receipt of the services.

And so the need arises to differentiate between the expense and the commitment. On the date that the grant is made a commitment is created, between the company and the executive and capital instruments are defined, in consideration for which the executive agrees to be employed by the company during the vesting period. The executive is not bound to grant the management services to the company and he can waive the benefit and leave the company during the course of the vesting period.

The expense is incurred and accumulated over the length of the vesting period, and it is to be measured in accordance with the length of that period. In other words, even if we adopt the rationale of the two transactions approach, it will be more correct to say that they are not carried out at the time of the grant, but rather over the length of the vesting period.

In order to demonstrate this claim, let us examine a case in which the executive chooses to leave his position during the course of the vesting period, and the company promises those same capital instruments (for the balance of the benefit period of the executive who is replaced) to the new executive. Under the logic of the pre-paid salary expense approach, no change has occurred. However, in accordance with the existing principles, the expense that has been recorded and which reflects the value of the benefit (which was measured at the time of the previous grant) to the executive who has left, is to be cancelled, and the value of the benefit for the new executive is to be re-measured (in accordance with the terms that are in existence in the market at the time that the commitment is entered into with him).

We would like to draw the reader's attention to the fact that one of the main reasons used to justify the recording of the option as an expense, was that the accounting should give identical expression to the two transactions, whose economic significance is identical, in the financial statements. Since the issuance of options constitutes an alternative to a cash salary, which is recorded as an expense in the statement of income, and similar expression is to be given to the value of the benefit that is rolled up in the issuance of options, which in effect constitutes an alternative to salary, in the financial statements.

The issuance of options to executives constitutes, according to the real economic significance of the transaction, the payment of salary, which is conditional upon results. A possible alternative to it is the promise of grants (bonuses) for the executives, as a set percentage of the company's business results, as will be recorded in the future financial statements (the generally accepted parameters are: the annual profit, the yield on capital, the economic value added – EVA).[4] But rather, these grants are recorded in the financial statements as an expense when they are paid, and not in accordance with the lifetime of the expense on the day that the plan is granted. The accounting logic in the giving of identical expression in the financial statements to the two transactions which have similar economic significance, does not, therefore, accord with the abovementioned principle for the timing of the measurement. It is appropriate to mention here, that a considerable portion of the executive remuneration plans contain the two aforesaid components of the benefit: options and bonuses, however under generally accepted accounting principles as they stand today, these two alternative salary components are measured differently; the options component is measured in accordance with its value on the day of the grant and the grants component is recorded in accordance with its value at the end of the period, at the time of the payment.

It is important to emphasize that where what is under discussion is a capital grant that is given to someone who is not an employee (for example − to various consultants of the company's who are interested in receiving results based fees), then the measurement is carried out in accordance with the actual value of the services <u>over the length of the consulting period</u>. The justification that is given in the accounting standards for the differentiation between work services and consultancy and other services is that in contrast to work and management services, the value of the other services can be reliably measured. However, this difference does not suffice to explain the difference in the timing of the measurement, and it does not justify the measurement of the value at the time of the grant.

Were this not enough, where the value of the services cannot be measured reliably, section 13 of International Financial Reporting Standard 2 (IFRS 2) determines that the expense is to be measured in accordance with the fair value of the financial instruments that are granted, <u>however, this measurement is to be made at the time that the services are provided and not at the time of the issue</u>.[5]

3. Additional proposals that have been made

Landsman, Peasnell, Pope and Shu Yeh (2006),[6] pointed to four different alternatives which had been proposed over the years, for the accounting reporting of capital grants to employees:

A. **Recording in accordance with the intrinsic value** − the approach that was presented, as aforesaid, in APB 25 and which is no longer permitted.

B. **Recording in accordance with the fair value at the time of the issue** – This is the approach that was adopted by the American Federal Accounting Standards Board in FAS 123 (R) and the International Accounting Standards Board in IFRS 2. This approach is the binding approach as of today for the reporting companies.

C. **The recognition of the asset approach** – in accordance with this approach, the remuneration expense in advance asset is to be recognized at the time of the grant and it is to be amortized over the length of the vesting period. This approach was proposed in the previous draft of FAS 123, but was not accepted.

One may claim that today's binding approach, which was adopted both in the American and International standards and which, in effect, ignores the existence of an intangible asset – the human capital of the executives, which is interlinked with the issuing company – and that the approach relates to this as it would to an off-balance sheet asset. Thus the misleading impression is created that the granting of the options constituted the recording of expenses in the company's financial statements, without any consideration being given in exchange for it. Therefore, prima facie, there is room for the recognition of the asset (remuneration expenses in advance) at the time of the issue, against an increase in the shareholders' equity (a capital reserve). It should be noted that the impact of the two approaches is identical. In both approaches an expense will be recorded at the level of the relative portion of the fair value of the options that have been granted, as measured at the time of the grant, which is attributed to the reporting period

In our opinion, the accounting standards boards were right to have rejected this approach. In the previous section we have already insisted that at the time of the grant it was only the terms of the commitment between the employee and the company which were set. In any event, it is not possible to recognize every asset that represented the employee's human capital. And for sure, the employee is entitled to leave his work at any time and to waive the capital grant that has been promised to him.

D. **The asset and liability approach** – according to this approach, which was proposed by Landsman et al (2006), an asset should be recognized at the time of the grant (remuneration expenses in advance) against the liability (the commitment to issue shares to employees). At the end of each reporting period, throughout the vesting period, the asset should be amortized and the salary expense should be recognized (which is similar to the two previous methods), however in addition to this, the liability is to be revalued in accordance with its market value – mark to market, in accordance with its fair value at the end of each period (see the appendix to the article for a demonstration of this method). At the end of the vesting period two possible scenarios can occur:

1. The options are valueless, and then, in any event, the value of the liability is zero (and is removed from the accounting records). In parallel, the asset has also been written off in full over the length of the vesting period. In this scenario, no addition whatsoever will be recorded to the shareholders' equity in respect of the grant of the options that were never exercised. That is in contradiction of the approach that is binding as of today, which sometimes also leave a "sullied" component of shareholders' equity (the premium) in the balance sheet, in the case that the options have not been exercised

and no new capital has been issued.

2. The options will be in the money, and an exercise will take place. In this case, an addition to shareholders' equity will be recorded in parallel to the issuance of the shares in kind, in an amount that is equivalent to the updated value of the liability in the accounting records, with the addition of the cash amount that is received on the exercise. The addition to the shareholders' equity at the time of the exercise will reflect, therefore, the fair value of the shares that are issued at the time of the exercise.

According to Landsman et al.'s version, the asset and liability approach has a number of theoretical and practical advantages over the approach which requires the carrying out of the recording in accordance with the fair value on the day of the issue, which is the binding approach today.

This approach is consistent with the perception of a "clean surplus." According to this approach, the statement of income must: **reflect all of the income and expenses that have been recognized from the perspective of the existing shareholders alone** (and not from the perspective of the existing shareholders and the shareholders by force).[7] Moreover, the asset and liability approach is also consistent with the approach adopted by Ohlson and Penman (2005),[8] according to which the financial commitments that the company has vis-à-vis its employees are to be reported on the basis of the index of the share price (including the various sorts of options, convertible instruments and other rights), in accordance with the mark to market approach. From a practical point of view, reporting in accordance with the asset and liability approach meets the needs of the evaluators, who generally adopt the perspective of the existing shareholders, and it is clearly much better correlated to the process of the shares of the reporting companies.

Even though this approach would appear, at first sight, to be elegant and to accord with the current trend in the accounting standards, that of reporting in accordance with the fair value, in our opinion its theoretical base is faulty and it should not be accepted. Our criticism is based on the following claims:

a. The clean surplus approach has not been adopted across the board by the accounting standards.

b. We are not talking about an asset or a liability in accordance with the conceptual framework for the preparation of financial statements (framework), since on the one hand, the company has no control over the economic benefit that will derive from the employment of the employee, since the employee can leave the company and waive the capital grant. On the other hand, we are not talking about a liability since this is not a case in which economic resources will be leaving the company, but rather, we are talking about the issuance of shares.

c. It is unclear what expense (or income) is to be recorded each year. Is it an addition (deduction) to (from) salary expenses? Is it a financing expense (income)? Or is what we have in front of us some other comprehensive income?

d. The proposed approach is completely disrupts the cut-off and periodic logic of the reporting of the overall salaries expenses in the vesting period. The expense that is reported in each period is in effect an interim calculation. Each period also contains an element of the correction of the reporting of the expense that has been recorded in previous periods, and the final expense is only crystallized at the end of the vesting period.

e. In these terms, the approach that is being proposed does not accord with the economic logic behind the giving of a capital grant, which is the creating of a direct and continuing link between the contribution of the employee and the performance of the company, and between the levels of his remuneration.

f. In many cases, the employee is given the possibility of exercising the options that have been granted to him during a defined additional period, which begins at the end of the vesting period. In such cases, an additional expense (income) will be recorded after the benefit period in respect of the change in the fair value of the liability at the end of the benefit period and up to the time of the exercise. This expense (income) will also be recorded in the event that the employee leaves his place of work at the end of the vesting period and he is no longer making a contribution to the company. In this way a cut is created between the accounting reporting and the economic logic for the recording of the granting of the options as an expense.

In comparison, under the approach that is customary today, since the fair value of the options at the time of the grant already reflects the benefit that is rolled up in the estimation of the time of the exercise. Hence, the full expense in respect of the salary benefit that is rolled up in the granting of the options is recorded in the benefit period, and there is no need whatsoever to record an additional expense after the end of the benefit period.

4. **The principle for the timing of the measurement that we are proposing**

In our opinion, the principle for the timing of the measurement, which is customary and binding today, as well as the alternative approach that was proposed by Landsman et al. (2006) have faulty theoretical bases. In our opinion, **the value of the benefit that is rolled up in options to employees should be measured in accordance with the average fair value of the option for each reporting period independently, where the result is then multiplied by the probability that the executive/employee will leave the company early**. This measurement will reflect the value of the benefit that the executive has received in respect of the services that he has actually provide during the course of each period as well as the value of the services that he provides.

The solution that is proposed is consistent with the two transactions approach, which was presented in the second part of this article and we are of the opinion that these transactions take place throughout the vesting period. It reasonable for a situation in which at the end of each day (or each month) during the vesting period, the executive is entitled to exercise a relative portion of the options that he is holding in accordance with the stock exchange price at the end of that same day (or each month). The shares that have been issued to the executive remain blocked until the end of the vesting period.

It would seem that this solution will prevent the obsessive preoccupation with the technical/legalistic determination of the time of the grant and therefore it will completely rule out any interest in backdating and other timing games surrounding the timing of the grant.

Moreover, despite the fact that this solution does, prima facie, increase the reporting burden, it does contain something that improves the quality of the measurement, since on average, by its very nature, works to spread out measuring errors.

Here, it is possible to bring up the question of why should not the expense be recorded in accordance with the value at the time of the exercise, in a similar way to salary that is conditional upon the results and which is paid in cash at the end of the period? The answer to this question is contained in the perception of the two transactions, which take place over the entire length of the vesting period. One theoretical transaction is that of the routine payment of salary to the employee in cash, over the entire length of the vesting period, and the second is the issuance of capital to the employee in the same amount every day or month. Therefore, the value of the benefit is in effect the average value, which is to be calculated in each period.

It is appropriate to consider here a case in which the options that go out during the course of the vesting period out of the money, such that at the time of the exercise the executive will not be entitled to capital remuneration. According to the method that is in practice, the fair value at the time of the issuance of the options is recorded in the company’s financial statements as an expense (in the accounting year and in the previous years). However, if the executive leaves his position, shortly before the end of the vesting period, the company will be entitled to cancel the entire expense (including the expense that was recorded in previous years). As compared with this, if the executive stays in his position throughout the entire vesting period it will not be possible to record the expense that has been recorded.

The measurement principal that is proposed by us solves this distortion. The expense is measured and reported over the length of the vesting period, in accordance with the fair value, which varied from reporting period to reporting period. It will be noted that since options that are to be found deeply out of the money always have a positive economic value as well, the company may continued to report the salary expense, even though the amount of the expense that will be recorded will be in a relatively low amount.

5. Abbreviated summary

In our opinion, the principle for the timing of the measurement, which was set back in the American Federal Accounting Standard APB 25 in the year 1972, according to which, at the time of the issuance of capital instrument to employees, the value of the benefit is to be measured only once – at the time of the granting of the plan – is not correct in either its economic logic or in its accounting logic and it causes significant distortions in the financial statements of the companies involved.

In our humble opinion, the solution that is proposed, in accordance with which the value of the benefit that is rolled up in the employee options is to be measured in accordance with the average fair value of the options for each of the reporting periods on their own, where it is to be multiplied by the probability of the executive/employee leaving early, is the appropriate accounting solution. This solution accords with the economic logic of the capital grants in that it creates a direct connection between the contribution of the employee to the company's performance and their remuneration. In this sense, the solution that we are proposing is also preferable to the solution that was proposed by Landsman et al (2006).

It is not superfluous to note that the solution that we are proposing will prevent the games that are played involving the timing of the time of the granting of the options (backdating).

At this point it is possible to bring up the question as to why we are continuing to accept the existing principle for the timing of the measurement, as it is. It would seem that there are two explanations that can be provided to this question:

A. The argument that has existed going back generations, on the question of whether the value of the benefit should be measured in accordance with the fair value of the options that have been granted or in accordance with their intrinsic values, has shrouded the question of the timing of the measurement. So much so, that insufficient attention has been given to the consideration of the principle of the timing of the measurement and also to the connection between the value of the benefit over time and the value of the services that are received.

B. It would seem that from the perspective of the companies, the situation that exists at present in the accounting standards is not necessarily bad – the opposite is true. From a positive outlook of the increase in the price of the shares, it is convenient for companies to set the amount of the expense that will be recorded in the financial statements for the years to come and to enable the executives to enjoy a much higher benefit that what was expected at the time of the grants, and also much higher than the expense that has been recorded in the financial statements. We are of the opinion that this can be seen as further evidence supporting the positive theory elucidated by Watts and Zimmermann.[9]

Endnotes:

1 The College of Management, Academic Studies, Israel.

2 For a description of the professional argument and the developments in the accounting standards on the subject, see for example H. Asiag and Y. Aden "The accounting treatment of options to employees – is this really the end of the road?" The Accountant (442)2, June 2003, pp 115-123.

3 Bodie. Z, Kaplan R.S, and Merton R.C. (2003) "For the last time: Stock options are an expense." Harvard Business Review, March 2003, pp 63-71.

4 Whereas the rationale for the remuneration of an executive under a plan that contains capital instruments is based on the performance of the shares on the stock exchange and the remuneration of the executive by grants are based on the accounting measurement of the achievements.

5 In accordance with the American Standard FAS 123R, the timing of the measurement in this case is the earlier of the time at which the commitment exists to carry out the transaction and the time at which the execution has been completed.

6 Landsman W.R., Peasnell K., Pope P.F. and Shu Yeh, Which approach to accounting for employee stock options best, reflects market pricing? Review of accounting studies, Vol 11 (2-3), 2006, pp 203-245.

7 For a more detailed review of this approach, see, for example Christensen P.O., and Feltham G.A, (2003), Economics of Accounting Vol 1 – Information in markets, Kluwer Academic Publishers, Hingham Ma.

8 Ohlson K.A., and Penham S.H., (2005), Debt Vs, Equity: Accounting for claims contingent on firms' common stock performance, with particular attention to employee compensation options, "White Paper No.1, Center for Excellence in Accounting and Security Analysis, Columbia University"

9 Watts R.L., and Zimmermann J., "The demand and supply of accounting theories: the market for excuses"

Appendix – An example of the accounting entries

The purpose of the appendix is to demonstrate, with the help of a simplistic example, the accounting entries that are involved in the implementation of three alternative methods for reporting on the granting of options to employees:

A, The accounting method that is customary today under the force of the provisions of FAS 123R and IFRS # 2. The alternative approach that was proposed by Landsman et al (2006).

C. The approach that we are proposing.

<u>The figures in the example:</u>

A. On 31/12/20X0 the Alpha Company Ltd. grants 100,000 options to its management under the following terms:

1) Every option warrant can be exercised into one regular share in the company at the end of a vesting period of three years and against an exercise price of $50 (adjusted for the distribution of dividends).

2) Each manager will be entitled to exercise the options that they own as from 31/12/20X3 and up to 31/12/20X4.

B. The share price at the time of the grant was $50. The price of the shares during the relevant period was as follows:

Year	Price at the end of the year	Price at the time of the exercise
20X1	53	
20X2	60	
20X3	59	
20X4		61

C. For the purpose of the calculation of the fair value of the options at the time of the grant and at the end of each year, the following figures have been taken into account:

1) The standard deviation of the yield on the share in the past – 30% (stability over the length of a long period.

2) The risk free interest rate: For 4 years - 3%, for 3 years – 2.67%, for 2 years – 2.33%, for 1 year -2.00%.

3) The offered managers will persist in their work in the company.

4) The results of the calculation - the fair value of 100,000 options:

At the time of the grant - USD 1,417 thousand.

On 31/12/20X1 - USD 1,394 thousand;

On 31/12/20X2 - USD 1,645 thousand;

On 31/12/20X2 - USD 1,184 thousand;

D. In practice, all of the option warrants were exercised during the course of the year 20X4, where the price per share on the stock exchange (prior to the exercise) was $61.

E. In order to simplify the example, we will ignore, without the restriction of generality, the quarterly, interim periodic financial statements.

<u>The accounting recordings (in UDS thousands) in accordance with the approach that is customary as of today under the force of FAS 123R, and IFRS 2, are as follows:</u>

1) <u>At the time of the issue</u>

No recording is made

2) At the end of the year 20X1

Debit Salary expenses - 472

Credit Shareholders; equity (Premium) - 472

3) At the end of the year 20X2

Debit Salary expenses - 472

Credit Shareholders; equity (Premium) - 472

4) At the end of the year 20X3

Debit Salary expenses - 473

Credit Shareholders; equity (Premium) - 473

5) At the time of the exercise

Debit Cash – 5,000

Credit Issued share capital – 5,000

The accounting recordings (in USD thousands) in accordance with the approach that is customary as of today under the force of FAS 123R, and IFRS 2 are as follows:

1) At the time of the issue

Debit Prepaid remuneration expenses (asset) – 1,417

Credit Commitment for the issuance of shares to employees – 1,417

2) At the end of the year 20X1

Debit Salary expenses - 472

Credit Prepaid remuneration expenses – 472

Debit Commitment for the issuance of shares - 23

Credit Gain on the decline in the value of the commitment for the issuance of shares – 23

3) At the end of the year 20X2

Debit Salary expenses - 472

Credit Prepaid remuneration expenses – 472

Debit Loss on the increase in the value of the commitment for the issuance of shares - 251

Credit Commitment for the issuance of shares – 251

4) At the end of the year 20X3

Debit Salary expenses - 472

Credit Prepaid remuneration expenses – 472

Debit Commitment for the issuance of shares - 461

Credit Gain on the decline in the value of the commitment for the issuance of shares – 461

5) At the time of the exercise

Debit Commitment for the issuance of shares – 84

Credit Gain on the decline in the value of the commitment for the issuance of shares – 84

Debit Cash – 5,000

Debit Commitment for the issuance of shares – 1,100

Credit Issued share capital and share premium– 6,100

The accounting recordings (in USD thousands) in accordance with solution that we are proposing a

1) At the time of the issue

No recording is made

2) At the end of the year 20X1

Debit Salary expenses - 469

Credit Shareholders; equity (Premium) - 469

3) At the end of the year 20X2

Debit Salary expenses - 507

Credit Shareholders; equity (Premium) - 507

4) At the end of the year 20X3

Debit Salary expenses - 472

Credit Shareholders; equity (Premium) - 472

5) At the time of the exercise

Debit Cash – 5,000

Credit Issued share capital – 5,000

The following table summarizes the effects and their results (In thousands of NIS) of each of the three approaches:

Year	The current approach	Landsman et al (2006)'s approach	The proposed solution
2001	472	449	469
2002	472	723	507
2003	473	11	472
2004	-	(84)	-
Total	1,417	1,099	1,448

a. In order to simplify the example, we have assumed that the average fair value of the options throughout each year in the benefit period is equivalent to the simple average of the fair value at the beginning and at the end of the year.