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Issues Paper: Accounting for employee capital accumulation plans, Draft 5/14/82

American Institute of Certified Public Accountants. Accounting Standards Division. Task Force on APB Opinion 25

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ISSUES PAPER

Accounting for Employee
Capital Accumulation Plans

Prepared by

Task Force on APB Opinion 25
Accounting Standards Division
American Institute of Certified Public Accountants

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INTRODUCTION

1. This issues paper discusses accounting for employee capital accumulation plans (plans). As discussed under the heading of the reasons for the project, current accounting guidance for the plans is considered to be inadequate. After a section on definitions, current literature on the subject is summarized and the reasons for the project are discussed in the light of that literature and of practice in applying the literature. Accounting related to the plans is then analyzed and issues are discussed.

DEFINITIONS

2. The following terms are used in this paper with the meanings indicated.

- <u>Employee Capital Accumulation Plans</u> - plans in which enterprises award employees stock or some type of right ultimately realizable in stock or cash. Continued employment for a specified period, generally longer than one year, is usually necessary for employees to obtain the awards. The amounts of the awards may be finally determined when they are granted or may be finally determined when the employees exercise the rights or the enterprise pays the employees; the amounts may depend on the market price of the company's stock, the financial performance of the company, or a combination of both.

- <u>Types of Plans</u> - These are the types of plans now used (they are explained in Appendix A):
  - incentive stock option plans,
  - nonqualified stock option plans,
  - stock appreciation rights plans, (SARs)
  - phantom stock plans,
  - restricted stock award plans,
  - restricted stock purchase award plans,
  - employee stock purchase award plans,
  - performance unit plans,
  - book value unit plans,
  - book value purchase plans,
  - performance share plans,
  - stock appreciation rights with performance requirements plans, and
  - stock options with performance requirements plans.

- Certain types of plans involve two or more alternative forms of the plans listed above:
  - Tandem Plans - plans that provide for two or more alternative forms of awards. Payment or exercise of one form of award cancels a ratable portion of the alternative form of award. The form of award may be selected by the employees or by the company.
  - Concurrent plans - plans that provide for two or more forms of awards, in which payment or exercise of an award or right under one plan does not affect rights to payment or exercise of an award under the other plans.
- Types of Awards - These types of awards are relevant to this issues paper:
  - Fixed Award - an award for which the number of shares of stock or the amount

of cash an employee is entitled to receive and the amount an employee is required to pay to receive the award are known at the date of grant.

- Variable Award - an award for which the number of shares of stock or the amount of cash an employee is entitled to receive, the amount an employee will be required to pay to exercise those rights, or both are unknown at the date of grant and depend on events that occur after the date of grant.

- Types of Dates - Events occur under the plans at these types of dates or over these types of periods:
  - Date Plan is Agreed to Be Proposed to Stockholders by the Company's Board of Directors or by the Compensation Committee.
  - Date Plan is Approved by the Stockholders.

- Date of Grant -- the date on which the employee is given rights to purchase stock or receive cash, usually subject to stated future service requirements and other stated conditions.
- Vesting Date -- the date on which an employee has completed service requirements to be eligible to exercise plan options or rights. The options or rights become contractual obligations. Options or rights could vest in total at the end of a specified period or percentages could vest at specified intervals.
- Vesting Period -- the period from the date of grant to the vesting date.
- Service Period -- the period during which the employee performs services as a condition to receive an award under a plan. The period may be stated, inferred from the terms of the plan, or derived from patterns of previous grants or awards.
- Exercise Date -- the date on which the employee is paid cash or is given stock on exercise of rights or options.

- Expiration Date -- the date on which plan options or rights expire.
- Date Treasury Stock Is Acquired -- the date on which the company reacquires its stock in an amount necessary to fulfill the expected requirements of a plan.
- Measurement Date -- the date as of which factors affecting the measurement of compensation are measured.

● Types of Prices - Two types of prices are discussed in this issues paper:

- Exercise Price[1] -- the price, specified at the date of grant, at which an employee may purchase optioned stock at the exercise date or which is a factor in computing the award. The exercise price may be a specified amount of cash or it may be based on a formula, such as a percentage of the market price of the underlying stock on the exercise date.

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1 In discussing accounting for the plans, the authoritative accounting literature uses the terms option price and purchase price in addition to the term exercise price, with their meanings the same as that given here for exercise price.

- Market Price -- the quoted price in an established market of a share of the company's stock of the class to be awarded under a plan or that is a factor in computing the award.

AUTHORITATIVE PRONOUNCEMENTS

3. Current generally accepted accounting principles that address accounting for the plans are set forth in the following authoritative pronouncements:

- Accounting Research Bulletin No. 37 (Revised), "Accounting for Compensation Involved in Stock Option and Stock Purchase Plans," January 1953. (This Bulletin superseded Bulletin No. 37 and was reissued in Accounting Research Bulletin No. 43, Chapter 13, Section B, "Compensation Involved in Stock Option and Stock Purchase Plans," June 1953).
- Accounting Principles Board Opinion 25, "Accounting for Stock Issued to Employees," October 1972.

- Financial Accounting Standards Board Interpretation No. 28, "Accounting for Stock Appreciation Rights and Other Variable Award Plans," December 1978, an interpretation of APB Opinion 25.

4. ARB No. 43, Chapter 13B, provided accounting guidance for stock option and stock purchase plans until APB Opinion 25 was issued and is still in effect to the extent it was not modified by APB Opinion 25 or FASB Interpretation No. 28. APB Opinion 25 states that it applies "...to all stock option, purchase, award and bonus rights granted by an employer corporation to an individual employee...."

5. Many varieties of plans were adopted since APB Opinion 25 was issued, because, for example, of SEC insider trading rules and the virtual elimination of the use of qualified stock options due to changes in federal tax laws enacted in 1976. The proliferation of new types of plans caused the FASB to issue FASB Interpretation No. 28, which states that

> APB Opinion No. 25 applies to plans for which the employer's stock is issued as compensation or the amount of cash paid as compensation is determined by reference to the market price of the stock or to changes in its market price. Plans involving stock appreciation rights and other variable plan awards are included in those plans dealt with by APB Opinion No. 25.

The FASB therefore made it clear that APB Opinion 25 applies to plans involving stock appreciation rights and other variable awards.

Noncompensatory and Compensatory Plans

6. ARB No. 43 and APB Opinion 25 are based on the presumption that some plans, called compensatory plans, involve an element of compensation to employees that causes an enterprise to incur a cost, called compensation cost, which should be measured and recognized in the financial statements of the enterprise. All other plans are called noncompensatory plans; they are presumed to be primarily intended to secure equity capital for the enterprise, induce ownership of its stock among its employees, or both and not to compensate employees. APB Opinion 25 specifies measurement criteria to determine whether the compensation cost in a compensatory plan exceeds zero.

7. APB Opinion 25, paragraph 7, requires plans to be treated as compensatory unless they have all of these characteristics:

- Substantially all full time employees meeting limited employment qualifications may participate (employees owning a specified percent of the outstanding stock and executives may be excluded).

- Stock is offered to eligible employees equally or based on a uniform percentage of salary or wages (the plan may limit the number of shares of stock that an employee may purchase through the plan).
- The time permitted for exercise of an option or purchase right is limited to a reasonable period.
- The discount from the market price of the stock is not greater than would be reasonable in an offer of stock to stockholders or others.

Plans that have all of those characteristics are treated as noncompensatory plans.

Measurement of Compensation Cost

8. ARB No. 43, Chapter 13B, paragraph 11 states that "...the cost of utilizing the shares for purposes of the option plan can best be measured in relation to what could then have been obtained through sale of such shares in the open market."

9. It indicates that the principal accounting problem involved in compensatory plans is the measurement of compensation cost. Two elements of the problem that were identified are

- the date as of which to measure compensation cost and
- the manner of measurement.

10. In considering those two elements, the committee on accounting procedure concluded

> "that the value to the grantee and the related cost to the corporation of a restricted right to purchase shares at [an exercise] price below the fair value of the shares at the grant date may...be taken as the excess of the then fair value of the shares over the [exercise] price" (ARB No. 43, Chapter 13B, paragraph 12).

However, while the committee recognized the importance of quoted market prices in determining the fair values of stock options or stock purchase rights, it noted that quoted market prices are not necessarily conclusive evidence of fair values and other factors should be considered. Such factors may include the range of price quotations over a reasonable period and the avoidance by the corporation of some or all of the expenses that would otherwise be incurred if shares of stock were issued in a public offering. The committee also indicated that other means of arriving at fair value may have to be used in the absence of a ready market.

11. APB Opinion 25 states, paragraph 9, that

> the consideration that a corporation receives for stock issued through a stock option, purchase, or award plan consists of cash or other assets, if any, plus services received from the employee.

Paragraph 10 of APB Opinion 25 sets forth this principle for measurement of compensation cost of stock option, purchase, and award plans:

> Compensation for services that a corporation receives as consideration for stock issued through employee stock option, purchase, and award plans should be measured by the quoted market price of the stock at the measurement date less the amount, if any, that the employee is required to pay....If a quoted market price is unavailable, the best estimate of the market value of the stock should be used to measure compensation....<u>The measurement date for determining compensation cost in</u> stock option, purchase, and award plans is the first date on which are known both (1) the number of shares that an individual is entitled to receive, and (2) the option or purchase price, if any.

However, in paragraph 10(a), the Opinion explains that the quoted market price of a share of stock is used to approximate the fair value of the stock to measure compensation because

> an employee's right to acquire or receive shares of stock is presumed to have a value, and that value stems basically from the value of the stock to be received under the right.

Therefore, APB Opinion 25 seems to be based on an assumption that the value of the option or right to the employee is an appropriate measure of compensation cost.

12. Thus, the measurement principle adopted in APB Opinion 25 supersedes the measurement principle in ARB No. 43 and differs from it in the following two respects:

- For measuring compensation, APB Opinion 25 requires the use of unadjusted quoted market prices of shares of stock of the same class that are freely traded in an established market. Unlike ARB No. 43, APB Opinion 25 allows no consideration of other factors, such as a range of price quotations or expenses saved, because their effects on the value of employees' rights to acquire or receive shares of stock is difficult to measure.
- If quoted market prices are unavailable, the best estimates of the market values of shares of stock should be used to measure compensation.

13. FASB Interpretation No. 28 upholds the measurement principles in APB Opinion 25 and extends their application to plans involving stock appreciation rights and other variable

award plans. In paragraph 2, the FASB states that compensation cost related to variable award plans is

> ...the amount by which the quoted market value of the shares of the enterprise's stock covered by the grant exceeds the option price or value specified, by reference to a market price or otherwise, subject to any appreciation limitations under the plan.

14. APB Opinion 25 provides additional guidance for applying the measurement principles to special situations involving cash settlements of options grants, affecting determination of the measurement date, treating changes in the market value of the shares between the date of grant and the measurement date, and restricting the use of the cost of reacquired (treasury) stock. It also provides guidance on accounting for tandem plans by requiring compensation cost to be measured according to the terms that are most likely to be chosen based on the facts available each period.

15. FASB Interpretation No. 28 provides additional guidance on tandem plans. The FASB specifies that in a tandem plan involving a variable award and a fixed award, compensation cost should normally be measured and allocated to expense under the presumption that the employee will exercise the variable award.

The presumption may be overcome if evidence indicates the employee will exercise the fixed award. Such evidence may include experience or ceilings on the amount of the award available to the employee under the variable feature.

Allocation of Compensation Cost

16. ARB No. 43 requires that compensation cost be allocated to expense over the period of service that "seems appropriate in the circumstances" if the plan does not specify the service period for which a stock option or stock purchase right is issued. APB Opinion 25 reaffirmed that principle.

17. FASB Interpretation No. 28 requires compensation costs of variable award plans to be recognized as expenses over the periods the employees perform the related services. The FASB concluded that the requirement is consistent with the recognition principles underlying APB Opinion 25. The Interpretation is based on the presumption that the vesting period is the service period if the plan or agreement does not define the service period.

18. The date of grant is generally the measurement date for compensation costs of fixed award plans, because both the number of shares the employees are entitled to receive and the exercise price, if any, are known at that date. The method used to allocate the cost to expense over the service period should be systematic, reasonable, and consistently applied.

19. Compensation costs related to variable awards granted for current or future services are not determinable at the date of grant and must be estimated. Accordingly, estimated total compensation costs of a variable award must be revised at the end of each period from the date of grant to the measurement date, based on the quoted market price of the enterprise's capital stock at the end of each period. FASB Interpretation No. 28 requires changes in estimates of compensation costs to be allocated to expense over the service period, with the amount of the change that relates to the portion of the service period already expired recognized currently as expense. It requires additional changes in compensation costs due to increases or decreases in the quoted market price of the enterprise's stock after the expiration of the service period but before the measurement date to be charged or credited to expense each period as the changes occur.

<u>Rights Not Exercised</u>

20. An employee's rights under a plan may be cancelled or forfeited, for example, if the employee terminates employment before her or his rights vest. Under APB Opinion 25, the amount of accrued compensation costs pertaining to the employee is to be eliminated and compensation expense is to be decreased in the period of forfeiture or cancellation.

Accounting for Tandem Plans

21. FASB Interpretation No. 28 provides special guidance for tandem plans and requires accrual of compensation cost for tandem plans based on the presumption that the employee generally will elect the variable award. If a change in circumstances makes election of the fixed award by the employee more likely, compensation costs accrued based on the variable award are not to be adjusted by decreasing compensation expense but are to be recognized as consideration for the stock issued in settlement of the fixed award. However, if both the fixed award and the variable award are forfeited or cancelled, accrued compensation is to be eliminated by decreasing compensation expense in the period of forfeiture or cancellation.

Accounting for Income Taxes

22. Tax effects attributable to timing differences under employee incentive plans are accounted for under APB Opinion 11, "Accounting for Income Taxes." Paragraph 17 of APB Opinion 25 limits the reduction of tax expense for a period to the proportion of the tax reduction that relates to compensation expense for the period. Any remainder of the tax reduction is recognized not in income but as adjustments to paid in capital.

REASONS FOR THE PROJECT

23. Concerns have been expressed about accounting for the plans under current pronouncements.

Effects of Differences in the Form of the Plans

24. Differences in the form of the plans can significantly affect the accounting for them under present standards, even though many believe the substance of the plans is essentially the same because the economic benefits received by the employees under the plans are virtually identical. For example,

- A nonqualified stock option or a stock appreciation right may be issued with an exercise price equal to its market price. If the market price increases, the economic benefits an employee receives from the two types of awards may be virtually identical. Yet under APB Opinion 25 and FASB Interpretation No. 28, the enterprise would report no compensation cost for the stock option, but for the stock appreciation right, the enterprise would report as compensation cost the excess, if any, of a specified future market price of a share of the stock over the exercise price.

- Two awards can have all but one of their terms and circumstances identical, with the difference in one term or circumstance making the first award more valuable to the employee than the second. For example, the first could cover a fixed number of shares with the exercise price equal to the market price at the date of grant and exercise contingent only on the employee continuing his employment for a specified period. The second award could be identical except that the number of shares will be reduced if the enterprise does not improve its earnings by a specified amount within a specified period. The additional contingency makes the second award less valuable to the recipient than the first. Yet under APB Opinion 25 and FASB Interpretation No. 28, the enterprise would report no compensation cost for the first, more valuable award, but for the second, less valuable award, the enterprise would report as compensation cost the excess, if any, of a future market price over the exercise price.

Earnings Fluctuations

25. Accruing annual or quarterly compensation cost or credits to income period by period based on a measurement date after the date of grant, currently required for variable plans, can result in wide fluctuations between periods in an enterprise's reported earnings, which sometimes may be unrelated to the enterprise's earnings performance. For example, a reduction of the prime interest rate could cause speculation in the stock market, driving stock prices up regardless of the performance of the company. A large increase in the market price of a company's stock could significantly and, many contend, inappropriately affect its reported earnings if the awards under its various plans are material.

Trading in Nonemployee Stock Options and Valuation Techniques

26. Since APB Opinion 25 was issued, nonemployee stock options have become traded on various stock exchanges and many new valuation techniques have been developed to value options

at a particular date. Availability of the market prices of the options and of the valuations techniques should be considered in determining how to implement the principles for accounting for the effects of the plans discussed in this paper.

New Types of Plans

27. Insider trading rules under Section 16b-3 of the Securities Act of 1934 require recipients of stock under options to hold the stock received for six months before disposition. The possible need of the employees to borrow money and incur interest expense during the holding period and their exposure to changes in the price of the stock during the period tend to reduce the value to the employees of awards under such plans. That has led to an increase in new types of plans. For example, a 1981 survey of the 200 largest industrial enterprises[2] indicates that many enterprises are moving toward

- adopting plans that provide grants under which the employees' awards can mostly depend on enterprise financial performance or continued employment rather than stock market appreciation,

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2 Frederick W. Cooke and Co., *Future Value Incentive Plans and Trends 1981; A Survey of the 200 Largest Industrial Companies*.

- introducing arrangements that, unlike stock option and stock purchase plans, need no investment by an employee to realize an award, for example, stock appreciation rights, and
- adopting plans that provide variety and flexibility in structuring employee awards.

28. The survey indicates that 184 of the 200 enterprises surveyed had plans. APB Opinion 25 focuses on plans in which the total value of awards to the recipients is affected by changes in the market price of the sponsoring enterprise's stock. Many believe the introduction of various types of plans in which the value to the recipient is based on the enterprise's performance or increases in its book value, not on the market price of its stock, warrants a review of the literature to consider accounting for all types of plans including such enterprise's performance plans.

29. Authoritative accounting guidance does not exist for certain types of plans now in effect, so accounting for them is inconsistent. For example, book value purchase plans award specified employees rights that allow them to buy predetermined

numbers of shares at specified prices, generally multiples of book values. On exercise of such rights, the employees receive dividends and voting rights and possess all other rights of stockholders, except that for a stipulated period the employees can sell the shares, at book value, only to the issuing enterprise. The stipulated periods in some plans end with the termination of employment. In many plans, the enterprises have the right and the obligation to reacquire the shares at book value on termination, retirement, or death. Some plans permit the employees to elect not to redeem the shares of stock for the stipulated price after the holding or vesting period ends. At those points, the provisions for acquisition of the stock by the enterprises at book value terminate.

30. Two approaches are used in practice to account for such plans:

- Shares issued under such plans are considered to be noncompensatory. Redemption of shares by the enterprise are accounted for as treasury stock transactions. Dividends paid on those shares are recorded in the same manner as other dividends.

- Shares issued under such plans are considered to be compensatory. Compensation cost is recorded each period based on changes in book values. Dividends paid on the shares are recorded either in the same manner as other dividends or as additional compensation cost.

SCOPE

31. This issues paper addresses accounting issues related to employee capital accumulation plans. It does not address accounting issues related to other forms of remuneration, such as salaries and wages, annual cash bonuses, contributions to qualified profit sharing plans, and pensions. Deferred compensation arrangements accounted for under APB Opinion 12, paragraphs 6 to 8, and accounting for employee stock ownership plans (ESOPs) are also beyond the scope of this paper. In addition, earnings per share is not considered in this paper.

ANALYSIS OF ACCOUNTING RELATED TO THE PLANS

32. This issues paper analyzes accounting related to the plans. The steps in the analysis are

- describing the plans (Appendix A),
- describing the events that occur under the plans (Appendix B),
- describing the effects of the events on the enterprise (Appendix B),
- classifying the effects of the events on the enterprise (paragraph 33), and
- considering how the classes of effects on the enterprise should be accounted for (paragraphs 38 to 194).

The analysis focuses on the effects on the enterprise of the events that occur under the plans. That differs from the approach of the literature, described in paragraphs 3 to 22, which focuses on the effects on the employees--on whether they are compensated and how much they are compensated. Paragraphs 86 to 90 relate the questions that have been raised in the literature to the analysis and issues raised in this paper.

<u>Classes of Effects</u>

33. Appendix B describes the effects on the enterprise of events that occur under eight types of plans, which involve all the common classes of effects. (Paragraphs   to   discuss classes other than the common classes.) The common classes of effects on the enterprise are

- changes in assets or liabilities:
  - receipts of employee services,
  - using up of employee services,
  - incurring liabilities to pay cash to the employees,
  - receipts of cash from the employees,
  - payments of cash to the employees, and
  - elimination of liabilities to pay cash to the employees, and
- effects on the enterprise of events that occur under the plans other than changes in assets or liabilities:
  - issuances of stock to the employees and
  - changes in the enterprise's prospects.

34. Acccounting for plans each of which provide only one type of award is considered first. Accounting for tandem plans is discussed in paragraph 194.

35. The events that occur under the plans have effects of more than one class. For example, employee services may be received (one class of effects) in an event in which the enterprise becomes required to issue its stock (another class of effects). Considering accounting for effects of one class necessitates consideration of other classes of effects that occur in the same events. Therefore, after each class of effects is first considered apart from the other classes of effects of the events in which they occur (paragraphs 38 to 73), the interrelatedness of the classes of effects and its implications for accounting are considered (paragraphs 74 to 85).

36. The analysis in this paper focuses on classes of effects on the enterprise of events that occur under the plans rather than on particular types of plans. The analysis is intended to be helpful in considering accounting for both existing types of plans and types of plans that may be proposed.

Topics Addressed

37. The topics addressed when considering accounting for each class of effects on the enterprise are

- whether to account for the effects,
- the amounts at which to account for the effects,
- the times as of which to account for the effects, and
- the financial statement elements in which to account for the effects.

In addressing each topic for each class of effects, the authoritative literature is examined to determine accepted principles for accounting for that class of effects under the plans and in other areas of accounting. Issues are stated in areas in which the principles are not clear and unambiguous and in areas in which implementation of the principles involve differences of opinion. The issues are then discussed and resolutions are sought.

PRINCIPLES FOR ACCOUNTING FOR RECEIPTS AND USING UP OF EMPLOYEE SERVICES RELATED TO THE PLANS

38. Receipts of employee services by the enterprise and using up the services are common to all the plans, and accounting for those two classes of effects is interrelated.

Accepted Principles for Accounting for Receipts of Services

39. An accepted principle for an enterprise to account for its receipts of services is that it should account for them as of the periods in which they are received:

> Transfers of resources or obligations to or from other entities consist of
>
> 1. Exchanges (reciprocal transfers)
> 2. Nonreciprocal transfers
>   a. Transfers between an enterprise and its owners
>   b. Nonreciprocal transfers between an enterprise and entities other than its owners[3]
>
> Exchanges may take place over time rather than at points of time...[4]
>
> Exchanges between the enterprises and other entities (enterprises or individuals) are generally recorded in financial accounting when the transfer of resources or obligations takes place or the services are provided.[5]
>
> Transfers of assets or liabilities between an enterprise and its owners are recorded when they occur.[6]
>
> Nonreciprocal transfers with other than owners are recorded when assets are acquired...[7]

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3 APB Statement 4, paragraph 177.
4 Ibid., paragraph 181.1
5 *Ibid*., paragraph 181.S-1
6 *Ibid*., paragraph 182.S-2
7 *Ibid*., paragraph 182.S-3.

Another such accepted principle is that services received should be accounted for at their fair values:

> ...accounting for nonmonetary transactions should be based on the fair values of the assets (or services) involved which is the same basis as that used in monetary transactions.[8]

<u>Accepted Principles for Accounting for Using Up of Services</u>

40. Some services received are first recorded in asset amounts, for example, as a labor component of the cost of manufactured inventories or as an architectural component of the cost of self constructed facilities. Using them up is charged to expense when the assets are used up or disposed of.[9] Most services, however, are recorded in expenses as of the times they are received, because the accounting profession has agreed that carrying them forward in asset amounts would "serve no useful purpose,"[10] not because they believe the services are not valuable to the enterprise when received:

> Services received are expected to enhance the business even though the amount assigned to those services is usually treated as an expense of operations and not as a continuing asset of the corporation.[11]

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8 APB Opinion 29, paragraph 18.
9 "Expenses are outflows or other using up of assets..." FASB Statement of Financial Accounting Concepts No. 3, "Elements of Financial Statements of Business Enterprises," paragraph 65
10 APB Statement 4, paragraph 160.
11 Beatrice Melcher, Accounting Research Study 14, <u>Stockholders' Equity</u> (New York: AICPA, 1973), page 171.

Under that treatment, receipts of services and using them up are recorded in the same entries.

41. Using up of the services received is thus recorded as an expense, either when the services are received or when the asset amounts in which they are first recorded are later charged to expense. Determining principles to account for receipts of services provides all the guidance needed for accounting for the expense involved in using up of those services, because practices to account for using up of services first recorded in asset accounts are well established.

Application to the Plans of Accepted Principles for Accounting for Receipts and Using Up of Services

42. Because accepted principles for accounting for receipts and using up of services, discussed in paragraphs 39 to 41, are clear and unambiguous (although their implementation may be difficult), their application to accounting for the plans is stated:

Principle:[12] Receipts of services from employees covered by a plan should be accounted for as of the periods in which they are received.

Principle: Receipts of services from employees covered by a plan should be accounted for at their fair values.

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[12] The principles are recapitulated, ordered, and numbered in in paragraph 91.

Principle: Receipts of services from employees covered by a plan should be recorded in asset amounts or in expenses when received.

Principle: Asset amounts in which receipts of services from employees covered by a plan are recorded when received should be charged to expense when the assets are used up or disposed of.

43. However, opinions differ on when the services are received. They may be received

- before the date of grant,
- over the vesting period,
- over some other service period, or
- over the period from the date of grant to the exercise date.

Because opinions differ, the following issue is stated:

Issue:[13] Over what periods should employee services related to a plan be considered to be received?

Also, determining the amounts of the fair values of services received is discussed, principles are identified, and issues are developed in paragraphs 77 to 83.

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[13] The issues are recapitulated, ordered and numbered in paragraph 92. Arguments for and against possible solutions are discussed in paragraphs 101 to 194. Advisory conclusions are presented in paragraph 197.

PRINCIPLES FOR ACCOUNTING FOR LIABILITIES TO PAY CASH TO THE EMPLOYEES

44. Under some plans, enterprises incur liabilities to pay cash to their employees. A typical plan that involves such a liability has these conditions concerning the liability:

- The amount of cash the enterprise will pay to an employee covered by the plan is the excess of the market price of the enterprise's stock at the date of exercise over the exercise price multiplied by a specified number of shares.
- The number of shares for each employee is specified at the date of grant.
- An exercise date is chosen by each employee from dates between the vesting date and the expiration date specified at the date of grant as eligible to be the exercise date.

Such a liability is one type of nonmonetary liability as defined in APB Opinion 29:

> monetary...liabilities are...liabilities whose amounts are fixed in terms of units of currency by contract or otherwise. ...nonmonetary...liabilities are... liabilities other than monetary ones.[14]

45. To help in understanding guidance in the accounting literature on accounting for nonmonetary liabilities of the type incurred under the plans, these types of nonmonetary liabilities are distinguished (other types not pertinent to this discussion are not indicated):

<u>Type A</u>: liabilities to pay cash whose amounts and due dates both depend on future events or conditions (liabilities under the plans discussed in this paper are Type A),

<u>Type B</u>: liabilities to pay cash whose amounts but not whose due dates depend on future events or conditions.

Accepted Principles for When to First Record Nonmonetary Liabilities

46. Guidance now provided on when to first record nonmonetary liabilities is discussed in the following paragraphs.

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14 APB Opinion 29, paragraph 3. FASB Statement of Financial Accounting Standards No. 33, paragraphs 47 and 48, has esentially the same definition for constant dollar accounting.

47. Loss Contingencies. FASB Statement No. 5 on accounting for contingencies, paragraph 8, gives conditions for recording an estimated loss from a loss contingency that involves a liability whose amount must be estimated at the time it is incurred. Such a loss and liability should be recorded when

> ... both of the following conditions are met:
>
> (a) Information...indicates that it is probable that...a liability had been incurred at the date of the financial statements....
>
> (b) The amount of the loss can be reasonably estimated.

The liability is a Type A or Type B nonmonetary liability if the reason its amount has to be estimated is that the amount depends on events or conditions, other than the accrual of interest, that occur or exist after the liability is incurred. The Statement implies that the liability should be first recorded as of the time it is incurred or as soon afterwards as the amount can be reasonably estimated. (FASB Interpretation No. 14 clarifies that provision when a range of amounts can be reasonably estimated.)

48. Leases. In certain types of capital leases, the amount of the liability consists of

a. lease payments whose due dates and amounts are specified at the beginning of the lease and

b. lease payments whose due dates but not whose amounts are specified at the beginning the lease. The amounts of such payments could be

(1) based on factors directly related to the future use of the leased property, such as machine hours of use or sales volume during the term of the lease or

(2) based on the amounts of an existing index or rate, such as the consumer price index or the prime interest rate, at the payment dates.

Those payments can be considered separately. Lease payments in item a. are monetary liabilities. Lease payments in item b.1. are monetary liabilities, because the enterprise incurs them while using the leased property and the amounts owed are fixed at the dates they are incurred, using the formula stated in the lease. Lease payments in item b.2. are Type B nonmonetary liabilities.

49. Nonmonetary liabilities for payments in item b.2. are first recorded, in conformity with FASB Statement No. 29 on determining contingent rentals, paragraph 11, at the inception of the lease when the property is given to the lessee and the lessee incurs the liability to the lessor.

50. Compensated Absences. FASB Statement No. 43 on accounting for compensated absences, paragraph 6, requires accrual of liabilities for employees' compensation for future absences whose amounts depend on salary or wage rates in effect at the times of the future absences and those rates and times are unknown when the liabilities are incurred; they therefore are Type A nonmonetary liabilities. The Statement requires such a liability to be recorded when the enterprise incurs an obligation with all of the following characteristics:

- its payment is probable,
- its amount can be reasonably estimated,
- it is compensation for services already rendered, and
- it is to employees whose rights vest or accumulate.

51. Stock Appreciation Rights. FASB Interpretation No. 28, paragraph 2, discusses accounting for liabilities and changes in liabilities to pay cash for stock appreciation rights in amounts that are "determined by reference to the market price of the [enterprise's] stock or to changes in its market price." The liabilities are based on plans "under which an employee may receive cash...[whose] amount is contingent on the occurrence of future events" (footnote 1)

and whose due dates are unknown at the times the liabilities are incurred. They are Type A nonmonetary liabilities. The Interpretation requires such nonmonetary liabilities to be recorded when they are incurred, over the service period.

Application to the Plans of Accepted Principles for When to First Record Nonmonetary Liabilities

52. Because accepted principles for when to first record nonmonetary liabilities, discussed in paragraphs 47 to 51, are clear and unambiguous (although their implementation may be difficult), their application to accounting for the plans is stated:

Principle: A nonmonetary liability to pay cash to employees under a plan should be first recorded when it is incurred or as soon afterwards as its amount can be reasonably estimated.

53. However, opinions differ on when the liability is incurred and therefore how to implement the principle in paragraph 52. It may be incurred

- at or before the date of grant,
- ratably over the service period,
- at the end of the service period,

- ratably over the vesting period, or
- at the end of the vesting period.

Because opinions differ, the following issue is stated:

Issue: As of what date or period should a nonmonetary liability related to a plan be considered incurred?

Accepted Principles for Determining the Amounts at Which to First Record Nonmonetary Liabilities

54. Guidance now provided on the amounts at which to first record nonmonetary liabilities is discussed in the following paragraphs.

55. Loss Contingencies. FASB Statement No. 5 implies that a liability required by the Statement to be recorded, discussed in paragraph 47 above, should be first recorded at an estimate of the amount that will become due.

56. Leases. FASB Statement No. 29, paragraph 11, requires that a liability required by the Statement to be recorded based on an index or rate, discussed in paragraph 48 above as liability type b.2., should be first recorded based on the index or rate at the date as of which it is first recorded.

57. Compensated Absences. FASB Statement No. 43, paragraph 20, states that the FASB is deferring a decision on how the amount should be determined at which to first record the liability the Statement requires to be reported, discussed in paragraph 50 above.

58. Stock Appreciation Rights. FASB Interpretation No. 28, paragraph 2, requires that a liability required by the Statement to be recorded, discussed in paragraph 51 above, should be first recorded by reference to the quoted market price at the date as of which it is first recorded.

59. Discounting Liabilities. APB Opinion 21, "Interest on Receivables and Payables," indicates the principle that liabilities whose due dates are fixed or determinable -- monetary liabilities and Type B nonmonetary liabilities -- should be discounted when first recorded. The Opinion states it

> is applicable to ... payables which represent ... contractual obligations to pay money on fixed or determinable dates. When [such a payable] is exchanged for ... service in a bargained transaction entered into at arm's length, ... the [payable] should be recorded at the fair value of the ... service .... That amount may or may not be the same as the ... amount [to be paid], and any resulting discount or premium should be accounted for as an element of interest over the life of the [payable]. (Paragraphs 2 and 12.)

60. The FASB's discussion memorandum on elements and their measurement states that discounting of liabilities when they are first recorded is "essential:"

> The time value of money is an essential component in measuring the present values of the future cash flows necessary to fulfill an obligation.[15]

However when the discussion memorandum discusses applying the rule to liabilities whose due dates and amounts are both not known when they are incurred, that is, to Type A nonmonetary liabilities, it makes an exception by saying in effect that they should not be discounted when first recorded:

> The attribute of [such] liabilities that is reflected in most of present practice is...the nondiscounted amount of cash expected to be paid to eliminate the liability in the due course of business. ...measures of [their] present values are probably impractical.[16]

61. Pension plans and deferred compensation plans result in liabilities whose amounts and due dates are unknown at the times they are incurred because the number of payments and the periods over which payments will be made depend on when the beneficiaries retire and when they die. They are therefore Type A nonmonetary liabilities. APB Opinion 8, Cost of Pension Plans," paragraph 17, states that "the annual provision for

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15 FASB Discussion Memorandum, "Analysis of Issues Related to Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurements," 1976, page 248.

16 Ibid., page 253.

pension cost should be based on an accounting method that uses an acceptable actuarial cost method," and Appendix A states that actuarial cost methods are based on calculations that involve discounting expected pension payments at "the average rate of earnings that can be expected on the funds invested or to be invested to provide for the future benefits." APB Opinion 12, paragraph 6, states that deferred compensation liabilities should be reported by making periodic accruals that "result in an accrued amount at the end of the term of active employment which is not less than the then present value of the estimated payments to be made." Both of those types of liabilities are thus first recorded at their discounted amounts.

62. As discussed in paragraph 57, FASB Statement of Financial Accounting Standards No. 43 does not address the question as to how the Type A nonmonetary liabilities should be first recorded, and this does not address the question as to whether it should be first recorded at discounted amounts. First recording nonmonetary liabilities incurred under a stock appreciation rights plan by reference to the quoted market price at the date they are first recorded, as discussed in paragraph 58, avoids the question as to whether they should be first recorded at their discounted amount.

Application to the Plans of Accepted Principles for Determining the Amounts at Which to First Record Nonmonetary Liabilities

63. Since principles for determining the amount at which to first record a nonmonetary liability are not settled, the following issues are stated:

Issue: Should the amount at which to first record a nonmonetary liability under a plan be based on an estimate of the amount to be paid at the date of exercise on the amounts at the date as of which the liability is first recorded of the factors on which the liability is based?

Issue: Should a nonmonetary liability incurred under a plan be first recorded at its discounted amount?

Issue: What discount rate should be used to first record a nonmonetary liability incurred under a plan.

Accepted Principles for Adjusting Nonmonetary Liabilities Between First Recording and Payment

64. FASB Statement No. 29, paragraph 11, requires the amount of the Type B nonmonetary liabilities recorded under it, discussed above in paragraphs 48, 49, and 56, to be adjusted

based on "changes in the index or rate" on which they are based during each financial reporting period after they are first recorded until payment. It requires the adjusting to "affect the determination of periodic income as accruable."

65. Also, FASB Interpretation No. 28 indicates (paragraph 4) that the Type A nonmonetary liabilities recorded under it, discussed in paragraph 51 in this paper, are to be adjusted each period between first recording and payment:

> [they] shall be adjusted in...periods [between the date of grant and] the measurement date for changes, either increases or decreases, in the quoted market value of the shares of the enterprise's stock covered by the grant but shall not be adjusted below zero. The offsetting adjustment shall be made to compensation expense of the period in which changes in the market value occur.

Footnote 2 to the Interpretation indicates that the measurement date generally is the exercise date.

Application to the Plans of Accepted Principles for Adjusting Nonmonetary Liabilities Between First Recording and Payment

66. Since the accepted principles for adjusting nonmonetary liabilities between first recording and payment are clear and unambiguous, the following principles are stated:

<u>Principle</u>: The amount at which a nonmonetary liability under a plan is first recorded should be adjusted each period based on changes in the factors on which the payment is based.

<u>Principle</u>: The amount by which a nonmonetary liability under a plan changes between first recording and payment should be charged or credited in the periods of the change.

However, opinions differ as what should be considered the nature of the charge or credit. It may be considered in whole or in part to be

- the type of expense charged when the liability was first recorded,
- the results of owing a nonmonetary liability while its amount changes, which are independent of the expense incurred when the liability was first recorded, or
- interest.

The following issue is therefore stated:

<u>Issue:</u> What should be the nature of the charge or credit that results from adjusting a nonmonetary liability that results from a plan?

PRINCIPLES FOR ACCOUNTING FOR OTHER EFFECTS OF THE PLANS ON THE ASSETS AND LIABILITIES OF THE ENTERPRISES

67. The effects on the enterprises' assets and liabilities of events that occur under the plans besides receipts and using up of services and incurring liabilities to pay cash to the employers consist of

- receipts of cash from the employees,
- payments of cash to the employees, and
- elimination of liabilities to pay cash to the employees.

There are no accounting issues concerning them, so the following principle is stated:

<u>Principle</u>: Receipts of cash from and payments of cash to employees related to the plans and elimination of liabilities to employees under such plans should be recorded as increases of cash as of the time cash is received and decreases of cash and liabilities as of the time cash is paid.

PRINCIPLES FOR ACCOUNTING FOR ISSUANCES OF STOCK OF THE ENTERPRISE

68. Accepted principles for events involving issuances of the enterprise's stock are generally based on the other effects on the enterprise of those events. In one area, which involves no other such effects, stock dividends and stock splits, the accounting depends on the number of shares issued. However, no events under the plans are analogous to stock dividends or stock splits. Therefore, no principles or issues are stated in this paper concerning issuances by the enterprise of its stock apart from other effects on the enterprise of the events in which the enterprise issues its stock.

PRINCIPLES FOR ACCOUNTING FOR CHANGES IN THE ENTERPRISE'S PROSPECTS

69. The effects of some events related to the plans are changes in the enterprise's prospects -- the likelihood that specific future events affecting its assets or liabilities will occur apart from current changes in its assets or liabilities. The specific future events the prospects foreshadow include, for example, receipts and using up of services and receipts and payments of cash.

70. Prospects differ from contingencies as defined in paragraph 1 of FASB Statement No. 5, "Accounting for Contingencies." That definition states that future events "confirm the acquisition of an asset or the reduction of a liability or the loss or impairment of an asset or the incurrence of a liability." Prospects do not involve changes in the assets or liabilities of the enterprise that have already occurred. They pertain to the likelihood of future changes in those assets and liabilities.

General Principle for Accounting for Changes in Prospects Apart from Changes in Assets or Liabilities

71. The only area the task force found in which changes in an enterprise's prospects may be recognized apart from changes in its assets or liabilities is under APB Opinion 25, "Accounting for Stock Issued to Employees." In that Opinion, paragraph 10, the measurement date may be the date of grant. The market price of the enterprise's stock at the measurement date is used in calculating compensation cost to be "recognized as an expense of one or more periods" (paragraph 12). The Opinion does not make clear whether the granting of the option should be recognized at the date of grant.

72. If the measurement date is the date of grant and the granting of the option is recorded as of the date of grant, a wholly executory contract may be recorded, affecting only the balance sheet. The balance sheet items that would be affected would not be assets or liabilities but prospects of receiving assets (services and possibly cash) and of either incurring liabilities or having the equity of the enterprise increased.

Application to the Plans of Accepted Principle for Accounting for Changes in Prospects

73. Recording changes in prospects not accompanied by changes in assets or liabilities is exceptional in accounting today. Nevertheless, some such changes may be recorded under plans covered by APB Opinion 25. The following issues are therefore stated:

Issue: Should changes in prospects to receive cash or services or to pay cash under the plans, apart from changes in assets or liabilities, be recorded?

Issue: At what amounts should changes in prospects be recorded?

Issue: As of what dates or periods should changes in prospects be recorded?

Issue: In which financial statement elements should the effects of changes in prospects be recorded?

IMPLICATIONS FOR ACCOUNTING OF INTERRELATEDNESS OF CLASSES OF EFFECTS

74. As discussed in paragraph 35, considering accounting for one class of effects on the enterprise of events that occur under the plans necessitates consideration of the other classes of effects that occur in the same events.

Effects of Events in Which Employee Services are Received

75. Services are received from employees covered by plans in events whose other effects are varied and require consideration in determining accounting for those effects.

76. Unrelated Effects. The services received from employees covered by the plans are received in events in which some of the effects are unrelated to the plans, for example, incurring liabilities for salaries. The fair value of the services received from employees covered by a plan is composed of a component related to the effects related to the plan and a component related to effects unrelated to the plan. This issues paper deals only with the component of the fair value of the services related to the effects related to the plan.

77. Receipts of Services in Exchanges and in Nonreciprocal Transfers. Application of the principles for recording the receipt of services stated in paragraph 39 to the receipt of services in exchanges (reciprocal transfers) in the authoritative accounting literature differs from their application to the receipt of services in nonreciprocal transfers in that literature. Therefore, all the effects of events in which employee services are received under the plans need to be considered together in determining accounting for those effects, that is, in amplifying the principles stated in paragraphs 42 and 52.

78. Receipts of services in exchanges -- In an exchange, an enterprise receives things of value to it and, by the definition of an exchange, incurs costs in the sense of giving up things of value to it.[17] Services received in an exchange are recorded under present GAAP as of the time they are received, at their acquisition costs, which are deemed to be their fair values at the dates of the exchanges.[18] The fair values of services received in exchange for cash or promises to pay cash are thus deemed to be the amounts of cash paid or promised, discounted if the lengths of time until payment are significant. The fair values of services received in exchange for

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17 APB Statement 4, paragraph 62.

18 APB Opinion 29, paragraph 18 and APB Statement 4, paragraph 181.M-1.

nonmonetary assets are deemed to be "the fair values[s] of the assets surrendered to obtain [them].... The fair value[s] of the [services] received should be used.... if [they are] more clearly evident than the fair value[s] of the asset[s] surrendered."[19]

79. Since the accepted principle for accounting for receipts of services in exchanges, discussed in paragraph 78, is clear and unambigious (although its implementation may be difficult), its application to accounting for the plans is stated:

<u>Principle</u>: The component related to a plan of the fair value of services received in an exchange from employees covered by the plan is the cost related to the plan incurred in the exchange.

However, opinions differ on what is the cost incurred in exchange. The following issue is therefore stated:

<u>Issue</u>: What is the cost incurred under a plan in which employee services are received in exchanges (which is considered to be their fair value related to the plan)?

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19 APB Opinion 29, paragraph 18.

80. Receipts of services in nonreciprocal transfers -- In a nonreciprocal transfer, an enterprise receives things of value to it but, by the definition of nonreciprocal transfers, incurs no costs in the sense of giving up things of value to it.[20] An enterprise gives up nothing of value to it when it issues shares of its stock in a nonreciprocal transfer, because the stock of an enterprise is not an economic resource to the enterprise--such events "are not exchanges from the point of view of the enterprise. The enterprise sacrifices none of its resources and incurs no obligations in exchange for owners' investments...."[21]. At the enterprise's end of the transaction, issuance of stock by the enterprise merely alters the percentages of stock held by its existing stockholders and by entities that become stockholders on the issuances of stock. However, the event is an exchange to the provider of services at the other end of the transaction -- a reciprocal transfer in which the provider of services provides them and receives stock of the enterprise, which is valuable to the provider. Also, the existing stockholders may incur a cost, dilution of their ownership of the enterprise.

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20 APB Statement 4, paragraph 62.

21 Ibid.

81. The effects on an enterprise, a provider of services to the enterprise, and the enterprise's existing stockholders of a provision of services and the issuance of stock are diagrammed and discussed in Exhibit I.

82. Receipts of services by the enterprise in nonreciprocal transfers are recorded as of the times they are received, at "the fair value[s] of the....[services] received...."[22] The fair values

> ...should be determined by referring to estimated realizable values in cash transactions of the same or similar [services], quoted market prices, independent appraisals, ... and other available evidence.[23]

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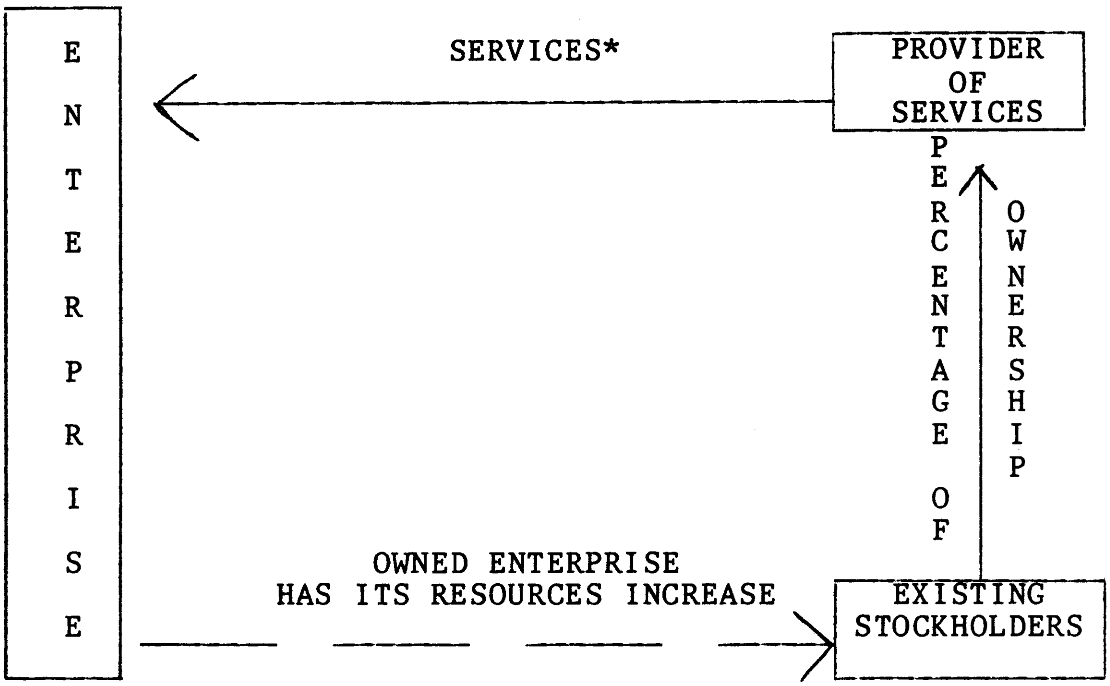
22 APB Opinion 29, paragraph 18. This is the general principle in the Opinion. However, the Opinion did not apply to acquisitions of services on issuance of stock of the enterprise (paragraph 4). APB Opinion 16 does not discuss receipts of services, but states in paragraph 67 that "An asset acquired by issuing shares of stock of the acquiring corporation is recorded at the fair value of the asset..." APB Statement 4 states the same principle (footnote 51 at paragraph 182).

23 APB Opinion 29, paragraph 25.

Exhibit I

Services Received in a Nonreciprocal Transfer



The parties are affected as follows:

- The provider of services provides services to the enterprise and receives a percentage of the ownership of the enterprise from the existing stockholders. (The only entities from which the provider of services could obtain a percentage of the ownership of the enterprise are the existing stockholders, who own all of it before the event. The stock issued to the provider of services by the enterprise is evidence of the transfer of a percentage of the ownership in the enterprise from the existing stockholders to the provider of services.)

- The existing stockholders are passive participants in the event. They have their percentages of the ownership of the enterprise reduced (their ownership is diluted). As owners, they are beneficiaries of the receipt of services by the enterprise.

- The enterprise receives services and its resources increase. It acts as a conduit by which the provider of services compensates the existing stockholders for the percentage of the ownership of the enterprise they receive from the existing stockholders, by having its resources increase to the benefit of the existing stockholders.

* A contribution of cash from the provider of services to the enterprise in addition to his services, say on exercise of a stock option, would not change the analysis. An additional arrow would be added in the diagram from the provider of services to the enterprise, labeled "cash."

83. Since the accepted principle for accounting for receipts of services in nonreciprocal transfers, discussed in paragraphs 80 to 82, is clear and unambiguous (although its implementation may be difficult), its application to accounting for the plans is stated:

<u>Principle</u>: The component related to a plan of the fair value of services received in a nonreciprocal transfer from employees covered by the plan is based on the best evidence available.

However, opinions differ on what is the best evidence available to determine the fair values. The following issue is therefore stated:

<u>Issue</u>: What is the best evidence available to determine the fair values of services received from employees under a plan in nonreciprocal transfers?

<u>Compensation Expense</u>

84. The expense incurred by using up the services received from employees covered by a plan, measured by the fair value of the services received as discussed in paragraphs 40 and 41, is composed of a component related to the plan and a component

unrelated to the plan, as discussed in paragraph 76. For purposes of discussion in this paper, the component of the expense related to the plan is called <u>compensation expense</u>.[24]

85. Paragraph 66 states principles for adjusting nonmonetary liabilities incurred under the plans between the times they are incurred and the times they are discharged. The designation of the amounts that result from the adjustments depends on resolution of the issue stated in paragraph 66 on what the nature of the charge or credit should be considered to be.

QUESTIONS IN THE LITERATURE

86. These questions have been asked in the authoritative literature on the plans:

- Is the plan compenatory or non-compensatory?

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[24] The term <u>compensation expense</u> is used because the enterprise incurs an expense, an income statement charge, in using up services regardless of how the services are received The term <u>compensation cost</u>, which has been emphasized in the literature on the plans, is not used, because, in the sense of giving up things of value to the enterprise, the term <u>cost</u> refers to services received at a cost, that is, in exchanges, but not to services received at no cost, that is, in nonreciprocal transfers.

- How much compensation is involved?
- What is the measurement date?
- How should the compensation be allocated to expense?

Noncompensatory and Compensatory Plans

87. Paragraphs 6 and 7 describe as noncompensatory the plans that have the characteristics listed in paragraph 7. Such plans have been considered to involve only the transfer of cash and stock and not to involve compensation. In the terms used in this analysis, they are considered not to involve a component of the fair value of services received from covered employees and, therefore, not to involve compensation expense. Such plans, called convenience stock purchase plans henceforth in this analysis, are discussed in paragraph , in the discussion of the implementation of principles for accounting for non-reciprocal transfers under the plans. All other plans have been called compensatory. They are simply called employee capital accumulation plans (plans) in this analysis.

Compensation

88. In a compensatory plan, the question has been: How much compensation is involved? In the terms used in this paper, that question becomes: What is the amount of the portion related to the plan of the fair value of the services received

from covered employees? That amount is eventually charged as compensation expense, so the question becomes: How much compensation expense is involved? Determining that amount is discussed in paragraphs 93 to 166.

Variable Measurement Date

89. The total amount of compensation expense has depended on the selection of a variable measurement date, as discussed in paragraphs 9 to 11. The usefulness of a variable measurement date is discussed in paragraphs 125 to 128.

Allocation of Compensation

90. Paragraphs 16 to 19 discuss allocation of compensation cost to expense. In the terms used in this paper the question becomes: In what periods should compensation expense be recognized? Determining the periods is discussed in paragraphs 167 to 186.

RECAPITULATION OF PRINCIPLES AND ISSUES STATED ABOVE

91. The following recapitulates the principles stated thus far in this issues paper, principles stated in paragraphs 42, 52, 66, 67, 79, and 83:

A. Receipts of services from employees covered by a plan should be accounted for as of the periods in which they are received.

B. Receipts of services from employees covered by a plan should be accounted for at their fair values.

1. The component related to a plan of the fair value of services received in an exchange from employees covered by the plan is the cost related to the plan incurred in the exchange.

2. The component related to a plan of the fair value of services received in a nonreciprocal transfer from employees covered by the plan is based on the best evidence available.

C. Receipts of services from employees covered by a plan should be recorded in asset amounts or in expenses when received.

D. Asset amounts in which receipts of services from employees covered by a plan are recorded when received should be charged to expense when the assets are used up or disposed of.

E. A nonmonetary liability to pay cash to employees under a plan should be first recorded when it is incurred or as soon afterwards as its amount can be reasonably estimated.

F. The amount at which a nonmonetary liability under a plan is first recorded should be adjusted each period based on changes in the factors on which the payment is based.

G. The amount by which a nonmonetary liability under a plan changes between first recording and payment should be charged or credited in the periods of the changes.

H. Receipts of cash from and payments of cash to employees related to the plans and elimination of liabilities to employees under such plans should be recorded as increases of cash as of the time cash is received and decreases of cash and liabilities as of the time cash is paid.

92. The following recapitulates and orders the issues stated in paragraphs 43, 53, 63, 66, 73, 79 and 83, which need to be addressed in determining principles or implementing the principles recapitulated in paragraph 91:

<u>Fair Value of Services Received</u>:

<u>Issue 1</u>: What is the cost incurred under a plan in which employee services are received in exchanges (which is considered their fair value related to the plan)?

<u>Issue 2</u>: Should the amount at which to first record a nonmonetary liability under a plan be based on an estimate of the amount to be paid at the date of exercise or on the amounts at the date as of which the liability is first recorded of the factors on which the liability is based?

Issue 3: What is the best evidence available to determine the fair value of services received from employees under a plan in nonreciprocal transfers?

Issue 4: What should be the nature of the charge or credit that results from adjusting a nonmonetary liability that results from a plan?

Timing of Receipts of Services and Incurring Liabilities:

Issue 5: Over what periods should employee services related to a plan be considered to be received?

Issue 6: As of what date or period should a nonmonetary liability related to a plan be considered incurred?

Discounting Liabilities Incurred:

Issue 7: Should a nonmonetary liability incurred under a plan be first recorded at its discounted amount?

<u>Issue 8</u>: What discount rate should be used to first record a nonmonetary liability incurred under a plan?

<u>Changes in Prospects</u>:

<u>Issue 9</u>: Should changes in prospects to receive cash or services or to pay cash under the plans, apart from changes in assets or liabilities, be recorded?

<u>Issue 10</u>: At what amounts should changes in prospects be recorded?

<u>Issue 11</u>: As of what dates or periods should changes in prospects be recorded?

<u>Issue 12</u>: In which financial statement elements should the effects of changes in prospects be recorded?

Those issues are discussed below under the headings in this paragraph.

FAIR VALUE OF SERVICES RECEIVED

93. The effect on a reporting enterprise of the events that occur under a plan that is common to all plans is the receipt of employee services. The principle to account for their receipt is likewise common to all plans: they should be accounted for at the fair value of the services. The major problem in determining how to account for the effects of the events that occur under all the plans is that neither the total fair value of the employee services nor the component of their fair value related to the plans can be determined directly.

The Enterprise and the Existing Stockholders as a Unit in Nonreciprocal Transfers

94. By convention, the fair value of the services received in a reciprocal transfer (an exchange) is deemed to be their cost in the exchange (see paragraph 79). That convention is applied below to receipts of employee services under a plan in transfers that are nonreciprocal to the enterprise by considering, for the purpose of implementation only, the enterprise and the existing stockholders as a unit, as one party to the transactions, with the employees as the other party. Considered that way, the nonreciprocal transfers

appear as exchanges in which the unit receives services and possibly cash on one hand and incurs dilution, that is, gives up a portion of the ownership of the enterprise, on the other hand.

95. Applying the cost convention to nonreciprocal transfers described that way, the component related to the plan of the fair value of the services received plus the cash received, if any, would be deemed to be their cost in the exchanges, which is the dilution incurred by the existing stockholders. The enterprise does not incur a cost in the sense of giving up something of value to it in such transfers, but determining the magnitude of the cost incurred by the existing stockholders would help the enterprise account for its receipts of services. The interest in cost in this section of the paper is thus solely to use it to determine the fair value of the services received, and not to account for the cost. The succeeding section of the paper deals with the timing of the receipt and using up of the services and charging their fair value to income as compensation expense.

Two Schools of Thought

96. Opinion on how the effects on the enterprise of events involving receipts of employee services under plans should be accounted for can be generally divided into two schools of thought, based on views that the fair value of the services received should be inferred from

(a) the amounts at the date of grant of the factors on which the award is based (DOG) or

(b) the amounts at the date of exercise or expiration of the factors on which the award is based (DOE).

97. Determining the component related to a plan of the fair value of employee services received in an exchange under DOG is similar to determining such a component received in a nonreciprocal transfer under DOG, using the device of considering the enterprise and the existing stockholders as a unit. Paragraphs 101 to 104 discuss such determinations. However, under DOG, a reciprocal transfer under a plan has ancillary effects on the enterprise different from those of a nonreciprocal transfer under a plan. Under a plan in which employee services are received in exchanges, the enterprise is exposed to changes that occur after the date of grant in the nonmonetary liability it incurs. That differs from a plan under which employee services are received in nonreciprocal transfers, because, under DOG, the existing stockholders are exposed to changes after the date of grant in their prospect of incurring a cost because of the possibility that the enterprise will issue stock, but the enterprise has no further exposure after that date.

98. In contrast, the component of the fair value of the services received related to a plan is deemed under DOE to be the cost incurred related to the plan at the date of exercise (a) by the enterprise in reciprocal transfers or (b) by the enterprise and the existing stockholders considered as a unit in nonreciprocal transfers. (If the award is not exercised, the component of the fair value of the services related to the plan is deemed to be zero.) The cost in a reciprocal transfer is the cash paid to the employees at the date of exercise; the cost in a nonreciprocal transfer is the dilution incurred by the existing stockholders at the date of exercise. In either case, the cost cannot be known in advance but can only be estimated.

99. The income statement results of applying DOG to plans involving reciprocal transfers and of applying DOE to all plans may be similar in that they may all incorporate the effects on the enterprise of events that occur to the date of exercise or expiration. However, the income statement results of applying DOG to plans involving nonreciprocal transfers may differ materially from the results of applying DOG to plans involving reciprocal transfers or of applying DOE to all plans, because the income statement results of applying DOG to nonreciprocal transfers may not incorporate effects on the enterprise of events that occur after the date of grant.

100. DOG and DOE are mutually exclusive, pertain to all plans, and underlie virtually all other issues in accounting for the effects of the plans. As discussed in paragraphs 97 to 99, the income statement results under DOG can differ materially from the income statement results under DOE, especially under plans that involve nonreciprocal transfers. The choice between them should be based on conceptual and practical arguments. The following sections present such arguments.

General Arguments in Support of DOG

101. The task force found general arguments in support of DOG in these categories:

- arguments that pertain to all receipts of services,
- arguments that pertain to receipts of services in nonreciprocal transfers, and
- arguments that pertain to receipts of services in reciprocal transfers.

102. Arguments in Support of DOG that Pertain to All Receipts of Services. These are the arguments the task force found in support of applying DOG that pertain to all receipts of services:

- The parties were willing to contract based on the amounts of the factors that affect the awards as known at the time they contracted, at the date of grant. That is the best evidence of what the parties believed was the fair value of the services. The provider of services could not have believed the services were worth materially more than it appeared at the date of grant that the provider would receive from the enterprise or the existing stockholders or both, or the provider would have provided services elsewhere. The enterprise could not have believed the services were worth materially less than it appeared at the date of grant that the enterprise or the existing stockholders or both would give up to the provider, or it would have offered less, sought another provider of services, or obtained what it needed in another manner.

- The date of grant is one of two dates used today, has been used for many plans, and has been proved to be useful, practicable, and objective for measuring the fair value of services received. Since a number of plans presently use the date of grant, continued and expanded use of that date would be the least disruptive.
- It is practical to determine the amount at the date of grant of the factors on which the award is based.

103. Arguments in Support of DOG that Pertain to Receipts of Services in Nonreciprocal Transfers. These are the arguments the task force found in support of applying DOG that pertain to receipts of services in nonreciprocal transfers:

- Applying DOG avoids predicting future magnitudes, such as changes in stock prices, to determine past results and present position.
- The enterprise has no exposure to changes in its assets or liabilities after it has received services in a nonreciprocal transfer under a plan, so it should report an income effect only in the periods the services are received.
- Income should not be affected by changes in the market price of the enterprise's stock. Changes in those prices should reflect income amounts but should not affect them.
- Basing the recording of the receipt of services on amounts of the factors on which the awards are based at dates later than the date of grant can result in wide fluctuations in income based on events that in some cases may be unrelated to the value of the services received. For example, an external influence could precipitate wide specula- tion in the market, driving stock prices up

without regard to the value of services or the performance of individual companies.

- Basing the recording of the receipt of services on the amounts of the factors on which the awards are based later than the date of grant may improperly buffer increases or decreases in the reported income of the enterprise. If the market price of its stock is a function of its reported earnings, as its income rises, the market price rises. As the market price rises, charges to expense rise and reported income declines. The converse is caused by decreases in income, that is, they decrease the stock price, which decreases the charges to expense, which increases reported income. Thus, use of amounts of factors on which the awards are based later than the date of grant can adversely affect the portrayal of the results of good management and mitigate the portrayal of the results of poor management. For example, use of DOE may result in reporting income by a poorly performing enterprise (by causing the reversal of prior accruals as the stock price declines); it may even cause the portrayal of good performance in amounts directly proportional to the magnitude of the poor performance measured by the market price of the enterprise's stock.

104. Arguments in Support of DOG that Pertain to Receipts of Services in Reciprocal Transfers. These are the arguments the task force found in support of applying DOG that pertain to receipts of services in reciprocal transfers:

- The effects on the enterprise of owing a nonmonetary liability incurred under a plan during the period in which the factors on which the liability is based change do not pertain to the receipt of services that occurred in the event in which the liability was incurred.
- The enterprise may be exposed to changes in the amount of a nonmonetary liability incurred in a reciprocal transfer under a plan, but it has the choice of bearing the exposure or hedging against it. The choice of bearing or hedging against changes in the amount of the liability is independent of and should not affect accounting for the receipt of services.

- Transactions that are analogous to the receipt of services and incurring of nonmonetary liabilities under a plan and that are treated in a manner that is similar to the treatment under DOG are acquisitions of long or short positions in securities. If a reporting enterprise sells its products in exchange for marketable securities of enterprises other than the reporting enterprise, its revenue is the market value of the securities at the date of sale.[25] Subsequent changes in their market value while the enterprise holds them are not part of the effects of the sale but are effects of holding the securities, which are accounted for during the periods the securities are held or in the periods they are sold. Also, if a reporting enterprise buys materials for its production processes in exchange for a promise to transfer marketable securities of enterprises other than the reporting enterprise at a specified future date, the cost of the materials is the market value of the securities at the date of

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[25] APB Statement 29, paragraph 18.

purchase.[26] Subsequent changes in the market value of the securities while the enterprise owes them are not part of the effects of the purchase and do not affect the cost of the materials. They are effects of owing the securities, which are accounted for during the periods they are owed or in the periods they are bought by the reporting enterprise and delivered to the seller or the obligation is otherwise discharged.

Another analogous situation is the treatment in constant dollar accounting of credit purchases and sales stated in fixed numbers of dollars. The revenue from such a sale or the cost in such a purchase is reported at the amount of the general purchasing power of the fixed number of dollars at the date of sale or purchase. Subsequent changes in the amount of general purchasing power of the fixed number of dollars receivable or payable are not attributed to the revenue from the sale or the cost in the purchase. They are

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26 Ibid.

attributed to holding or owing monetary items during inflation or deflation and are reported in the periods the receivables or payables are outstanding.[27]

General Arguments in Support of DOE

105. The task force found general arguments in support of DOE in these categories:

- arguments that pertain to all receipts of services and
- arguments that pertain to receipts of services in nonreciprocal transfers.

106. Arguments in Support of DOE that Pertain to All Receipts of Services. These are the arguments the task force found in support of applying DOE that pertain to all receipts of services:

- The commitment to transfer cash or stock to employees under a plan is only a contingency until the date of exercise or the date of expiration, when the amount of the transfer will be known. Only then can the fair value of the services received be known based on the transfer.

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[27] FASB Statement No. 33, "Financial Reporting and Changing Prices," paragraphs 40 and 50.

- Only at the date of exercise or the date of expiration can the total amounts involved be known without resort to unreliable means such as estimates or stock option pricing models.
- For some plans, such as a performance share units plan, the amounts involved cannot be determined before the date of exercise or the date of expiration.
- Applying DOE avoids conceptual and practical problems encountered in tandem plans, discussed in paragraph 194 below.
- Practical difficulties in applying DOG, avoided by DOE, can result in a measurement rule that can be used to manipulate income reporting or that assigns no value to valuable services received.
- The use of estimates under DOE for periods before the date of exercise or expiration is compatible with the historical cost based system now in use. APB Opinion 20 states a general rule for accounting for changes in such estimates, and the Accounting Standards Executive Committee asked in an issues paper for clarification of that rule and did not question the practice of accounting on the basis of estimates of the future magnitude of amounts.[28]

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28 "Accounting for Changes in Estimates," December 12, 1978.

That issues paper provides examples of precedent in other areas of accounting for basing representations of current position and past results on estimates of the future.

107. <u>Arguments in Support of DOE that Pertain to Receipts of Services in Nonreciprocal Transfers</u>. These are the arguments the task force found in support of applying DOE that pertain to receipts of services in nonreciprocal transfers:

- The fair value of services received in nonreciprocal transfers under the plans is related to the dilution of the ownership interests of the existing stockholders. The magnitude of the dilution can be known only at the date of exercise or the date of expiration.
- Plans under which services are received in nonreciprocal transfers involve contingent equity financing. The contingency is resolved only at the date of exercise or the date of expiration.

<u>Subsidiary Arguments Concerning DOG Versus DOE</u>

108. The task force found subsidiary arguments concerning the choice between DOG and DOE in these areas:

- Should the type of plan affect the choice between DOG and DOE?

- Should the type of consideration issued by an enterprise (such as cash, stock, or a combination of cash and stock) affect the choice between DOG and DOE?
- Should the type of consideration received by the enterprise (such as cash, stock, or a combination of cash and stock) affect the choice between DOG and DOE?

109. Types of Plan. Plans can be grouped into those under which the awards are based on

- performance of the stock of the enterprise in the market (market performance plans -- MPPs),
- performance of the enterprise as indicated in their records and reports (enterprise performance plans -- EPPs), or
- a combination of those two bases (combination plans -- COMs).

The task force found arguments, discussed in paragraphs 110 to 124, concerning the choice between DOG and DOE that relate to the plans grouped that way.

110. Some argue that a MPP should be treated as involving the granting of an equity right and a EPP as involving the granting of a creditorship claim. They believe that based on that distinction, (a) the fair value of services received under a MPP

should be based on DOG and the disposition of the equity right by the issuance of stock or payment of cash should be reported as such and (b) a EPP is essentially a profit sharing plan and the accounting should reflect that view, with the fair value of services received under the plan based on DOE.

111. Others believe accounting for MPPs and EPPs should all be based on either DOG or DOE. They argue the use of indices (whether related to market price or growth in earnings) does not affect the nature of the effect on the enterprise of the receipt of services and no difference in accounting for the plans should be based on which indices are used.

112. Some believe that two distinct portions are involved in a COM, a MPP portion and a EPP portion. Because they believe an equity right is granted for the MPP portion and a creditorship right is granted for the EPP portion, accounting for one portion differently from accounting for the other may be justified. They also believe the segmentation of the two portions is not difficult.

113. The following illustrates how a performance share unit plan (a COM) is now accounted for without such segmentation:

ASSUMPTIONS

Date of award: January 1, 1982
Market price at date of grant: $20
Exercise price: $0
Performance period: Five years ended December 31, 1986

Vesting: end of fifth year
Maximum common shares issuable: 1,000
Performance criteria:

Five Year Compounded Earning Per Share Growth	Percent of Award Earned	Common Shares Earned
20%	100%	1,000
15%	65%	650
10%	40%	400
Less than 10%	None	None

	December 31				
	1982	1983	1984	1985	1986
Fair market value of enterprise's common stock	$ 22	$ 25	$ 24	$ 26	$ 30
Cumulative compounded earnings per share growth:	25%	20%	26%	24%	23%

Determination of compensation expense: It is assumed that the maximum number of shares (1,000) will be earned for all periods, since cumulative compounde interest per share growth always equals or exceeds 20%.

CALCULATION OF FAIR VALUE OF SERVICES RECEIVED

	December 31				
	1982	1983	1984	1985	1986
Estimated issuable shares	1,000	1,000	1,000	1,000	1,000
Fair market value of enterprise's capital stock	$ 22	$ 25	$ 24	$ 26	$ 30
Total fair value	$22,000	$25,000	$24,000	$26,000	$30,000
Percent of performance period lapsed	20%	40%	60%	80%	100%
Cumulative fair value	$ 4,400	$10,000	$14,400	$20,800	$30,000
Accrued fair value --beginning of period	-	4,400	10,000	14,400	20,800
Fair value -- current period	$ 4,400	5,600	4,400	6,400	9,200

114. If the COM in the illustration is segmented, the services received related to the 1,000 shares at $20 would be accounted for in accordance with accounting for a EPP and the services received related to the $10 difference between the $30 and $20 for 1,000 shares would be accounted for in accordance with accounting for a MPP. Applying DOE for the EPP portion, a total fair value of services received of $20,000 ($20 X 1,000 shares) would be allocated over the five year period. Applying DOG for MPP, a method of determining the value of services related to the MPP portion at the date of grant would have to be used. The value would be allocated over the five year period, assuming that is an appropriate allocation period.

115. Those who argue against the segmentation indicate that most COMs are interdependent and that they cannot be meaningfully segmented into portions related to MPPs and EPPs. They also point out that present accounting for COMs is not to make the segmentation and that procedure has worked well.

116. If COMs are segmented, the choice of DOG or DOE for MPPs and EPPs standing alone would be used for the related portions of a COM. However, if COMs are not segmented, the general arguments presented in paragraphs 101 to 107 above for DOG and DOE apply to the entire (combined) award. Some also

express concern that if MPPs are accounted for on DOG but COMs are accounted for on DOE, inconsistencies might develop. To illustrate, if an enterprise wishes to account for a plan based on DOG, it can adopt a MPP. If another enterprise wishes to account for a plan based on DOE it can adopt a COM that has the features of the MPP adopted by the first enterprise but establishes an additional performance variable that is almost certain to be met. The two plans would be essentially equivalent, but if DOG is required for MPPs and DOE is required for COMs, determinations of the fair value of services received under the plans would differ. The same type of result could be caused by requiring accounting for MPPs based on DOE and COMs based on DOG.

117. Type of Consideration Issued by the Enterprise. Some believe that the type of consideration issued by the enterprise (cash, stock, or cash and stock) should affect the issue between DOG and DOE. For example, some support DOG for the reasons cited above, but they believe that if cash is paid by the enterprise in final settlement of the plan and the payment exceeds the fair value of services recognized based on DOG, they believe the fair value should be adjusted. They believe the final cash payment discharges an understated liability of the enterprise and that an additional amount of fair value of services should be reported. They, in effect, advocate applying DOE for plans in which cash is paid by the enterprise.

118. However, others who favor DOG argue that if the amount of fair value is adjusted for subsequent changes in the market price of the stock when cash is paid, the accounting is inappropriately changed from DOG to DOE.

119. Also, some argue that an equity transaction occurs in a MPP at the date of grant. As a consequence, it should not matter whether cash or stock is issued in a subsequent period, because the issuance is the retirement of an equity right and should not be charged to expense.

120. These are other arguments against adjusting the recorded amount of the component related to the plan of the fair value of services for cash payments to employes:

- In many cases, practice requires that no adjustment to the fair value of services be made when stock is issued to extinguish an equity right in a MPP. To be consistent, practice should also require that no adjustment of the fair value of services be made when cash is issued, but that a cash payment should be reported as an adjustment to equity.
- If the fair value of services is adjusted at the date of exercise in a cash transaction, costs and revenues are mismatched,

> because a high charge to the fair value of services may result in the period of exercise (assuming no interim accrual) in which no related services are received or used up.

121. Type of Consideration Received by the Enterprise. Another question is whether the type of consideration the employees give to the enterprise in addition to services should affect the accounting for the plan. For example, there are now plans under which stock options outstanding may be exercised by the employees by delivering previously acquired company shares to the enterprise rather than cash. To illustrate, an employee owns 1,000 shares of his employer's stock and also holds an exercisable option to acquire 1,500 shares of that stock. The shares held by the employee were purchased by him for $10 each and are now selling for $30 a share. The exercise price for the 1,500 shares is $20. Thus, exercise of the option will cost the employee $30,000. Rather than selling his currently owned shares or otherwise financing his exercise of the option, he has the choice to deliver to his employer his 1,000 shares as full consideration for the $30,000 exercise price of the option. In return, the employee would receive 1,500 shares of the employer's stock worth $45,000.

122. Current accounting requirements for those types of transactions are unclear. Two principal views have developed. The first is that the transaction is in substance the exercise of a nonqualified stock option. As such, the exercise requires

no adjustment of the fair value of the services based on the type of consideration the enterprise receives; any such aspect of the option would have arisen at the date of grant of the option and is not altered by the type of consideration used to exercise it.

123. A second view is that the transaction is in substance equivalent to a stock appreciation right or a similar arrangement. In effect, the employee has not exercised his option; rather, he has received additional shares at a current value of $15,000 (500 shares at $30) equivalent in value to the appreciation over the exercise price of the shares under option (1,500 X ($30 - $20)). As such, the $15,000 should be recognized by the enterprise as the fair value of the services received.

124. Others view the transaction as further support for the need to readdress current requirements and adopt either DOG or DOE for all plans.

<u>Variable Measurement Date in APB Opinion 25</u>

125. As discussed in paragraphs 9 to 11 above, APB Opinion 25 uses a variable measurement date (VMD) concept rather than a simple DOG or DOE approach. As quoted in paragraph 11, the amounts assigned to the fair value of the services received under VMD are the amounts of the factors on which the awards are based at the first date on which are known both (a) the number of shares that an individual employee is entitled to receive

and (b) the exercise price, if any. Since it refers to the number of shares an employee is to receive, it would appear that it does not cover plans under which the employees do not receive shares. However, in FASB Interpretation No. 28, the FASB says that

> APB Opinion No. 25 applies to plans for which the employer's stock is issued as compensation or the amount of cash paid as compensation is determined by reference to the market price of the stock or to changes in its market price.

Whether APB Opinion 25 covers EPPs cannot be determined from that Opinion or the Interpretation.

126. VMD appears to be a practical modification of DOG because of uncertainties. If the two factors, number of shares and exercise price, are known as of the date of grant, VMD is simply DOG. VMD requires for plans in which the factors are not known at the date of grant that the factors used should be as close as possible in time to those at the date of grant (which can be the date of exercise under some plans). The factors require certainty about two of the factors involved in the award but not about others, such as the market price at the date of exercise of a stock option award. The pronouncements do not make clear why some factors that are uncertain at the date of grant but not others have to be known before the fair value of the services received can be determined.

127. Some argue that VMD has provided a workable solution to the determinations of the fair value of services received for the various types of plans that is objective and should be retained. They hold that no significant problems are caused in practice by VMD and therefore sufficient justification for change does not exist.

128. The arguments against the use of VMD are essentially the arguments for the use of DOG and the use of DOE. An additional argument against VMD is that differences in the form of plans can significantly affect the accounting for them, even though their effects on the enterprise are essentially the same. (Paragraph 24 above contains examples.)

Measurement Under DOE of Fair Value of Services Received

129. As discussed in paragraphs 94 and 95, the amount of the component related to a plan of the fair value of services received under the plan can be deemed to be the amount of the cost incurred by the enterprise or the existing stockholders under the plan. As indicated in paragraph 96, the amounts involved in such a cost are based under DOE on the amounts at the date of exercise of the factors on which the award is based.

The task force believes that presents no conceptual or practical difficulties for accounting at the date of exercise. The amounts would be the amount of cash paid or the market value at the date of exercise of the stock issued to the employees under the plan, less the cash received from the employees, if any.

130. Accounting under DOE before the date of exercise for the component related to the plan of the fair value of services received under the plan would involve estimating what the amounts will be at the date of exercise and refining the estimate between first recording and the date of exercise, as discussed in paragraphs 180 to 186.

Measurement Under DOG of Fair Value of Services Received

131. As discussed in paragraph 96, the amounts involved in the cost incurred by the enterprise or the existing stockholders are based under DOG on the amounts at the date of grant of the factors on which the award is based. Changes in those amounts after the date of grant do not affect the measurement of the component related to the plan of the fair value of services under DOG. Accounting for those changes is discussed in paragraph 166.

132. Views differ on what should constitute the cost incurred at the date of grant by the enterprise or the existing stockholders. Also, implementing some of the views involves practical difficulties.

133. The task force focused on MPPs in considering the views. The measurement techniques used for MPPs can be applied to EPPs and COMs with some modifications, discussed in paragraphs to . Some believe costs incurred in EPPs are more easily determined than costs incurred in MPPs, because assigning amounts for prospective enterprise performance is not as difficult as assigning amounts for prospective market performance; others, however, believe the reverse. Determining costs incurred in COMs has the added difficulty of the need to assess the likelihood that the enterprise performance objective will be achieved.

134. These approaches have been suggested for measurement of the cost incurred at the date of grant, based on the various views on what constitute the cost and and on how such views should be implemented:

- difference between the market price[29] (or fair value)[30] of the stock at the date of grant and the exercise price,
- minimum value method: difference between the market price (or fair value) of the stock at the date of grant and the discounted amount of the exercise price,
- option pricing models -- conceptual,
- option pricing models -- empirical,
- equivalent cash salary,
- arbitrary determination, and
- outside specialists.

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29 For EPPs, the performance indicator, for example, book value, would be substituted for market price.

30 Views differ on whether market price or fair value should be used to measure the cost incurred. This issues paper uses the assumption that the unadjusted quoted market price of a share of stock of the same class that trades freely in an established market should be used. The problem is difficult because the value of the underlying stock is affected by various factors, some of which tend to diminish its value and some which tend to enhance it. This discussion in APB Opinion 25, paragraph 10(a) indicates factors that might have to be considered and the "practical solution" the Board reached:

> Those opposing factors include a known future purchase price (or no payment), restrictions on the employee's right to receive stock, absence of commissions on acquisition, different risks as compared with those of a stockholder, tax consequences to the employee, and restrictions on the employee's ability to transfer stock issued under the right. The effects of the opposing factors are difficult to measure and a practical solution is to rely on quoted market price to measure compensation cost related to issuing both restricted (or letter) and unrestricted stock through stock options, purchase or award plans.

135. <u>Difference Between the Market Price (or Fair Value) of the Stock at the Date of Grant and the Exercise Price</u>. The main argument for determining the cost under DOG as the difference between the market price (or fair value) of the stock at the date of grant and the exercise price is that although every award may have value immediately on issuance and therefore involve a cost to the enterprise or the existing stockholders, determining the value is difficult and a more objective determination based on the market price of the stock and on the exercise price provides a practical means of determining the cost.

136. In addition, some contend that although all MPPs involve costs and therefore components of the fair value of the services received, costs are restricted and perhaps fully offset because, for example, the holder of an award must remain as an employee of the enterprise, the employee cannot sell the stock award to a third party, and, in some plans, the employee must hold the stock for a stated period after exercise. Consequently the value of the option to the employee and, therefore, the cost to the enterprise or the existing stockholders is somewhat less than the market price of a like option without the restrictions.

137. A practical approach should therefore be used to account under those plans, such as the difference between the market

value of the stock at the date of grant and the exercise price. That treatment is held to be consistent with the present practice of not recognizing the value of a conversion feature in accounting for convertible securities and of not recognizing the value of nondetachable warrants.

138. Arguments against that approach are that all MPPs give value to the employees and cause the enterprise or the existing stockholders to incur cost and that there is therefore a component of the fair value of the services received related to the plans. If the exercise price is the same as the market price of the stock at the date of grant, the approach would thus not recognize a component of the fair value of the services received that should be recognized.

139. Also, some contend that valuation techniques that have been developed to measure option values provide reasonable measures of value to the employees and therefore cost to the enterprise or the existing stockholders.

140. Finally, it is argued that users of the financial statements cannot understand the aggregate fair value of the services received from employees (and therefore the total compensation expense incurred in using up the services) unless an attempt is made to determine the value of the options granted.

141. Option Pricing Models. The next three approaches to measuring cost in MPPs under DOG involve option pricing models. Some question the use of option pricing models because events over the last ten years generally indicate options have had little or no value. Use of all of the option pricing models, however, would have resulted in recognition of costs. Another major argument against option pricing models is that marketable stock options are different in important ways from employee stock options. The differences are presented here with pro and con arguments so they need not be presented separately in each of the three sections on option pricing model approaches.

142. Nontransferability of the option -- The employee is generally not permitted to transfer plan options to another person. Marketable stock options, on the other hand, are freely traded and transferable.

- Some believe a nontransferable option can be valued by considering the equivalent of a sale of the beneficial rights under the option. For example, an employee may choose to sell a call option from another enterprise whose stock is similar to the stock of the employee's enterprise.

- Others believe the employee can never effectively transfer rights under the option, and, therefore, the option is not comparable to options for similar stock (which are involved in conceptual models, discussed below in paragraphs 151 to 153).

143. <u>Need to remain in the employ of the enterprise</u> -- An employee must remain in the employ of the enterprise or the options are usually voided. Marketable stock options can be bought and sold without regard to employment.

- Advocates of the use of option pricing models question whether this restriction is substantive. They believe the purpose of an employee stock option is to attempt to retain the executive. From the viewpoint of the enterprise, the probability of keeping the employee is high, given the enterprise's compensation package, or the enterprise would improve its package.
- Others believe that the restriction is substantive, since employees who are not yet vested will more likely continue their employment if the optioned stock has appreciated considerably.

- Still others believe that the continued employment restriction has minimal effect on whether the employee stays with the enterprise or leaves. They believe options are usually granted as part of a compensation package because everyone else appears to be doing it and that the probability of keeping the employee is not especially affected by the existence of the plan.

144. Insider trading rules -- SEC insider trading rules require that if certain employees and others receive stock options, employees must hold the stock for six months after exercise or return any gains on sale of the stock to the enterprise. In addition, the employees may not trade in publicly-traded put or call options of the enterprise.

- Most agree that insider trading rules act as an additional restriction on the stock option. Of course, the executive may gain or lose by having to hold the stock for six months.

Some argue, however, that if the employee is so concerned about a drop in the price of the stock, the employee should sell the equivalent beneficial rights under the option. For example, the employee might attempt to lock in a certain return by purchasing a put option in a similar enterprise.

- Others believe that the insider trading rules are substantive and cause a reduction in the value of the option.

145. <u>Deferred exercisability</u> -- In many cases, employee stock options are not exercisable for one, two, or even more years. In contrast, marketable stock options can be exercised immediately if desired.

- Some believe that while most marketable options are theoretically exercisable at any time, they are usually not exercised immediately because the terms make that uneconomical. Exercise is often deferred for marketable options because the exercise price is above the market price of the stock at the date of issuance.

- Others believe that although many marketable options are not exercised immediately, this restriction severly limits the value of the employee stock option.

146. Dilution -- Exercise of a marketable stock option changes the percentages held by individual stockholders of the outstanding stock, but it does not change the amount outstanding. In contrast, exercise of an employee stock option increases the amount of stock outstanding and thereby dilutes the amount of ownership of the existing stockholders.

- Some argue that dilution is so small that in most cases it can be ignored. They also believe that if dilution is substantive, models can be adapted for that effect.
- Others believe that dilution must be considered and serious valuation problems develop in assessing the effect of dilution.

147. Minimum Value Method: Difference Between the Quoted Market Price (or Fair Value) of the Stock at the Date of Grant Less the Discounted Amount of the Exercise Price. One approach proposed to be used to determine amounts under MPPs at the date of grant is to use the difference between the market price of the stock at the date of grant and the discounted amount of the exercise price, discounted from the expiration date. The discount rate used would be a risk free rate of return. That method has been referred to as the minimum value method because some contend that it provides a lower boundary for the cost incurred by the enterprise or the existing stockholders in a MPP.

148. The minimum value method is based on the premise that an investor purchasing an option would be willing to pay at least the current market price of the stock less the discounted amount of the exercise price, discounted at the risk free rate of return. The rationale for the premise and the development and mechanics of the approach are discussed in detail in Appendix C.

149. Arguments for the approach are that this minimum value for an option is conceptually sound and objectively determinable and that it can be computed. In addition, it is noted that although items such as the discount rate must be estimated in the

approach, an error rate is tolerable because a minimum value is being computed. It follows that the method involves considerably less subjectivity than other types of valuation models. Also, all MPPs have certain restrictions, such as remaining as an employee of the company. Some believe that a minimum value might be reasonable in light of the restrictions. Finally, the use of the minimum value is held to be generally consistent with the ideas underlying APB Opinion 21 that the exercise price does not reasonably represent the discounted amount of the consideration transferred. Therefore, the exercise price should be stated at its discounted amount when determining the difference between the market price of the stock and the exercise price.

150. Arguments against the approach are that a minimum value is too low and may result in an understatement of the fair value of services received. In addition, factors such as changing exercise prices, tax reimbursements at the date of exercise, tax effects, dividend payments, the variety of performance plans, and determination of the risk free rate of return complicate the computation of the minimum value.

151. Option Pricing Models -- Conceptual. Various statistical models have been developed that incorporate factors that affect an option's value. It has been shown, for example, that an option's value is primarily a function of these factors:

- the market price of the stock,
- the exercise price,

- the risk free rate of return,
- variance of the stock price, and
- life of the option.

Conceptual models have been developed to determine the value of the option, giving consideration to those factors. Two of the most widely cited models are the Two State Option Pricing Model (TSOPM) and the Black & Scholes Option Pricing Model (BSOPM). The development of those models is discussed in Appendix D.

152. Arguments for the use of conceptual models are that the TSOPM and the BSOPM are conceptually sound and well recognized in the financial literature. Unlike other approaches that rely on pragmatic justifications, those models are thought by some to provide a sound approach to determination of costs incurred under MPPs. In addition, inconsistencies in accounting would be eliminated if one of the option pricing models were adopted. For example, the models would give approximately the same value to a stock option with an exercise price of $20 and market price of $20 and a stock appreciation right with a $20 prescribed exercise price and a market price of $20 with the same expiration date.

153. Arguments against the use of conceptual models are that the conceptual models are complex and would be difficult to use in practice because of a lack of understanding of the models. As a result, specialists will have to be used, and that may be expensive. In addition, one formula cannot be applied to all the varied types of plans. Changing exercise prices, tax reimbursements, market price ceilings, and other factors would make it necessary to allow for a variety of methods. Finally, in some cases, information necessary to use the models will not always be available, especially for new enterprises and enterprises whose stock is not publicly traded. For example, an estimate of the volatility of the stock price, required under the models, may be impossible to determine.

154. Option Pricing Models -- Empirical. In contrast with conceptual models for option pricing, models are often developed through empirical analysis. For example, an individual may want to determine the influence of stock prices on option valuation. The individual might take 100 options currently selling at varying prices and compare the prices to the underlying stock prices. A graph would be developed that would plot option price on one axis and market price of the stock on the other axis. A line of best fit would then be developed to determine the

relationship of the option price to the stock price. For example, the line of best fit might establish a valuation formula that indicates that the value of an option is 30% of the stock price. The analysis can then be expanded to include other variables to better predict the value of the option. For example, options might be segregated based on such factors as whether the underlying stock paid or did not pay dividends and the time to maturity of the option. The additional variables would be used to estimate the value of the option. Various empirical models are discussed in detail in Appendix E.

155. Arguments in favor of the use of empirical models are that empirical models are consistent with the general variables that should be considered in a rational pricing strategy for options. In addition, the models use realistic data to develop their variables. They are not hypothetical models based on normative reasoning. Finally, the models are relatively simple to apply after minimum training and can be audited easily.

156. Arguments against the use of empirical models are that empirical models are ad hoc and are based on limited samples that may or may not be representative of MPPs. As may be true for conceptual option pricing models, information necessary to use empirical option pricing models will not always be available, especially for new enterprises and enterprises whose stock is not publicly traded. In addition, although the factors to consider in the models are reasonably consistent, they differ as

to the weighting system used for certain components, and some models consider factors not considered in other models. Part of that problem is caused by the development of models at various times in the past. No assurance exists that the weightings would be sound if used today.

157. Equivalent Cash Salary. Some hold that at the time an employer and an employee conclude employment negotiations, they reach an agreement as to the total values to be transferred. The total is represented by the amount of cash salary that would have been agreed on in the absence of a plan. The value of the stock options at the date of grant and therefore of the cost incurred under DOG by the enterprise or the existing stockholders would therefore be determined by the excess of cash salary that would have been agreed on over the amount paid.

158. The major argument in favor of the approach is that if the employee stock options were not granted, cash salaries would undoubtedly be higher. Therefore, there must be some inherent cash trade-off in them.

159. The major argument against the approach is that an unacceptable degree of subjectivity enters into the computation of a cash salary trade-off, which would reduce the usefulness of the information and could lead to abuse. In addition, a cash

salary does not correspond to values transferred in MPPs in nature, results, or benefits. Accounting should measure amounts based on events that have happened, not on events that might have happened but did not.

160. Arbitrary Determination. Some contend that the amounts under DOG should be determined by an arbitrary, uniform method. For example, the Internal Revenue Service recently explored the possibility of determining amounts under MPPs at the date of grant for tax purposes. The percentage they have discussed (something like 1% or 2% a year times the life of the option times the market price of the stock) could be adopted by the accounting profession. Arguments for the approach are that it would be easy to apply and easy to audit. The argument against the approach is that it is conceptually deficient and would yield information with little, if any, usefulness.

161. Use of Outside Specialists. Some contend that amounts under MPPs should be determined by outside specialists experienced in the area, such as investment bankers. The major argument for the approach is that valuation of the awards requires specialized expertise and demands training in finance and economics and related experience in valuing restricted rights to shares of

stock. The arguments against the approach are that such a procedure is costly and that accountants should be able to develop a model that is useful, reasonably easy to understand, and capable of implementation without the use of specialists. In addition, use of outside specialists may cause competition in the valuation of the plans for reasons unrelated to the quality of the resulting information.

Issues 1 to 3 Under DOG, DOE, and VMD

162. To summarize, issues 1 to 3, stated in paragraph 92, are answered diversely under DOG, DOE, and VMD.

Issue	Answer
1. What is the cost incurred under a plan in which employee services are received in exchanges (which is considered to be their fair value related to the plan)?	DOG: The fair value at the date of grant of the prospective amount of cash to be transferred. DOE: The amount of cash transferred at the date of exercise. VMD: The amount of cash transferred at the date of exercise.

Issue	Answer
2. Should the amount at which to first record a nonmonetary liability under a plan be based on an estimate of the amount to be paid at the date of exercise or on the amounts at the date as of which the liability is first recorded of the factors on which the liability is based?	DOG: The amounts at the date as of which the liability is first recorded of the factors on which the liability is based. DOE: An estimate of the amount to be paid at the date of exercise. Paragraphs 180 to 186 discuss how to make the estimate. VMD: The amounts at the date as of which the liability is first recorded of the factors on which the liability is based.

Issue	Answer
3. What is the best evidence available to determine the fair value of services received from employees under a plan in nonreciprocal transfers?	DOG: (Paragraphs 131 to 161 discuss possible answers to issue 3 under DOG)
	DOE: The difference between the amount of cash received, if any, and the market price at the date of exercise of the stock issued.
	VMD: The difference between (a) the exercise price and (b) the market price of the stock at the first date at which the exercise price and number of shares are both known.

Adjusting the Nonmonetary Liabilities Under Plans that Involve Reciprocal Transfers - Issue 4

163. Under a plan that involves reciprocal transfers, the enterprise incurs nonmonetary liabilities. The liability must be adjusted between the date it is first recorded and the date of exercise. Issue 4 stated in paragraph 92 asks:

> What should be the nature of the charge or credit that results from adjusting a nonmonetary liability that results from a plan?

164. Under DOE, the charge or credit is a change in an accounting estimate. Paragraphs 180 to 186 discuss how to account for the change.

165. Under VMD, the change is accounted for as a charge or credit to expense in the period of the change.

166. Under DOG, views vary:

- Some believe that the liability under MPPs is an equity right and changes in the liability from the date it is first recorded to the exercise date should be treated as the retirement of an equity right, with no effect on income after the liability is first recorded. They support that view by pointing out that

- In many cases, practice requires that no adjustment to compensation cost be made when stock is issued to extinguish an equity right in a MPP. To be consistent, practice should also require that a cash payment be reported as an adjustment to paid-in-capital.
- If compensation cost is adjusted at the date of exercise in a cash transaction, a mismatching of costs and revenues results because a high charge to compensation expense may result in the period of exercise (assuming no interim accrual).

● Some believe that the changes should be reported as adjustments to the fair value of the services received and thus of compensation expense. Others, however, believe that that treatment inappropriately changes the accounting from DOG to DOE.

TIMING OF RECEIPTS OF SERVICES AND INCURRING LIABILITIES

167. The preceding section discusses issues that pertain to determining the total amount of the component related to the plans of the fair value of services received under the plans. Issues 5 and 6 pertain to the timing of the recognition in the accounts of that total amount and of related liabilities if any:

- Issue 5: Over what periods should employee services related to a plan be considered to be received?
- Issue 6: As of what date or period should a nonmonetary liability related to a plan be considered incurred?

168. The fair value of services received are sometimes capitalized, for example, as part of self constructed assets, as discussed in paragraphs 40 to 42; accepted principles for capitalizing the fair value of services received and for subsequent accounting for them are clear and unambigious, as indicated in paragraph 42, and are stated as principles C and D in paragraph 91.

169. However, as indicated in paragraph 40, most services are recorded in expenses as of the time they are received. For most

services received under the plans, therefore, determining the timing of their receipt determines the timing of the recognition of using them up and thus the recognition of compensation expense. Determining the timing of their receipt also determines the date or period as of which a nonmonetary liability related to the services should be considered incurred.

170. Views concerning when services are received under the plans differ. As indicated in paragraph 43, they may be considered to be received

- before the date of grant,
- over the vesting period,
- over the service period, or
- over the period from the date of grant to the exercise date.

Before the Date of Grant

171. Some believe services received under the plans should be treated as having been received before the date of grant and that the component related to the plans of their fair value should be reported in total in the period of the date of grant. No services should be reported as received in future periods because the services do not relate to those periods.

172. Others believe that the services should be treated as received in the period of the date of grant simply because that treatment is objective and definitely determinable and eliminates

the practical problems associated with other treatments of the timing of the receipt of services. They contend that recognizing them over periods after the period of the date ~~of~~ grant is too subjective and often leads to materially different accounting results depending on the assumptions used. Many contend that the treatment required by APB Opinion 25 has that deficiency.

Over the Vesting Period

173. Those who support recognition of the receipt of services over the vesting period believe that the benefits to the enterprise under the incentive provided by the plans are received from the date ~~of~~ grant to the vesting date. They also hold that the vesting period is definite and determinable, unlike other periods based on less precise guidelines, such as a service period other than the vesting period.

Over the Service Period

174. Those who support recognition of the receipt of services over the service period without regard for the vesting period hold that recognizing the receipt of services over the periods they are received most conforms with present principles, as quoted in paragraph 39. They also contend that recognizing their receipt over the service period provides flexibility, because it gives enterprises the opportunity to use shorter

periods such as current year recognition if the circumstances warrant it, and they contend that other approaches lack that flexibility. In addition, many argue that the service period approach, as required under APB Opinion 25, is determinable and has provided no substantial problems in practice.

Over the Period from the Date ~~of~~ Grant to the Exercise Date

175. The major argument for recognizing the receipt of services under the plans over the period from the date ~~of~~ grant to the exercise date is that the employees' incentive to benefit the enterprise remains until the exercise date. Supporters of this approach also point out that problems develop if the services are to be recognized over the vesting or other period that ends before the exercise date and the total amount of the component related to the plans of the fair value of services received is determined under ~~DOE~~ the exercise date: the total amount would have to be recognized over a period that ends before the exercise date but the total amount would not be known until the exercise date.

Patterns of Recognition of the Receipt of Services

176. Once the total amount of the component related to the plan of the fair value of covered employee services is determined

and the period over which the receipt of those services should be recognized is determined, the pattern of recognition of the amount over the period must be determined. Consideration of the pattern under DOG and under DOE are discussed in this section.

177. <u>Pattern Under DOG</u>. There is support for recognizing the receipt of services under DOG over the period they are to be recognized using straight line, decreasing charge, and increasing charge methods.

178. Those who favor straight line argue that the benefits of the services appear to be the same in each period and their rcognition over the periods should therefore be equal. Straight line is also considered to be desirable because it is easy to apply.

179. Arguments for a decreasing or increasing charge method are based on the belief of their supporters that the benefits are higher or lower in the earlier or later periods.

180. <u>Pattern Under DOE</u>. Various approaches have been suggested as bases under DOE for estimating in advance the total amount of the component related to the plans of the fair value of services received and for the pattern of its recognition over the periods they are considered to be received. These are the major approaches:

- Use of the current market price less the exercise price of the underlying stock adjusted for the receipt of services previously recognized. This is referred to as the mark-to-market approach.
- Use of the current market price less the exercise (prescribed) price of the underlying stock. This amount is then allocated over the service period on a percentage basis adjusted for the receipt of services previously recognized. This is referred to in this paper as the averaging approach and is currently used in accounting for stock appreciation rights and is consistent with FASB Interpretation No. 28. Alternatively, some would adjust for compensation expense recognized before allocation on a percentage basis.
- Use of an estimate (forecast) of the future market price of the underlying stock. Allocations are made based on that estimate unless other information requires revision of that estimate because it is no longer reasonable. This method is referred to as the forecast approach.

181. This illustrates the allocation approaches:

General Assumptions

Date of award: January 1, 1982

Market price at date of grant: $20

Exercise price: $20

Common shares issuable: 1,000

Period of allocation: exercise period

Exercise period: end of fifth year

Market price at December 31

1982	1983	1984	1985	1986
$22	$25	$24	$26	$30

The fair value of services received is allocated as follows:

	1982	1983	1984	1985	1986	Total
Mark-to-Market Method	$2,000[1]	$3,000[2]	($1,000)[3]	$2,000[4]	$4,000[5]	$10,000

[1]$22 - $20 = $2; $2 x 1,000 = $2,000

[2]$25 - $22 = $3; $3 x 1,000 = $3,000

[3]$24 - $25 = ($1); ($1) x 1,000 - ($1,000)

[4]$26 - $24 = $2; $2 x 1,000 = $2,000

[5]$30 - $26 = $4; $4 x 1,000 = $4,000

	1982	1983	1984	1985	1986	Total
Averaging Method	$400[1]	$1,600[2]	$400[3]	$2,400[4]	$5,200[5]	$10,000

[1]$22 - $20 = $2; $2 x 1,000 = $2,000; $2,000 x 20% = $400

[2]$25 - $20 = $5; $5 x 1,000 = $5,000; $5,000x40% = $2,000; $2,000 - $400 = $1,600

[3]$24 - $20 = $4; $4 x 1,000 = $4,000; $4,000 x 60% = $2,400; $2,400 - $2,000 = $4

[4]$26 - $20 = $6; $6x1,000 = $6,000; $6,000x80% = $4,800; $4,800 - $2,400 = $2,400

[5]$30 - $20 = $10; $10x1,000=$10,000; $10,000x100% = $10,000; $10,000-$4,800=$5,20

	1982	1983	1984	1985	1986	Total
Forecast Method	$1,600[1]	$1,600[1]	$1,600[1]	$1,600[1]	$3,600[2]	$10,000

Specific Assumptions

1. Allocation on straight-line basis

2. Initial forecast $28; changed to $30 in 1986

[1]$28 - $20 = $8; $8 x 1,000= $8,000; $8,000 ÷ 5 = $1,600

[2]$30 - $28 = $2; $2 x 1,000 = $2,000; $2,000 + $1,600 = $3,600

	1982	1983	1984	1985	1986	Total
Present Value Method	$1,366.02[1]	$2,253.96[1]	$(826.45)[1]	$1,818.18[1]	$4,000[1]	$8,611.71

Specific Assumptions

1. Mark-to-market present value approach (other assumptions could have been made).

2. Discount rate: 10%.

[1] Schedule 1

Mark-to-Market	Discounted Amount of 1	Fair Value of Services
$2,000	.68301	$ 1,366.02
3,000	.75132	2,253.96
(1,000)	.82645	(826.45)
2,000	.90909	1,818.18
4,000	1.00000	$ 4,000.00
		$ 8,611.71

2 Schedule 2

Date December 31 (1)	Interest (2)	Fair Value of Services (3)	Liability (4) (2 + 3 + 4)
1982	- 0 -	1,366.02	1,366.02
1983	136.60	2,253.96	3,756.58
1984	375.66	(826.45)	3,305.79
1985	330.58	1,818.18	5,454.55
1986	545.45	4,000.00	10,000.00

182. Mark-to-market -- The major argument for the use of mark-to-market is that it provides an objective determination of services in the periods over which they are received and uses the same formula used to measure the total amount at the date of exercise. It is also held that costs are best matched with revenues under mark-to-market. If the market price of the underlying stock goes up, it can be assumed that more benefits are received from employees, and that should be recognized by the enterprise.

183. Also, some believe that stock prices follow a random walk and attempts to average recognition of services over several periods would be fruitless.[31] Services received to any point in time should be recorded at the difference between the market price and exercise price and any type of averaging technique would only provide misleading information.

184. Averaging -- One argument in favor of averaging is that it smoothes out the effects of fluctuations in the amount of services to be recognized over the periods in which they are deemed to be received. Many argue that mark-to-market leads to a yo-yo effect, which does not represent the economics of the

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31 See William H. Beaver, "Reporting Rules for Marketable Equity Securities," Journal of Accountancy, October 1971; William J. Morris and Bernard A. Coda, "Valuation of Equity Securities," Journal of Accountancy, January 1973; and William H. Beaver, "Accounting for Marketable Equity Securities," Journal of Accountancy, December 1973.

transactions. Amounts based on use of a quoted market price at the year end are often unreliable estimates of the total services that will ultimately be reported. Market value is likely to be volatile over the short run and not be correlated to benefits received. In the long run, however, the best basis for measuring benefits received is to average the effects of changes in the market price. In addition, it is contended that the average approach is now used in practice (for example, with stock appreciation rights) and no serious problems have occurred in its implementation.

185. Forecast approach -- The major argument in support of the forecast approach is that it provides the most reasonable basis for assigning services received to the reporting periods, because it enables the enterprise to record receipts of service on what it expects to be receiving from the employees. If the total component of the fair value of services received can be reasonably estimated, the amount can be spread uniformly over the periods affected to provide the most appropriate matching of costs and revenues. Also, many contend that use of a market price at the end of a reporting period is too imprecise because it is not representative of the entire period over which the services are received; thus the mark-to-market and averaging

approaches, which use end of period prices, are often inappropriate for allocation purposes. Others believe that the forecast would be even more appropriate for EPPs, because the forecast error would not be as great. The major argument against such an approach is that this method leads to a number of subjective estimates. No one can foretell the future. Therefore, forecasts, while conveying an impression of precision about the future, will inevitably be wrong.

186. Discounted amount approaches -- Use of any of the above approaches adjusted for the time value of money, that is, allocation of the discounted amount of the total amount of the component related to the plans of the fair value of services received. Those approaches are known as discounted mark-to-market, and so forth. The major argument in support of the discounted amount approaches is that they take into consideration the fact that a period of time will elapse before the events involved in the plan have all occurred. Proponents of these approaches argue that a more representative amount will appear on the balance sheet if it is reported at the discounted amount rather than at the gross amount that will be finally determined. In addition, it is argued that these approaches have additional applicability with stock appreciation rights when cash will be paid at the end of the exercise period. Others, however, argue

that cash is often not involved and therefore discounted amount consideration should be ignored. Also, these approaches reduce compensation expense on the income statement, which many believe would be an understatement. Finally, others note that these approaches are cumbersome and lead to many subjective evaluations, such as selection of the interest rate and exercise period.

DISCOUNTING LIABILITIES INCURRED

187. (This section remains to be prepared, based on issues 7 and 8 in paragraph 92. It will relate the issues to the discussion in paragraph 186, among other things.)

ACCOUNTING FOR CHANGES IN PROSPECTS

188. (This section remains to be prepared, based on issues 9 to 12 in paragraph 92.)

SUBSIDIARY ISSUES

189. Paragraph 190 to 196 discuss the following subsidiary issues:

> Issue 13: How should permanent tax differences be reported?

Issue 14: How should accrued compensation be adjusted if the award is not exercised?

Issue 15: How should tandem plans be accounted for?

Issue 16: What types of disclosures should be made related to these plans?

Issue 17: What type of transition should be required if accounting changes are required in response to this issues paper?

Permanent Tax Differences

190. APB Opinion 25 takes the position that the tax effects of permanent differences between compensation expense deducted for tax purposes and compensation expense reported in income statements should be added to or deducted from equity in the period of tax reduction or increase. The major argument for that approach is that the tax effect of differences between pretax accounting income and taxable income results from a transaction involving the stock of the enterprise. Others, however, argue that the permanent difference arises as a result of the determination of compensation expense under generally

accepted accounting principles in a manner differing from the determination of compensation expense for tax purposes. The tax effect of such a difference is related to an item affecting the determination of income and not to the amount the equity of the enterprise. Accordingly, the tax effect should be reflected as a reduction of income tax expense in accordance with APB Opinion 11.

Award Not Exercised

191. Some argue that the compensation expense previously recognized should be credited to expense if an award is not exercised. They contend that recording a component of the fair value services received should be contingent on the employees providing such a component. If no award is exercised, that demonstrates that no such component was provided and no related compensation expense should be reported. Therefore, previously reported compensation expense should be reversed. Others argue that if previously recognized compensation expense should be reversed if an award is not exercised, it should be increased if the employee's gain at exercise is greater than the compensation expense previously recognized. Still others argue that a component of valuable services has been received. Subsequent events should not affect the amount of compensation expense previously recognized. In some cases, the employee will remain and will be awarded much more than the price of the stock; in other situations, the employee will not remain and will not receive anything. In either case, compensation expense previously recognized should not be reversed.

192. To many, answers to this issue depend on whether DOG or DOE is used: If DOG is used, compensation expense should not be adjusted; if DOE is used, compensation should be adjusted.

193. To some the answer depends on whether the award was not exercised because the employee failed to fulfill an obligation or because the stock price dropped, which made the exercise uneconomic. In the first situation, some argue compensation expense should be reversed. In the second situation, many argue that a reversal is not justified.

<u>Accounting For Tandem Plans</u>

194. Present practice is to select from the tandem plans the award that most probably will be exercised. Suggested types of accounting for tandem plans include:

- <u>present practice</u>: based on probability,
- <u>least charge method</u>: accounting for the award resulting in the least charge to income,
- <u>most charge method</u>: accounting for the award resulting in the highest charge to income, based on conservation,
- <u>always assuming one award will be exercised over another</u>: for example, assume an SAR will always be exercised over a stock option,

- historical experience: accounting for the award most often chosen by employees in the past,
- surveying employees: surveying employees at the inception of a plan to determine their current preference and accounting accordingly, and
- choice of management: allowing management to choose the award to be accounted for.

Disclosures Related to the Plans

195. Should the present disclosure rules apply or should more or less disclosure be required? Many contend that the answer to the question depends on the resolution of the other issues discussed in this issues paper.

Transition

196. If an accounting change is required to adopt one of the accounting methods discussed in this issues paper, how should it be reported, by

- retroactive restatement,
- cumulative catch-up, or
- prospective application: plans initiated after 12/31/XX?

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ADVISORY CONCLUSIONS