SPECIAL REPORT

FUTURE EVENTS

A Conceptual Study of Their Significance for Recognition and Measurement

L. Todd Johnson
Principal Author

Australian Accounting Standards Board
Canadian Accounting Standards Board
International Accounting Standards Committee
United Kingdom Accounting Standards Board
United States Financial Accounting Standards Board
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Second printing—5/03.
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FOREWORD

The significance of future events for recognition and measurement in accounting is an issue that confronts standard setters worldwide. Specifically, the issue is what should be the significance of future events in deciding (a) whether items meet the definitions of assets and liabilities, (b) whether and when they should be recognized, and (c) how they should be measured. This study was prepared as a background for and to facilitate a discussion of the role of future events at the Conference of Standard-Setting Bodies that was held in London in November 1993 under the auspices of the International Accounting Standards Committee (IASC). That conference represented the third such meeting (the preceding meetings took place in Norwalk, Connecticut in 1992, and in Brussels in 1991). As with the previous meetings, the purpose of the London conference was to enhance communications between standard-setting bodies and to explore conceptual and technical issues about which they have common concerns.

This study resulted from the efforts of a “working group” consisting of Board members and senior staff members of the standard-setting bodies of Australia, Canada, the United Kingdom, and the United States, as well as staff of the IASC. Members of the working group included:

Australia

Ian Mackintosh, Deputy Chairman
Australian Accounting Standards Board (AASB)

Warren McGregor, Executive Director
Australian Accounting Research Foundation (AARF)

Canada

Alex Milburn, Chairman
Accounting Standards Board (AcSB)
Canadian Institute of Chartered Accountants (CICA)

John Denman, Director, Accounting Standards
Canadian Institute of Chartered Accountants

Bryan Walker, Senior Manager, Accounting Standards
Canadian Institute of Chartered Accountants
International Accounting Standards Committee

David Cairns, Secretary General

United Kingdom

David Tweedie, Chairman
Accounting Standards Board (ASB)

Allan Cook, Technical Director
Accounting Standards Board

Andrew Lennard, Assistant Technical Director
Accounting Standards Board

Hans Nailor, Project Director
Accounting Standards Board

Sandra Thompson, Project Director
Accounting Standards Board

United States

James Leisenring, Vice Chairman
Financial Accounting Standards Board (FASB)

L. Todd Johnson, Research Manager
Financial Accounting Standards Board

Kimberley Ryan Petrone, FASB assistant project manager, also contributed to the preparation of this study. FASB staff members Debbie Kelly and Mary Huynh edited the draft and prepared it for production.

While members of the working group represented the standard-setting bodies with which they were affiliated, the views they expressed during the course of the discussions were their own and had not been officially deliberated by the bodies themselves.

The purpose of this study is to help standard setters develop a common conceptual foundation on which they can base accounting standards for their respective countries concerning issues that involve the consideration of future events. The working group believes that developing such a foundation will enhance the prospect of future international harmonization from the earliest stages of the development of accounting standards.

This study focuses on conceptual issues and discusses a series of cases that represent a cross section of situations that members of the working group identified as involving future events. The working group found that focusing on specific future events scenarios rather than discussing the issues in the abstract not only facilitated communication among its members, but also contributed to a better understanding of the issues. Because of that,
the working group decided to develop a collection of cases to illustrate and explain the issues. Some of those cases are incorporated in the body of the study to help readers gain a better appreciation for the issues. Other cases were discussed in some detail at the conference in London and the remainder are included as additional illustrations for readers. All of the cases that the working group developed appear in Appendix B.

The issues embodied in the cases were considered on a conceptual basis because each of the standard-setting bodies believes that concepts should play a primary role in the setting of accounting standards. In addition, the conceptual frameworks of each of the national standard-setting bodies represented in the working group are similar to each other as well as to the conceptual framework of the IASC. Those commonalities provided members of the working group with the necessary common ground for consideration of the individual cases.

Consideration of each of the cases in light of those conceptual frameworks is accomplished by way of “discussion notes” that were used to facilitate the discussion of the cases at the conference. The notes raise the conceptual issues and possible alternative viewpoints. The notes also indicate in each case the degree of consensus achieved among members of the working group; in some instances, the group was unable to reach a consensus on the issues either because of differences in views held by the members or because there was not adequate time to fully discuss the issues and their implications.

The case-study exercise at the conference proved to be an enlightening process as conference participants were not bound by their own national standards, but rather were able to discuss the issues and their views on those issues largely in the context of the IASC’s conceptual framework. The success of that approach at the conference suggests that it may hold considerable promise as an effective means for addressing similar technical accounting issues—with an open mind and uninhibited by extant national standards and practices.

We hope that this study is useful in helping others formulate their own thoughts on these issues. We also hope it will encourage further thinking about the significance of future events for recognition and measurement. Issues involving future events are likely to continue to pervade standard setting both domestically and internationally and the think-
ing on those issues is therefore likely to continue to develop and evolve. Accordingly, we welcome reactions to the individual cases or the study as a whole. Please address any comments to one of the following:

Executive Director
Australian Accounting Research Foundation
211 Hawthorn Road
Caulfield 3162
Australia

Director, Accounting Standards
Canadian Institute of Chartered Accountants
277 Wellington Street West
Toronto, Ontario
Canada M5V 3H2

Secretary General
International Accounting Standards Committee
167 Fleet Street
London EC4A 2ES
England

Technical Director
Accounting Standards Board
Holborn Hall
100 Gray’s Inn Road
London WC1X 8AL
England

Director of Research and Technical Activities
Financial Accounting Standards Board
P. O. Box 5116
Norwalk, CT 06856-5116
USA
SPECIAL REPORT

Future Events: A Conceptual Study of Their Significance for Recognition and Measurement

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INTRODUCTION

What role future events should play in accounting is a question that has confronted—and vexed—standard setters in an increasingly wide array of agenda topics. This question is hardly a new one, yet it pervades accounting because virtually every accrual and deferral contains an explicit or implicit assumption about the occurrence or outcome of future events.

Consider the accounting by a company that has cancelled its insurance coverage for employee accidents, electing instead to be “self-insured” by absorbing those costs itself. Some have suggested that the company should charge to expense each year an amount equal to the yearly average of any expected losses, with the corresponding credit being made to a “self-insurance reserve.” Others dispute that treatment, believing that a liability should not be recognized until an accident actually happens.

Consider also the accounting by a manufacturer for the warranties it makes to customers on the performance of a recently introduced product. Some of those who would oppose the recognition of a liability for self-insurance would support the recognition of a liability for product warranties. In their view, recognition of a liability should not be postponed until the product fails to perform as warranted. Are those views inconsistent?

This study has been prepared to explore questions like those. Its purpose is to help develop a common conceptual foundation on which standard setters can base their own accounting standards about future events issues, thereby enhancing the prospect of future international harmonization from the earliest stages of the development of accounting standards.

All of the standard-setting bodies represented in the working group that prepared this study have developed their own conceptual frameworks in the belief that those frameworks are necessary if consistent and conceptually sound solutions to difficult accounting issues (such as those that arise in connection with future events) are to be found. Their conceptual frameworks are similar, and under those frameworks, the process of addressing accounting questions generally involves considering the following three stages:

1. **Definitions**
   Does the item in question meet the definition of one of the elements of financial statements (assets, liabilities, etc.)?

2. **Recognition**
   If so, does the item satisfy the criteria for recognition?

3. **Measurement**
   How should the item be measured?

---

1In this context, “reserve” refers to a liability (or “deferred credit”) rather than to a component of equity.
Appendix A contains tables comparing the definitions or underlying concepts of the various terms used in the conceptual frameworks of the members of the working group. They are:

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**LINKING FUTURE EVENTS WITH RECOGNITION AND MEASUREMENT**

**Future Events**

*Future events* are *implicitly* embodied not only in the assets definitions (*future* economic benefits), but also in the liabilities definitions (transferring or sacrificing economic benefits *in the future*). And, because all other elements of financial statements (such as revenues, expenses, gains, losses, etc.) are defined in terms of changes in assets and liabilities, it follows that future events are inherent in those definitions as well. Thus, there is a clear link between future events and the definitions of elements of financial statements.

**Past Events**

*Past events* are *explicitly* embodied in the definitions of assets and liabilities (the result of *past* transactions and events), thereby making the occurrence of past events

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2It should be noted that the definitions of assets and liabilities refer to real-world assets and liabilities that financial statements seek to model by means of recognition and measurement. Thus, it is useful to distinguish between *underlying assets and liabilities* and *recognized assets and liabilities*. All of the assets and liabilities that are recognized in an entity’s financial statements should reflect underlying assets and liabilities that exist; conversely, all of an entity’s underlying assets and liabilities should be reflected (but not necessarily recognized) in its financial statements, subject to materiality and cost-benefit considerations.

The same can be said of events. Changes in assets and liabilities are commonly described as revenues, expenses, gains, losses, and the like, which are particular classes of events. Those changes that have been defined in conjunction with the definitions of assets and liabilities refer to real-world or underlying events. Those events are then reflected in financial statements as recognized events. All of the events that are recognized in an entity’s financial statements for a particular period should reflect underlying events that have occurred during that period; conversely, all of an entity’s underlying events that have occurred in a particular period should be reflected (but not necessarily recognized) in its financial statements, subject to materiality and cost-benefit considerations. Recognition and measurement, therefore, constitute the bridge between underlying elements and recognized elements.
essential to the existence of assets and liabilities (as well as other elements). That linkage places a critical restraint on future events because they cannot be considered—even if they are virtually certain to occur—unless there is a past event. Thus, there is a tension between past events and future events that is evident in the future events question.

"Probable"

That tension is heightened by the use of probable or similar terms in the conceptual frameworks of the members of the working group. For all but one of the working group members (AASB, AcSB, ASB, and IASC), probable or similar terms are embodied in the recognition criteria (which appear in Table 4 of Appendix A). For the other member (FASB), probable\(^3\) is embodied in the definitions of assets and liabilities (which appear in Table 1 and Table 2 of Appendix A). Because probable clearly plays a key role in the recognition of elements of financial statements and, by inference, may also play a key role in measurement, that term is a central component of the future events question. However, despite its centrality, what "probable" means and how probability should be assessed are matters that are open to question and are explored in this study.

**FUTURE EVENTS: NOT A SIMPLE QUESTION**

Although the future events question has thus far been described in this study as though it were a simple question, it is in fact a collection of related questions. Selected issues that the working group has identified as variants of the future events question are discussed in the following sections of the study. In some instances, the questions primarily involve recognition, and in other instances measurement.

**ISSUES INVOLVING RECOGNITION**

To demonstrate how future events might be seen as playing a role in recognition, the working group has identified the following as illustrations of issues involving future events: (1) the relationship between costs and future benefits, (2) the relationship between obligations and future sacrifices, (3) the role of management intent, and (4) perceptions of the past event and probable future benefit or sacrifice.

\(^3\)Even though the FASB did not intend probable to be used in a specific, technical sense, but rather to simply acknowledge that few outcomes are certain, the term nonetheless has been commonly interpreted to mean the same as it does in the recognition criteria of the other members of the working group. Moreover, the FASB has itself adopted recognition criteria in some standards that specifically embody the notion of probable.
The Relationship between Costs and Future Benefits

Assets are commonly thought of in terms of incurred costs. Under the definitions, however, a past event such as the incurrence of cost is only one of the requirements for recognition of an asset; there also is the requirement of control over or other access to future benefits. In this context, the future events question may be stated as follows:

In what circumstances, if any, should the incurrence of costs be assumed to result in future benefits?

The emphasis commonly placed on costs reflects the fact that asset measurements generally are sacrifice based rather than benefit based. One reason is that benefits usually are harder to measure than sacrifices in the typical purchase transaction. Another is that sacrifices serve as a basis for performance measures. However, the emphasis on costs extends beyond measurement into recognition, since items that cannot be satisfactorily measured cannot be recognized. Because costs are commonly taken for granted as providing reliable measures, the incurrence of cost therefore is commonly associated with recognition.

An example of the circumstances in which costs are sometimes unreasonably assumed to result in future benefits is when cash is expended for various fees and services in the course of issuing bonds. In that case, those costs are sometimes capitalized as an asset, commonly labeled “bond issue costs” or “debt issue costs.” However, those expenditures do not result in assets because they provide no future economic benefits. Instead, they are either a reduction in the net proceeds from the borrowing or an expense.

Working Group View

The consensus of the working group is that, though assets are generally measured in terms of cost, they represent control over or other access to future benefits. Accordingly, the incurrence of cost is neither a necessary nor a sufficient condition for recognition.

The Relationship between Obligations and Future Sacrifices

Liabilities are commonly thought of in terms of future sacrifices. Under the definitions, however, the future event of sacrificing economic benefits is only one of the re-

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⁴In a purchase transaction, the entity becomes less liquid, acquiring an asset that is not as liquid as what the entity sacrifices (such as cash) or incurs (such as a short-term payable) to acquire the asset. Because more-liquid items typically are more easily measured than less-liquid ones, the measure of the item sacrificed usually is imputed as the measure of the item acquired.
quirements for recognition of a liability; there also is the requirement for the past event of an existing obligation to incur those sacrifices. In this context, the future events question may be stated as follows:

In what circumstances, if any, should exposure to risk be assumed to result in future sacrifices?

Sometimes a prospect of future sacrifices (in the form of an exposure to possible loss) may arise from explicit actions, such as when an insurance company writes a policy for a customer covering a specific exposure. At other times, a prospect of future sacrifices may result from inaction (albeit perhaps by conscious inaction), such as when an entity elects to be “self-insured” (rather than to obtain protection in the form of insurance from a risk to which it is exposed).

In both these instances, losses may occur in the future as a consequence of the risks to which an entity is exposed. Indeed, those future losses may even be highly likely or virtually certain to occur, and recognition of anticipated losses resulting from them therefore is sometimes accelerated. That accelerated recognition results from application of the convention of conservatism (prudence). Conservatism’s dictum “to anticipate no profits but provide for all losses” has led to the recognition of anticipated future events, such as the practice of “provisioning” or “providing for” expected losses.5

However, recording events in periods other than those in which they actually occur causes the resulting financial statements to lack reliability. In particular, the statements lack representational faithfulness because they misrepresent not only the activities of the period but also the assets and liabilities at the end of the period. Moreover, because events with negative consequences may be no more likely to occur than ones with positive consequences, recording one but not the other introduces a bias into financial statements.

Working Group View

The consensus of the working group is that, although liabilities are generally measured in terms of future sacrifices, they represent an existing obligation to incur those sacrifices. Accordingly, the prospect of future sacrifices, though necessary, is not a sufficient condition for recognition.6

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5Examples of provisioning are in Appendix B. Those examples include Self-Insurance Losses and Forecasted Losses, the latter of which has three parts (Losses from Operations Being Continued, Losses from Operations Being Terminated, and Losses from Operations Being Acquired). A related example that involves assets is Plant Maintenance Costs.

6A related issue is whether the criteria for recognizing losses involving increases in liabilities should be different from those involving decreases in or remeasurement of assets. The working group’s general view is that the recognition criteria for both types of losses should be the same.
The implications of this view are particularly relevant in assessing whether provisions should be made for future expenditures. The mere fact that a future loss is probable does not justify recognition of a liability. However, the group agrees that losses may be recognized in circumstances in which the entity is irrevocably committed to incur losses in the future, such as might be the case in terminating particular operations (either by discontinuance or by sale). An example might be an entity that has entered into a contract for the sale of particular operations but is required under the contract to continue them and to incur whatever operating losses that may eventuate until the sale is closed. In that case, the requirement to incur those losses might be viewed as impairment of an asset. Alternatively, the entity might be bound by law or union contract to provide notice of a termination decision several months in advance of the actual shutdown, in which case the requirement to incur operating losses in the interim might be viewed as an increase in liabilities stemming from the obligation imposed by law or union contract.

The Role of Management Intent

The foregoing discussion also raises the issue of management intent. For instance, if management simply were to decide to discontinue particular operations, should that change in its intentions affect how those operations are to be accounted for? In this context, the future events question may be stated as follows:

*In what circumstances, if any, should accounting decisions depend on assumptions about the future that are based on management’s stated intentions?*

Management intent is a present assertion about management’s plans for future courses of action. To the extent that those intentions about future courses of action are consistent with present courses of action, management intent may be thought of as a reasonable basis for accounting treatments. However, management intent can and sometimes does change, raising the question of whether accounting should change whenever stated intentions change. Because intentions are inherently unknowable by others, and because the actual course taken cannot be known until it ultimately unfolds, management intent is a particularly difficult notion to use as a basis for accounting.7

Working Group View

The consensus of the working group is that, taken alone, management intent should not be a basis for accounting decisions. Intentions do not increase or decrease an entity’s

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7Indeed, Richard Breeden, the past chairman of the U.S. Securities and Exchange Commission, has referred to accounting based on intent as “psychoanalytic accounting.”
assets or liabilities, but rather events do. However, once intention is translated into acts that consent the entity to particular courses of action, recognition is appropriate because an obligation has been incurred.

**Perceptions of the Past Event and Probable Future Benefit or Sacrifice**

All members of the working group require two criteria to be satisfied before they would recognize an asset:

1. The occurrence of a transaction or other event giving control over, or some access to, future benefits
2. Some degree of probability that the benefits will be realized.

Similarly, two criteria are required for the recognition of a liability:

1. The occurrence of a transaction or other event creating an obligation to sacrifice benefits in the future
2. Some degree of probability that the benefits will be sacrificed.

In applying these criteria to specific recognition problems, the first question that arises is whether the necessary past event has occurred. The working group found it helpful to address this question by considering whether one event or two events were necessary to meet the first criterion in each case and, thus, open up the possibility of recognition.8

**Alternative Ways of Perceiving the “Past Event”**

One example is an employer’s offering of incentives to encourage employees to retire earlier than they otherwise would.9 In that case, the first event is making the offer, and the second is employees’ accepting the offer. The issue is when the employer should recognize a liability.

Some accountants believe that the second event should be the basis for recognition (the “two-event view”), holding that a liability should not be recognized until the employees actually accept the offer. Those accountants believe that the employer has no obligation to pay the incentives until the offer is accepted by the employees; thus, no matter how probable acceptance—and the consequent payment of benefits—may be, no

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8That simple characterization is used here for purposes of exposition because it helps make the discussion of alternatives not only easier to explain but also easier to comprehend and digest. Most issues, of course, are more complex and involve multiple events, many of which could be the basis for recognition. Nonetheless, the underlying concepts should generally apply to both simple and complex issues involving ultimate outcomes that are the joint product of two or more events.

9This example appears in Appendix B as Early Retirement Incentives.
liability can be recognized until the event of acceptance, because no obligation has been incurred. For those accountants, the probability of benefits ultimately being sacrificed is not a crucial consideration because payment is all but certain to occur once employees accept the offer.

Other accountants believe that the first event should open up the possibility of recognition (the “one-event view”). They hold that an obligation has arisen when the offer is made and that a liability should be recognized provided there also is sufficient probability that benefits will be sacrificed.

Another example involves income tax carryforwards that arise in some jurisdictions wherein losses for tax purposes may be carried forward to future periods and used to offset future taxable income. In that case, the first event is incurring a loss for tax purposes and the second is earning taxable income against which the tax carryforward can be applied. The issue is when the taxpayer should recognize an asset.

Some accountants believe that the second event should be the basis for recognition, holding that an asset should not be recognized until taxable income is actually earned. They believe that the event giving rise to future benefits is not the mere incurrence of a tax loss but rather the subsequent earning of taxable income; thus, no matter how probable the earning of future taxable income—and the consequent realization of the carryforward—may be, no asset can be recognized until income is earned because no event has taken place giving control over, or access to, future benefits. For those accountants, the probability of benefits ultimately being realized is not a crucial consideration because the reduction in income taxes is all but certain once taxable income has been earned.

Other accountants believe that the first event should open up the possibility of recognition. They hold that the earning of subsequent taxable income relates to the realization of the future benefits embodied in the tax loss carryforward rather than the initial creation of the asset. Accordingly, they believe that an asset should be recognized at the time the tax loss arises, provided that there is sufficient probability that the future benefits will be realized.11

As those examples illustrate, proponents of both the one-event and two-event views may use the same definitions of assets and liabilities, yet reach different conclusions. That is because they perceive different past events as being the requisite basis for creating an asset or incurring a liability.

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10This example appears in Appendix B as Income Tax Assets Resulting from Carryforward.

11It should be noted that some accountants might decide whether to adopt the one-event or two-event view on the basis of whether the entity was required to take action following the first event. In the example of the tax loss carryforward, if the entity is required to take action to earn taxable income after the first event, they would adopt the two-event view. However, if the entity was not required to take action (such as simply collecting royalties), they would adopt the one-event view.
Alternative Ways of Interpreting “Probable”

Similarly, some proponents of the one-event view may use the same criteria for recognition (that is, require a sufficient degree of probability as a threshold for recognition), yet reach different conclusions. That is because they have different perceptions about what “probable” means and how probability should be assessed. Moreover, other proponents of the one-event view may reach similar conclusions, but for different reasons. That is because they have different perceptions about how they view the benefit embodied by the asset or the sacrifice embodied by the liability, which in turn involves different perceptions about the assets and liabilities themselves.

“Probable” means different things to different people. Studies of auditors in the United States and Canada have found that they ascribe a probability of 80 or 90 percent to probable, thereby implying a meaning of “highly likely” or even “virtually certain.” In the context of the example of the tax loss carryforward, that interpretation might be consistent with the view that the event of earning taxable income must occur for ultimate realization of the benefit to be virtually certain. Likewise, in the context of the example of the offer of early retirement, that interpretation might be consistent with the view that the event of accepting the offer must occur for the ultimate sacrifice of benefits to be virtually certain. Thus, proponents of the one-event view who interpret probable to mean “virtually certain” or “highly likely” might recognize assets and liabilities at much the same time as proponents of the two-event view.

By contrast, proponents of the one-event view who interpret probable in terms of lower probabilities might typically recognize assets and liabilities earlier than those who hold the two-event view. For example, they might take probable to mean “more likely than not,” which is a probability of anything over 50 percent; that is what probable means to accountants in Australia and also what it means in statistics. Thus, if at the time the tax loss was incurred they thought earning future taxable income was more likely than not, they would recognize the tax loss carryforward as an asset then. Similarly, if at the time the offer of early retirement incentives was made they thought acceptance was more likely than not, they would recognize the offer as a liability then.

However, some proponents of the one-event view would support recognition even if the probability of ultimately realizing benefits or ultimately making sacrifices was clearly less than 50 percent. Thus, they might support recognition when occurrence of those events was only “reasonably possible”—or in some cases only “remote.” That suggests that the probable benefit they perceive in the tax loss carryforward is something other than ultimately reducing taxes. Likewise, it suggests that the probable sacrifice they perceive in the offer of early retirement incentives is something other than ultimately paying employees.
Alternative Ways of Assessing Probability

As the preceding discussion indicates, different people assess probability in different ways. One way of assessing probability may be described as a "modal probability" approach, another as a "cumulative probability" approach, and yet another as a "weighted probability" approach. The following discussion of those approaches focuses on assets for ease of exposition, but applies equally to liabilities.

A "Modal Probability" Approach

The modal probability approach\(^\text{12}\) focuses on the outcome that is the more (or most) likely one. It may be illustrated by means of a lottery ticket that is 1 of 10,000 that have been issued, each of which has an equal chance of winning the sole prize of $1,000,000.\(^\text{13}\) Since the only possible outcomes of the drawing are either winning $1,000,000 (1 chance in 10,000, or a probability of .0001) or not winning\(^\text{14}\) (9,999 chances in 10,000, or a probability of .9999), not winning is the modal outcome. On that basis, the ticket would not be recognized as an asset because ultimate realization of benefits is not probable.

Thus, under the modal probability approach, "high-risk assets" are ignored. The treatment of research and development could be an example: the costs of research and development projects generally are not capitalized as assets because the majority of those projects will not ultimately prove to be successful and because it is not known which ones will be successful. However, accounting standards do not always take that approach: under the "successful efforts" method of accounting, the costs of gas and oil wells are capitalized as assets until evidence to the contrary appears, even though the probability of success of any given well is relatively low.

A "Cumulative Probability" Approach

An alternative to the modal probability approach is what might be termed the cumulative probability approach. That approach may be illustrated by means of a second lottery ticket for a different lottery. This lottery, like the one in the earlier example, has

\(^{12}\)The modal probability approach is analogous to the modal value concept in statistics, which is a measure that reflects the outcome that is more likely to occur than any other.

\(^{13}\)This example appears in Appendix B as Lottery Ticket (part a).

\(^{14}\)"Not winning" is used as it is a more precise descriptor than "losing" because the holder of a ticket that does not win suffers no loss other than the failure of a sunk cost to provide a return.
10,000 tickets and total prize money of $1,000,000, but with a different schedule of prizes as follows:

<table>
<thead>
<tr>
<th>Number of Prizes</th>
<th>$ Amount of Prizes</th>
<th>Probability of Winning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>@ $100,000</td>
<td>(.0001)</td>
</tr>
<tr>
<td>10</td>
<td>@ 10,000</td>
<td>(.0010)</td>
</tr>
<tr>
<td>100</td>
<td>@ 1,000</td>
<td>(.0100)</td>
</tr>
<tr>
<td>1,000</td>
<td>@ 300</td>
<td>(.1000)</td>
</tr>
<tr>
<td>4,000</td>
<td>@ 100</td>
<td>(.4000)</td>
</tr>
<tr>
<td>5,111</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus, holders of more than half of the tickets will receive a prize of some kind, while the holders of the other 4,889 tickets will receive no prize of any kind. Because the most likely single outcome is that of receiving no prize (.4889 probability), this ticket would not be recognized as an asset under the modal probability approach already described.

However, a ticket in this lottery is more likely than not to receive some prize because the sum of the probabilities (the “cumulative probability”) of receiving some prize is greater than 50 percent (more precisely,.0001 + .0010 + .0100 + .1000 + .4000 = .5111). Therefore, a ticket in this lottery would be recognized as an asset under the cumulative probability approach because ultimate realization of benefits is probable.

In contrast, a ticket in the previous lottery had a cumulative probability of receiving a prize of less than 50 percent. Accordingly, that ticket would probably not ultimately realize any benefits and would not be recognized as an asset under the cumulative probability approach.

A “Weighted Probability” Approach

A still different approach to probability is what might be called a weighted probability approach. In contrast to the modal probability and cumulative probability approaches, which focus only on the probability of ultimate realization of benefits, the weighted probability approach also takes into account the magnitude of each possible outcome. It is a composite that combines the probability and magnitude of the outcome by multiplying one by the other for each outcome and summing the products.\(^{16}\)

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\(^{15}\)This example appears in Appendix B as Lottery Ticket (part b). Another example that relates to the lottery ticket examples is Exploratory Well.

\(^{16}\)The weighted probability approach is analogous to the expected value concept in statistics, which is a measure that considers the magnitudes of all possible outcomes and weighs each by their probability of occurring.
How the weighted probability approach works may be illustrated by means of the two lottery tickets already described. The weighted probability of the first lottery ticket is calculated by multiplying the probability of each outcome by the amount of the outcome, thereby yielding a weighted probability of $100 [(0.0001 \times 1,000,000) + (0.9999 \times 0) = 100]. The weighted probability of the second lottery ticket also would be $100 [(0.0001 \times 100,000) + (0.0010 \times 10,000) + (0.0100 \times 1,000) + (0.1000 \times 300) + (0.4000 \times 100) + (0.4889 \times 0) = 100]. Because the weighted probability is positive in each case, this approach would result in recognizing both lottery tickets as assets.\(^\text{17}\)

Alternative Ways of Perceiving the Asset

As illustrated above, the three probability approaches lead to different conclusions in evaluating the two lottery tickets. The modal probability approach would recognize neither ticket as an asset, the cumulative probability approach would recognize the second but not the first, and the weighted probability approach would recognize both.

Despite those differences, the modal and cumulative probability approaches are related to each other, with the cumulative probability approach essentially being an extension or refinement of the modal probability approach. In contrast, the weighted probability approach differs fundamentally from both of the others, relying not solely on probabilities but also taking into account the magnitude of each possible outcome.

That fundamental difference in the approaches reflects a fundamental difference in how the benefit—hence the asset itself—is viewed.\(^\text{19}\) Under the modal probability and cumulative probability approaches, the benefit embodied by the lottery ticket is seen as \textit{the prize}. As a consequence, the asset is viewed as the \textit{right to the prize}; that is, as a \textit{receivable} in the form of a claim to the prize. Thus, if realizing the benefit (collecting the prize) is not probable, the asset—the receivable—should not be recognized.\(^\text{20}\)

In contrast, under the weighted probability approach, the benefit embodied by the lottery ticket is seen as the \textit{chance to win the prize by participating in the drawing}. As a consequence, the asset is viewed as the \textit{right to participate in the drawing} (akin to an

\(^\text{17}\)Some cases may encompass outcomes that are negative as well as positive; in those cases, the weighted probability may be negative rather than positive.

\(^\text{18}\)It should be noted that \textit{fair values} often reflect weighted probabilities because fair values capture the various future events for realizing future economic benefits and weigh those outcomes in terms of both their probabilities and amounts. However, fair values may not necessarily yield the same results as the weighted probability approach because fair values also reflect the liquidity preferences of market participants and risk premiums that they may demand.

\(^\text{19}\)Other issues involving differing perceptions of assets are discussed in Appendix C.

\(^\text{20}\)In the context of the example of the tax loss carryforward, the benefit embodied by the carryforward would be \textit{reducing future income taxes} and the asset would be a "\textit{receivable}" for \textit{reducing future income taxes}. In the context of the example of early retirement incentives, the sacrifice embodied by the offer would be \textit{paying the incentives to employees} and the liability would be the \textit{obligation to pay those incentives}.\)
option held), which carries with it the contingent right to collect a prize should the ticket be drawn. That is, the asset is akin to an option held wherein the ticketholder may be able to compel the counterparty (the sponsor of the lottery) to provide economic benefits in the future, but the counterparty cannot compel the ticketholder to sacrifice economic benefits in the future. For those who view the benefit and asset in that way, being "probable" is not a crucial consideration.

Working Group View

The working group finds those issues to be among the most difficult of the future events questions. That may be because those issues lie at the very heart of the future events question, raising challenges about how to interpret not only the past event as called for in the definitions of assets and liabilities, but also the probability of future benefits and sacrifices as called for in the recognition criteria.

In the context of the lottery tickets, the working group agrees that the lottery tickets meet the definitions of assets because all three essential components are present: (1) future economic benefit, (2) control, and (3) past event. Beyond that basic agreement, however, the views of members of the working group tend to diverge about recognition.

If active secondary markets exist in which similar tickets are bought and sold, the working group generally agrees that the lottery tickets should be recognized, but the members have different reasons for that conclusion. The presence of the market is crucial to some members of the group because it provides clear evidence that a ticketholder can readily realize economic benefits from a ticket by selling it. In addition, the active nature of the secondary market makes ticket prices readily available, thereby enabling the ticket to be measured satisfactorily using those prices. However, if the secondary market is not active, some question whether the tickets can be measured satisfactorily, thereby rendering recognition impossible.

If secondary markets do not exist, additional concerns arise. In that case, many members of the working group would not recognize the first lottery ticket (the one with the single grand prize of $1,000,000) on the basis that collecting $1,000,000 is not probable. Others, however, would recognize the ticket, citing the weighted probability approach as the basis for assessing probability (that is, the asset is akin to an option held), and would measure the ticket using its expected value.

In contrast, members generally agree that the second ticket (the one with multiple prizes) meets the recognition criteria. Some believe it meets the criteria because collecting some prize is probable, citing the cumulative probability approach; however, there are ques-

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21In the context of the example of the tax loss carryforward, the benefit embodied by the carryforward would be the chance or privilege to reduce future income taxes and the asset would be the right to that privilege (akin to an option held). In the context of the example of the early retirement incentives, the sacrifice embodied by the offer would be standing behind its offers and the liability would be the obligation to stand behind its offers (akin to an option written).
tions about whether it can be measured satisfactorily, especially with the array of possible prize amounts. Others believe it meets the criteria, citing the weighted probability approach, and believe that satisfactory measures can be based on the ticket’s expected value.

ISSUES INVOLVING MEASUREMENT

In addition to the illustrations of instances in which future events may play a role in recognition, the working group also has identified several illustrations of how future events may play a role in measurement. They are: (1) the role of future events that are probable, (2) the role of future economic conditions, and (3) the role of future legal requirements.

The Role of Future Events That Are Probable

Future events that are probable of occurrence may affect the measurement of assets and liabilities. While some of those future events may be within management’s control, others may be beyond it. In this context, the future events question may be stated as:

*In what circumstances, if any, should the presumed outcomes of specific future events that are probable to occur affect the measurement of assets and liabilities?*

That issue can be illustrated by means of longevity bonuses, wherein the amounts of the bonuses to be paid to employees upon their retirement or termination depend on their length of service and highest salary up to that date. Forecasts of the amounts to be ultimately paid may be based on past experience, although the accuracy of those forecasts may depend on the number of employees involved, with forecasts involving large numbers of employees generally being more accurate than those with small numbers of them.

The issue is whether the effects of particular future events should be considered in the measurement of assets and liabilities. In the case of the longevity bonuses, the issue is whether the events of future years of service and future salary increases should be considered in the measurement of the liability for those bonuses. Those events are likely to occur and their monetary consequences for the bonus liability may be capable of being forecast with a relatively high degree of accuracy.

Working Group View

If existence and recognition of an asset or liability are not open to question (as they are not in the case of the liability for longevity bonuses), the majority view of the working group is that future events that will affect the ultimate amount of an asset or liability

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22: This example appears in Appendix B as Longevity Bonuses. Another example is Future Site Restoration.
and are probable to occur should be considered in the measurement in the current reporting period. However, it should also be noted that a significant minority of the working group would not consider the effects of those future events in the measurement of the asset or liability because those events have not occurred and should not affect the measurement until they do occur.

The Role of Future Economic Conditions

Assumptions about future economic conditions often relate to assets that have been deemed to be impaired. Impairment refers to an entity’s inability to recover an asset’s carrying amount. Because recovery relates to the future, determining recoverability depends at least in part on assumptions about future economic conditions that will affect the amount and timing of recovery. Accordingly, the future events question in this context is:

_In what circumstances, if any, should future economic conditions that might affect the recoverability of assets be presumed to differ from current conditions?_

The issue generally concerns whether future economic conditions may be presumed to improve relative to current conditions. For example, an idle drilling rig may not be likely to return to service drilling oil wells until the price of crude oil climbs to $30 per barrel.\(^2\) If the price has hovered around $19 for some time, should the recoverability of the drilling rig’s costs be based on current crude oil prices or on expectations that higher prices will return in the foreseeable future?

That issue is not a new one. Indeed, the authoritative literature in various countries sometimes distinguishes between price declines that are described as “temporary” and those that are not, and prescribes different accounting treatments based on that distinction. However, requirements to determine which changes are temporary ones that will be reversed and which are not place a heavy burden on accountants.

Working Group View

The working group’s consensus is that, absent compelling evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions. Distinguishing between circumstances and conditions that may be temporary and those that may not seems to be beyond the scope of accounting and the qualifications of accountants.

\(^2\)This example appears in Appendix B as Idle Drilling Rig. Another example is “See-through” Office Building.
The Role of Future Legal Requirements

Closely related to assumptions about future economic conditions are assumptions about future legal requirements, which may govern the measurement of both assets and liabilities. Accordingly, the future events question in this context is:

In what circumstances, if any, should future legal requirements that might affect the accounting for assets and liabilities be presumed to differ from current requirements?

For example, if income tax rates are expected to change, should the expected rates as opposed to the current rates be used to measure an entity’s deferred tax assets or deferred tax liabilities?

Working Group View

The working group’s consensus is that, regardless of likelihood, only changes in future legal requirements that have already been enacted—or substantially enacted—into law should be assumed in accounting for assets and liabilities. The degree of uncertainty associated with requirements that have not yet been enacted is typically too great to serve as a basis for accounting.

CONCLUDING COMMENTS

This study discusses issues that embody different assumptions about the occurrence and outcomes of future events or relationships having future events implications. The specific situations it discusses represent a cross section of areas that the working group has identified in which questions arise involving future events. By articulating those questions and attempting to agree on what the answers to those questions should be, members of the working group hope to further the cause of international harmonization of accounting standards.

The approach taken in this study focuses on developing a common conceptual basis that individual standard-setting bodies can then use as a basis for establishing their own accounting standards. That approach should help lead to harmonization on a prospective basis and complement ongoing efforts for harmonization on a retrospective basis.

24 Also related to both are assumptions about future technologies, a subject that is not directly addressed in this study but for which the discussions of future economic conditions and future legal requirements may be pertinent.

25 This example appears in Appendix B as Future Tax Rate Changes.
Appendix A

A COMPARATIVE ANALYSIS OF KEY TERMS AND CONCEPTS

This appendix contains five tables that compare key terms and concepts that have been or are in the process of being formally adopted by the five standard-setting bodies represented in the working group. Those tables are as follows:

Table 1 Assets
Table 2 Liabilities
Table 3 Recognition
Table 4 Recognition Criteria
Table 5 Measurement.

For ease of reference, each table appears on a separate page. Definitions are in italics.


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<table>
<thead>
<tr>
<th>Country</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>&quot;Assets&quot; are service potential or future economic benefits controlled by the entity as a result of past transactions or other past events. Assets have three essential characteristics: (1) there must be service potential or future economic benefits, (2) the entity must have control over the service potential or future economic benefits such that the entity is able to enjoy the benefits and deny or regulate the access of others to the benefits, and (3) the transaction or other event giving rise to the entity’s control over the service potential or future economic benefits must have occurred.</td>
</tr>
<tr>
<td>Canada</td>
<td>Assets are economic resources controlled by an entity as a result of past transactions or events from which future economic benefits may be obtained. It is not essential for control of access to the benefit to be legally enforceable for a resource to be an asset, provided the entity can control its use by other means.</td>
</tr>
<tr>
<td>IASC</td>
<td>An asset is a resource controlled by the enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. Physical form and the right of ownership are not essential to the existence of an asset. There is a close association between incurring expenditures and generating assets but the two do not necessarily coincide.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Assets are rights or other access to future economic benefits controlled by an entity as a result of past transactions or events.</td>
</tr>
<tr>
<td>United States</td>
<td>Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. Legal enforceability of a claim to the benefit is not a prerequisite for the benefit to qualify as an asset if the entity has the ability to obtain and control the benefit in other ways. Other features that are not essential characteristics of assets include: being acquired at cost, being tangible, or being exchangeable.</td>
</tr>
<tr>
<td>Country</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Australia</td>
<td>&quot;Liabilities&quot; are the future sacrifices of service potential or future economic benefits that the entity is presently obliged to make to other entities as a result of past transactions or other past events. Essential features of liabilities include: a present obligation exists and it has adverse financial consequences for the entity in that the entity is obliged to sacrifice service potential or future economic benefits to one or more entities.</td>
</tr>
<tr>
<td>Canada</td>
<td>Liabilities are obligations of an entity arising from past transactions or events, the settlement of which may result in the transfer or use of assets, provision of services or other yielding of economic... benefits, at a specified or determinable date, on occurrence of a specific event, or on demand. The duties or responsibilities obligate the entity leaving it little or no discretion to avoid it. Liabilities do not have to be legally enforceable and they can be based on equitable or constructive obligations.</td>
</tr>
<tr>
<td>IASC</td>
<td>A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits. An essential characteristic of a liability is that the enterprise has a present obligation. The decision by the management of an enterprise to acquire assets in the future does not, of itself, give rise to a present obligation. An obligation normally arises only when the asset is delivered or the enterprise enters into an irrevocable agreement to acquire the asset.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Liabilities are an entity's obligations to transfer economic benefits as a result of past transactions or events.</td>
</tr>
<tr>
<td>United States</td>
<td>Liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events. The entity has little or no discretion to avoid the future sacrifice. Common features of liabilities that are not essential characteristics include requirement to pay cash, knowledge of the identity to the recipient, and legal enforceability (some liabilities rest on equitable or constructive obligations).</td>
</tr>
<tr>
<td>Country</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>Australia</td>
<td>“Recognised” means reported on, or incorporated in amounts reported on, the face of the financial statements of the entity (whether or not further disclosure of the item is made in notes thereto). Reporting of information about assets, liabilities, equity, revenues, and expenses in financial reports may be by way of recognition and/or by disclosure in notes in the financial report. Inclusion of an element only in notes in the financial report does not constitute recognition.</td>
</tr>
<tr>
<td>Canada</td>
<td>Recognition is the process of including an item in the financial statements of an entity. Recognition consists of the addition of the amount involved into statement totals together with a narrative description of the item. It does not mean disclosure in the notes to the financial statements. Recognition must be done with professional judgment in considering the specific circumstances.</td>
</tr>
<tr>
<td>IASC</td>
<td>Recognition is the process of incorporating in the balance sheet or income statement an item that meets the definition of an element and satisfies the criteria for recognition. The elements directly related to the measurement of financial position in the balance sheet are assets, liabilities, and equity; and for the income statement, income, and expenses.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Recognition is the process of incorporating an item into the primary financial statements. It involves depiction of the item in words and by a monetary amount and the inclusion of that amount in the statement totals.</td>
</tr>
<tr>
<td>United States</td>
<td>Recognition is the process of formally recording or incorporating an item into the financial statements of an entity as an asset, liability, revenue, expense, or the like. Recognition includes depiction of an item in both words and numbers, with the amount included in the totals of the financial statements. Recognition comprehends both initial recognition of an item and recognition of subsequent changes in or removal of a previously recognized item.</td>
</tr>
</tbody>
</table>
Table 4
Recognition Criteria

<table>
<thead>
<tr>
<th>Country</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Assets shall be recognised in the statement of financial position when and only when (a) it is probable that the service potential or future economic benefits embodied in the asset will eventuate and (b) the asset possesses a cost or other value that can be measured reliably. A liability should be recognised when and only when (a) it is probable that the future sacrifice of service potential or future economic benefit will be required and (b) the amount of the liability can be measured reliably. A revenue shall be recognised in the operating statement, in the determination of the result for the reporting period, when and only when (a) it is probable that the inflow or other saving in outflows of service potential or future economic benefits has occurred and (b) the inflow or other enhancement or saving in outflows of service potential or future economic benefits can be measured reliably. An expense shall be recognised in the operating statement, in the determination of the result for the reporting period, when and only when (a) it is probable that the consumption or loss of service potential or future economic benefits resulting from a reduction in assets and/or increase in liabilities has occurred and (b) the consumption or loss of service potential or future economic benefits can be measured reliably.</td>
</tr>
<tr>
<td>Canada</td>
<td>An item should be recognized if it has an appropriate basis of measurement and a reasonable estimate can be made of the amount involved, and for items involving obtaining or giving up future economic benefits, it is probable that such benefits will be obtained or given up. It may be appropriate to provide information about items that do not meet the recognition criteria in notes to the financial statements.</td>
</tr>
<tr>
<td>IASC</td>
<td>An item that meets the definition of an element should be recognised if:</td>
</tr>
<tr>
<td></td>
<td>• It is probable that any future economic benefit associated with the item will flow to or from the enterprise; and</td>
</tr>
<tr>
<td></td>
<td>• The item has a cost or value that can be measured with reliability.</td>
</tr>
<tr>
<td></td>
<td>In assessing whether an item meets these criteria and therefore qualifies for recognition in the financial statements, regard needs to be given to materiality considerations.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>An item should be recognised in financial statements if:</td>
</tr>
<tr>
<td></td>
<td>• The item meets the definition of an element of financial statements; and</td>
</tr>
<tr>
<td></td>
<td>• There is sufficient evidence that the change in assets or liabilities has occurred (including, where appropriate, evidence that a future inflow or outflow of benefit will occur); and</td>
</tr>
<tr>
<td></td>
<td>• The item can be measured at a monetary amount with sufficient reliability.</td>
</tr>
<tr>
<td>United States</td>
<td>An item should be recognized when all of the following criteria are met:</td>
</tr>
<tr>
<td></td>
<td>• The item meets the definition of an element of financial statements</td>
</tr>
<tr>
<td></td>
<td>• It has a relevant attribute measurable with sufficient reliability</td>
</tr>
<tr>
<td></td>
<td>• The information about it is capable of making a difference in user decisions (relevant)</td>
</tr>
<tr>
<td></td>
<td>• The information is representationally faithful, verifiable, and neutral (that is, reliable).</td>
</tr>
</tbody>
</table>
Table 5
Measurement

Australia  No definition.

Canada  
Measurement is the process of determining the amount at which an item is recognized in the financial statements. Several measurement alternatives exist. Historical cost financial statements are prepared primarily using a basis of measurement whereby transactions and events are recognized at the amount of cash or cash equivalents paid or received or the fair value ascribed to them when they took place. Replacement cost utilizes the amount that would be needed currently to acquire an equivalent asset. Realizable value reports the amount that would be received by selling an asset. Present value uses the discounted amount of future cash flows expected to be received from an asset or required to settle a liability.

IASC  
Measurement is the process of determining the monetary amounts at which the elements of the financial statements are to be recognised and carried in the balance sheet and income statement. This involves the selection of the particular basis of measurement. Measurement alternatives include historical cost where assets are recorded at the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire them at the time of their acquisition. Liabilities are recorded at the amount of proceeds received in the exchange for the obligation, or in some circumstances (income tax), at the amounts expected to be paid to satisfy the liability in the normal course of business. With current cost, assets are carried at the amount of cash or its equivalents that would have to be paid if the same or an equivalent asset was acquired currently. Liabilities are carried at the undiscounted amount of cash or equivalent that would be required to settle the obligation currently. Realizable (settlement) value carries assets at the amount of cash or equivalents that could currently be obtained by selling the asset in an orderly disposal. Liabilities are carried at their settlement values. In present value, assets are carried at the present discounted value of the future net cash inflows that the item is expected to generate in the normal course of business. Liabilities are carried at the present discounted value of the future net cash outflows that are expected to be required to settle the liabilities in the normal course of business.

United Kingdom  No definition.

United States  
Measurement is the process of determining a relevant attribute to quantify an item in monetary units with sufficient reliability. Several measurement alternatives are used. Historical cost reports assets (liabilities) at the amount of cash or its equivalent paid to acquire them (when the obligation was incurred). Current cost recognizes the amount of cash or its equivalent that would have to be paid if the same or an equivalent asset were acquired currently. Current market value utilizes the amount of cash or its equivalent that could be obtained by selling an asset in orderly liquidation. Net realizable value uses the non-discounted amount of cash or its equivalent into (at) which an asset (liability) is expected to be converted (settled) in due course of business less direct costs, if any, necessary to make that conversion. Present (or discounted) value of future cash flows reports the present or discounted value of future cash inflows (outflows) into (at) which an asset (liability) is expected to be converted (settled) in due course of business less present values of cash outflows necessary to obtain those inflows. The monetary unit or measurement scale in financial statements in current practice is nominal units of money, that is, unadjusted for changes in purchasing power of money over time. An ideal measurement scale would be one that is stable over time.
Appendix B

EXAMPLES OF ISSUES INVOLVING FUTURE EVENTS

This appendix contains examples that the working group has identified as illustrating situations involving future events. The examples are in the form of cases. They are intended to be instructive rather than exhaustive and do not represent a comprehensive catalogue of situations involving future events.

The cases are grouped by the issues that they illustrate. Broadly speaking, the cases involve issues of either recognition or measurement.

Recognition

The following cases contain issues involving recognition. The relationship between obligations and future sacrifices is considered in the following cases:

- Self-Insurance Losses
- Forecasted Losses:
  - Part a. Losses from Operations Being Continued
  - Part b. Losses from Operations Being Terminated
  - Part c. Losses from Operations Being Acquired
- Plant Maintenance Costs.

Perceptions of the past event and probable future benefit or sacrifice are considered in the following cases:

- Early Retirement Incentives
- Income Tax Assets Resulting from Carryforward
- Lottery Ticket
  - Part a. The Single Prize Lottery
  - Part b. The Multiple Prize Lottery
- Exploratory Well.

Measurement

The following cases contain issues involving measurement. The role of future events that are probable is considered in the following cases:

- Longevity Bonuses
- Future Site Restoration.
The role of future economic conditions is considered in the following cases:

- Idle Drilling Rig
- “See-through” Office Building.

The role of future legal requirements is considered in the following case:

- Future Tax Rate Changes.

For ease of reference, each case appears on a separate page. Each case is accompanied by discussion notes that raise the issues and possible alternative viewpoints. In most instances, the notes include an indication of the working group’s views on the issues, which appear in italics at the end of the discussion. However, the group was not able to reach views on some of the issues either because of differences among the members or because there was not adequate time to fully discuss the issues and their implications.
SELF-INSURANCE LOSSES

Intrepid, Inc., operates a retail store that has a significant level of customer traffic each day. Rather than bear the expense of carrying liability insurance, Intrepid has elected to “self-insure” against injuries to customers on its premises.

Intrepid’s store has been in operation for three years and during that period has had to pay only one claim to a customer who was injured as the result of slipping on a wet floor and falling. That claim was settled for $30,000.

On the basis of that past experience, Intrepid’s management has proposed charging $10,000 each year as “self-insurance” expense and recognizing a corresponding liability that would grow in amount to $30,000 at the end of 3 years.

**Question:** Should Intrepid recognize an expense and liability for “self-insurance”?

**Discussion:** The issue is whether Intrepid in fact has a liability for “self-insurance.” Even though Intrepid is exposed to risk of future customer injuries as a consequence of high customer traffic and is likely to have to make future sacrifices in the form of payments of customers’ claims for injuries that occur in the store, whether Intrepid is obligated to make those future sacrifices as a result of a past event is open to question.

Some believe that if future losses are highly likely or virtually certain to occur, accelerating recognition of those anticipated losses is appropriate on the basis of conservatism—the requirement to provide for all losses. Thus, because injuries to customers are probable to occur, Intrepid’s exposure to that risk should be recognized as a liability. Of those taking that view, some might be willing to base the estimate of the amount to be recognized on management’s proposal, especially since it reflects Intrepid’s recent experience. However, others would base the estimate on the amount of the annual insurance premium that Intrepid would have to pay if it chose not to self-insure.

Others believe that no matter how likely it is that Intrepid will have to bear some sacrifice in the future, its exposure to risk does not constitute an obligation. They view the potential injuries as a general business risk and argue that those losses do not meet the definition of liabilities because the requisite past event (which they see as the actual injury to a customer) has not occurred; hence, Intrepid is not obligated to anyone until the injury occurs.
Still others would argue that the injury does not constitute the requisite past event. They would interpret the liability—and the past event—more strictly, arguing that Intrepid has no obligation until either a claim is filed or the claim is upheld by a court. In effect, they focus more on legally enforceable obligations than on equitable or constructive ones. However, if Intrepid were required by law to carry insurance for injuries to customers, most would agree that an obligation exists for which a liability should be recognized.

Those who argue against accruing for self-insurance point to the resulting smoothing of expenses over a period of time if an entity provides for anticipated losses. Recording losses in periods other than those in which they actually occur causes the resulting financial statements to lack reliability. Not only are the expenses of a period overstated, but so are the liabilities at the end of the period. At the heart of the arguments against accruing for self-insurance is the fact that it has no real-world grounding—either you are insured or you are not.

Moreover, treating self-insurance as a liability raises an endless number of questions. For example, what if in the second year a $100,000 claim was filed that Intrepid pays? Should it start charging $50,000 to expense each year? Or, what happens in the fourth year if no injuries have occurred and Intrepid now has a $30,000 “self-insurance” liability on its books? Should it charge another $10,000 to expense in the fourth year? Because the notion of self-insurance has no grounding in the real world, these questions have no answers, or at least no “right” answers because one answer is as justifiable as the other.

[The working group’s view is that exposure to risk does not obligate the entity; hence, a liability should not be recognized until an actual injury occurs.]
Recognition Issues: The Relationship between Obligations and Future Sacrifices

FORECASTED LOSSES

Part a. Losses from Operations Being Continued

Aeroways is an airline that operates a single route. Because of a business recession that has reduced passenger loads and led to ruinous price cutting by its competitors, Aeroways forecasts that it will incur operating losses for the next two years. Although management thinks those losses to be virtually inevitable, Aeroways is solvent and management expects it to continue in business for the foreseeable future.

**Question:** Should Aeroways make a provision for its forecasted losses from operations over the next two years?

**Discussion:** The issue is in what circumstances, if any, should probable future losses be assumed to result in liabilities. Because the future operating losses that Aeroways expects to incur (as a consequence of a business recession) are highly likely or virtually certain to occur, some would provide for those losses by accelerating their recognition. They argue that the losses are both probable and foreseeable and that conservatism’s dictum “to anticipate no profits but provide for all losses” requires that those losses be recognized. For those proponents, the requisite past event called for in the definition of liabilities has already occurred—management’s forecast of losses.

Others, however, would oppose recognizing liabilities based solely on a forecast that losses are probable, regardless of whether the forecast was made by outside experts or by management. In their view, probability does not constitute sufficient justification for recognizing a liability; rather, the entity must be obligated to bear that sacrifice. Thus, losses that are probable to occur in the future do not satisfy the definition of liabilities if the event that obligates the entity—the “past event”—has not occurred. Because Aeroways is not obligated to incur losses—even though the probability of its ultimately having to suffer a future sacrifice may be high—Aeroways should not recognize a liability by establishing a provision for those expected future losses.

Moreover, recording events in periods other than those in which they actually occur results in financial statements that lack reliability. In particular, the statements lack representational faithfulness because they not only misrepresent the activities of both the period in which the fictitious liability is recognized and the period in which the losses (if any) actually occur, but also misrepresent the assets and liabilities at the end of the
earlier period. Additionally, because events with negative consequences may be no more likely to occur than those with positive consequences, to invoke conservatism and record one but not the other introduces bias into financial statements. Just as next year’s profits are not recognized, neither should next year’s losses be.

[The working group’s view is that a liability should not be recognized because, even though there is a forecast that future losses are probable, the past event that obligates the entity has not occurred; hence, the entity is not obligated to incur those losses.]

Part b. Losses from Operations Being Terminated

Instead of operating a single route, Aeroways operates a number of routes, each of which has its own operating facilities (principally staff, computers, and premises). One of those routes is incurring operating losses that are forecasted to continue for the next two years. All of the other routes that Aeroways operates are profitable and the company as a whole is profitable.

The management of Aeroways has decided to terminate the money-losing route either by selling it as an operating entity to a third party or by discontinuing it. Discontinuation would result in the sale of certain assets at a gain or loss, severance payments to personnel, legal fees, and operating losses during the run-down or phase-out period (approximately three months).

**Question:** Should Aeroways record a provision for losses from termination?

**Discussion:** In this scenario, Aeroways not only has forecasted operating losses, but also has decided to terminate the money-losing route. Those who would have recorded a provision for losses in part a presumably would record a provision for losses from termination based on management’s decision to terminate. However, would those who would not have recorded a provision for forecasted losses now be willing to record a provision for losses from termination based on management’s decision to terminate?

This question raises the issue of management intent. Some believe that management’s decision to terminate the route is an appropriate basis for accounting. Thus, they would treat the decision by Aeroways to terminate the route as the requisite past event on which
to base the recognition of a liability (in the form of a provision for losses related to the pending termination).\(^1\)

Still others believe that management’s intent is a difficult notion on which to base accounting because what will actually happen cannot be known until it occurs. They would argue that management’s announcement or decision does not create an obligation. In addition, to record a provision based solely on management’s intent opens the door to problems should management’s intent subsequently change. They believe that Aeroways should not record a liability until actual termination occurs because management’s decision to terminate the route does not obligate Aeroways to sacrifice economic benefits. Since the necessary past event has not occurred, a liability does not exist.

However, if management’s decision is—or becomes—irreversible or irrevocable, an obligation may be said to exist. Management’s decision might be irrevocable when it is made if it triggered a “latent” obligation, such as if an entity is irrevocably committed by law or by contract with another entity. In that case, a liability should be recognized before the termination actually happens. For example, if the decision by Aeroways triggered the operation of some law or contractual provision (such as in a union labor contract that specified severance payments to employees being terminated), an obligation would arise that constituted a liability.

In other cases, management’s decision might not be irrevocable when made, but might become irrevocable later, at which point an obligation may be said to exist. For example, management’s decision to terminate the route might lead to negotiations with employees not under contract. Should those negotiations result in an agreement that effectively makes management’s decision irrevocable, a liability should be recognized at that time.

On the other hand, if Aeroways enters into a contract for the sale of the unprofitable route and is required under the contract to continue operations and to incur whatever

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\(^1\)In the United States, APB Opinion No. 30, Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions, provides guidance on accounting for the disposal of a segment of a business (paragraphs 13-18). If the money-losing route were considered a segment of the business, a provision for losses should be recorded at the measurement date (the date at which management commits itself to a formal plan to dispose of the segment) if a loss is expected from the proposed sale or abandonment of the segment. That provision would include, among other items, forecasted operating losses only during the period from the measurement date to the disposal date (which should not be longer than one year).

Similar provisions exist in the United Kingdom. Paragraph 18 of Financial Reporting Standard 3, Reporting Financial Performance, states “If a decision has been made to sell or terminate an operation, any consequential provisions should reflect the extent to which obligations have been incurred that are not expected to be covered by the future profits of the operation or the disposal of its assets. This principle requires that the reporting entity should be demonstrably committed to the sale or termination.”
operating losses that may eventuate until the sale is closed, the requirement to incur those losses would be viewed by some as an impairment of an asset and not as an increase in its liabilities. In that situation, however, Aeroways does not owe anyone anything—only the value of the route is affected.

[The working group’s view is that a liability should not be recognized unless management’s decision either is irrevocable or becomes so, for until then, the entity is not obligated to sacrifice economic benefits.]

Part c. Losses from Operations Being Acquired

Leviathan Airlines purchases Aeroways, which has several profitable routes and one unprofitable route. Leviathan can either continue to operate the unprofitable route or discontinue it.

Question: If Leviathan continues the route, should it make a provision for the operating losses that are forecasted for the next two years in allocating the purchase price of Aeroways to the fair values of its assets and liabilities, thereby increasing the amount allocated to purchased goodwill? Alternatively, if Leviathan discontinues the route, should it record a provision for losses from termination?

Discussion: If Leviathan continues the route, it faces the same issue as Aeroways did in part a—is it appropriate for Leviathan to record a liability for forecasted losses? Some hold that because management has forecasted losses that are both probable and foreseeable, the conservatism principle dictates that a liability should be recorded for the expected losses in allocating the purchase price, treating the acquisition by Leviathan as the requisite past event. Others would argue that because Leviathan is not obligated to incur losses, no liability should be recognized at the time of the purchase no matter how probable those losses are. In their view, the requisite past event is not the acquisition, but occurrence of the actual losses themselves.

If Leviathan decides to discontinue the route, it faces the same issue as Aeroways did in part b—should a liability be recorded based solely on management intent? Some view management intent as an appropriate basis for recording a provision for losses; others believe Leviathan’s decision to terminate the route does not obligate it to anyone, and no provision should be recognized at least until the termination occurs.

[The working group’s view is that if Leviathan continues the route, it should not recognize a liability for the same reasons as in part a, and if it decides to discontinue the route, it should not recognize a liability for the same reasons as in part b.]
PLANT MAINTENANCE COSTS

The Occasional Company owns one building, a factory for manufacturing its products, which it occupied when the building was completed early in the current period. Occasional’s management expects the factory building to have a useful life of 30 years and plans to depreciate it on a straight-line basis at the rate of 3 1/3 percent a year, assuming no net salvage value.

Management also expects that to maintain the building in good working order over the course of its life, the mechanical systems (heating, air conditioning, etc.) will have to be replaced twice and the roof will have to be replaced once. Accordingly, management proposes recognizing maintenance expenses each year for those future replacements, thereby providing a better “matching” of expenses and revenues over the factory’s life. Specifically, management proposes charging to expense, in each of years 1-20, 10 percent of the expected future cost of replacing the mechanical systems and, in each of years 1-15, 6 2/3 percent of the expected future cost of replacing the roof.

Question: Should Occasional recognize those maintenance expenses and a related liability for maintenance?

Discussion: The issue is whether Occasional’s expected future replacements of its mechanical systems and roof constitute a liability. Although Occasional is likely to have to make future sacrifices in the form of replacement costs, whether Occasional is obligated to incur future sacrifices as a result of past events is open to discussion.

Some believe that because the replacements are probable and foreseeable, it is appropriate to recognize those anticipated losses (expenses) as a liability on the basis of conservatism—anticipate no profits but provide for all losses. To them, the requisite past event is of secondary importance. Some would argue that Occasional’s expectation that it ultimately will make the replacements, or even its acquisition of the building, could be viewed as the requisite past event. Others would take a more stringent position arguing that the demise of the roof or breakdown of the mechanical systems is the requisite past event; in their view, actual replacement must be imminent rather than just expected.

However, others do not believe that expectation or even imminence of future replacements constitutes a liability. In their view, Occasional is not obligated to anyone until the requisite past event that gives rise to the obligation (to incur replacement costs) occurs.
Accordingly, they would not recognize the liability or the related expense until Occasional actually enters into a contract to make those replacements. Neither the demise of the roof nor the breakdown of the mechanical systems increases Occasional’s liabilities because at that point in time Occasional does not owe anyone anything. Rather, they would argue that those events indicate that the building has been impaired (a decrease in Occasional’s assets) and that a liability does not exist.

Replacing the mechanical systems or roof, therefore, will increase Occasional’s assets (not its liabilities) and Occasional should depreciate the cost of the new roof or mechanical system in a systematic and rational manner over their respective lives, thereby achieving the “matching” that management was concerned about. However, that matching will be over the useful lives of the mechanical systems and the roof, not over the useful life of the building.

Indeed, Occasional should not have been depreciating its building over its 30-year useful life, but rather should have been depreciating the components of the building over their useful lives. Occasional should depreciate the mechanical systems over 10 years (expecting to replace them twice in 30 years) and the roof over 15 years (expecting to replace it once in 30 years). By doing so, Occasional would have fully depreciated each asset by the time it needed replacement.
EARTLY RETIREMENT INCENTIVES

To trim its operating expenses, Lean and Mean Company decided to reduce its staffing levels by offering early retirement incentives to 4,000 of its employees. The company made the offer shortly before the company’s year-end, and the employees have 30 days to accept it. If they accept it, they will retire and collect a one-time cash payment of one month’s salary for each year they have been employed. By year-end, no employees have accepted the offer, but management expects that about three-fourths will ultimately accept it.

Question (a): Should Lean and Mean recognize a liability for the retirement incentives if the offer cannot be withdrawn?

Discussion: The issue is when the employer should recognize a liability for the offer. Specifically, should the offer be recognized when it is made by the employer (the first of the two events) or only when it is accepted by the employees (the second of the two events)?

Some would argue that acceptance should be the basis for recognition of the liability. In their view, Lean and Mean is not obligated to pay the incentives until the offer is accepted; hence, acceptance is the requisite “past event” for recognizing the liability. They believe that, no matter how probable acceptance— and the consequent sacrifice of benefits— might be, no liability exists to be recognized since there is no obligation. Thus, the probability that payments will ultimately be made is not a crucial consideration.

Others would argue that the making of the offer opens up the possibility of recognizing the offer as a liability. In their view, that event constitutes the requisite “past event” that obligates Lean and Mean, hence a liability exists that might be recognized. Since the offer cannot be withdrawn, Lean and Mean is irrevocably committed to following through and honoring any acceptances by employees. As the nature of the offer gives Lean and Mean little or no discretion to avoid the sacrifice of future benefits, there is a liability. Thus, the question becomes one of assessing if there is sufficient probability that the employer will ultimately have to pay the incentives. In this case, there may be some question as to how many employees will accept the offer, who they will be, and hence how much the employer may ultimately have to pay. However, since the offer was made to 4,000 employees, at least some of them are likely to accept it, thereby causing Lean
and Mean to pay some amount. Thus, because future sacrifices appear to be probable, recognition of a liability is justified.

[The working group’s view is that an irrevocable offer creates a liability because the entity has little or no discretion to avoid the sacrifice of future benefits. In this case, the working group believes that Lean and Mean is effectively “locked in” at year-end, since the offer is irrevocable; hence, it should recognize the offer as a liability. A minority expressed concern that recognizing an offer rather than an acceptance as the triggering event for recognition could lead to difficulties in other areas.]

**Question (b):** Should Lean and Mean recognize a liability for the retirement incentives if the offer can be withdrawn?

**Discussion:** Some would disregard the right to withdraw the offer as little more than a technicality. In their view, Lean and Mean would not have made the offer only to subsequently withdraw it. Moreover, Lean and Mean likely would incur sufficient ill will on the part of its employees from attempting to withdraw the offer to dissuade it from doing so. Accordingly, they would view the cancellation right as meaning little and thus would recognize the offer as a liability.

Others, however, would view the right to withdraw the offer as being substantive. In their view, that right provides Lean and Mean with the discretion to avoid the sacrifice of future economic benefits that is lacking with irrevocable offers. Circumstances and situations do change, and in response to those changes, management might decide that the offer should be withdrawn, even in spite of some short-term employee ill will. Accordingly, a liability should not be recognized for the offer.

[Since the offer is both legally and practically revocable, the entity has the discretion to avoid the sacrifice of future economic benefits; hence, the working group would not recognize the offer as a liability.]

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2In the United States, FASB Statement No. 88, Employers’ Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits, provides guidance on recognizing a liability for early retirement incentives (paragraph 15). A liability and a loss for special termination benefits should be recognized when the employees accept the offer and the amount can be reasonably estimated. Probability does not enter into the determination of when to recognize the liability as it would for contractual obligations. Thus, following Statement 88, Lean and Mean Company should not recognize a liability for early retirement incentives in their year-end financial statements, as no employees have accepted the offer. The existence of a right to withdraw the offer does not have any impact on that accounting.
Recognition Issues: Perceptions of the Past Event and Probable Future Benefit or Sacrifice

INCOME TAX ASSETS RESULTING FROM CARRYFORWARD

The Rustbelt Manufacturing Company has an income tax carryforward that resulted from an operating loss that it incurred during the past year and cannot be carried back to prior periods. The company can use that carryforward to offset its taxable income in future years, thereby saving income taxes that it otherwise would have to pay on its future income equal to the amount of the carryforward.

Question: Should Rustbelt recognize that loss carryforward as an asset?

Discussion: The first question is whether an asset exists. At the crux of that question is whether the event giving rise to the benefit has already occurred, and not all would agree that it has. That difference in opinion may be described in terms of the “one-event view” and the “two-event view.” Some would say that the one-event view deals with probability and the two-event view deals with certainty.

Under the one-event view, incurring the loss for tax purposes—the first event—is regarded as the requisite past event that gave rise to the benefit. In contrast, under the two-event view, earning taxable income against which the carryforward can be offset—the second (or “confirming”) event—is regarded as the requisite past event that gave rise to the benefit. Thus, under the one-event view, only the first of the two events is required, whereas under the two-event view, both events are required. Because in Rustbelt’s case only the first of those two events has occurred, those who hold the one-event view believe that an asset exists, whereas those who hold the two-event view do not. 3

Those who hold the two-event view argue that Rustbelt must control the benefit (future tax savings), which in this case it does not. The tax loss that gives rise to the offset, while necessary to ultimate realization of the tax savings, is not sufficient; earning taxable income in the future is also essential. In their view, this is a conditional asset—conditional on the company’s earning taxable income in the future. Some might also point out that there might be changes in the tax laws that might change Rustbelt’s ability to offset any future taxable income. Thus, for them the issue is closed and they would not have Rustbelt recognize an asset in its year-end financial statements.

3 Some of those who hold the two-event view do so on the basis of conservatism or prudence. That is, they believe that the one-event view requires anticipating future income, which they think is prohibited by the conservatism convention that requires entities to “provide for all losses but anticipate no profits.”
For those who believe that an asset exists, there is another question: whether the asset should be recognized. That raises issues of how the benefit (and the asset) is perceived and the probability that the benefit will be realized.

Some view the benefit as the future tax savings (the “ultimate benefit”) and the asset as a claim to those savings (that is, as a “receivable” to be used to offset taxes payable). For them, the probability that the benefit ultimately will be realized depends on the probability of Rustbelt’s earning future taxable income. Accordingly, the issue turns on the probability threshold that is required. On the one hand, those who require a high threshold would recognize the asset only if Rustbelt’s earning taxable income was highly likely or virtually certain. On the other hand, those who do not require as high a threshold might recognize the asset if Rustbelt’s earning taxable income was more likely than not. The approach they take might be described as an unweighted approach to probability, wherein ultimate realization of the benefit must be probable (however defined), regardless of the magnitude of the benefit.

Others view the benefit and asset differently. They see the benefit as the chance or privilege to reduce taxes that might be levied in the future (a “derived benefit”). They also see the asset as the right to that privilege, a right that Rustbelt controls as a consequence of having incurred the qualifying tax loss. That right might be used in either of two ways. One way would be for Rustbelt to apply the right to its own future taxable income and thereby avoid paying taxes levied on that income. The other way would be for Rustbelt to sell or otherwise transfer the right to another entity so that the other entity could apply the right to its future taxable income (for example, a parent might be able to utilize a subsidiary’s right, or an acquiring company might be able to utilize an acquiree’s right). Thus, Rustbelt itself might not have to earn future taxable income for its right to provide a benefit.

That approach might be described as a weighted probability approach. In contrast to an unweighted approach to probability that focuses only on the probability of ultimate realization of benefits, the weighted probability approach also takes into account the magnitude of each possible outcome. It is therefore a composite that combines the probability and magnitude of the outcome by multiplying one by the other for each outcome and summing the products. The weighted outcome approach is analogous to the expected value concept in statistics, which is a measure that considers the magnitudes of all possible outcomes and weighs each by their probability of occurring. Thus, if Rustbelt’s only alternative were to apply the offset against its own future taxable income, the offset would yield benefit so long as Rustbelt’s chances of earning future taxable income were anything greater than zero. However, if the offset could be sold or otherwise transferred, it could yield benefit regardless of Rustbelt’s chances of earning future taxable income.

[The working group generally agrees that the entity has an asset and that recognition of that asset depends on the expectation of recoverability; however, a minority is of the view that no asset can be recognized until income is earned because until then no event has occurred giving the entity control over, or access to, future economic benefits.]
LOTTERY TICKET

Part a. The Single Prize Lottery

Phil N. Tropic purchased a lottery ticket for $150 from a local charity that is holding its annual fund-raising sweepstakes. The ticket entitles him to participate in a drawing to be held in 30 days in which the 1 winning ticket of the 10,000 tickets that were printed and sold will be awarded the prize of $1,000,000.

Although the charity has reserved the right to cancel the drawing and refund the tickets if an insufficient number of tickets are sold, it never has done so in the many years of running the lottery. The tickets currently are being actively traded in a local secondary market for about $95 apiece.

Question (a): Should Phil N. Tropic recognize the lottery ticket as an asset?

Discussion: The first question is whether an asset exists. At the center of that question is whether the event giving rise to the benefit has already occurred, and not all would agree that it has. The difference in opinion may best be described in terms of the “one-event view” and the “two-event view.”

Under the one-event view, Tropic’s purchase of the ticket is the requisite past event that gave rise to the benefit. In contrast, under the two-event view, in addition to purchasing the ticket, Tropic must also win the drawing for the benefit to exist. Because that event has not yet occurred, those who hold the two-event view do not believe an asset exists.

For those who hold the one-event view and believe an asset exists, there is another question: whether the asset should be recognized. That raises the issues of how the benefit (and the asset) is perceived and of the probability that the benefit will be realized.

How the benefit is perceived depends on how the rights the ticket conveys to Tropic are interpreted. Some view the benefit as the $1 million prize (the “ultimate benefit”) and

Note: This case is adapted from “The Lottery Ticket Case (Part I)” and “The Lottery Ticket Case (Part II)” from The FASB Cases on Recognition and Measurement, edited by L. Todd Johnson (FASB, Norwalk, Conn.: 1991), pp. 25 and 26.
the asset as the claim to ("receivable" for) that prize. For them, the probability of the benefits ultimately being realized depends on the probability of Tropic’s winning the drawing. Accordingly, for them the issue depends on the probability threshold that is required. Those who require a high threshold would not recognize the asset because Tropic’s chances of winning the drawing and ultimately realizing $1 million are not virtually certain or highly likely. Even those with a lower probability threshold of more likely than not would not recognize an asset in this case because Tropic’s chances of winning are only 1 in 10,000. They take an unweighted approach to probability in which ultimate realization of the benefit must be probable (however defined) regardless of the magnitude of the benefit.

However, others interpret the benefit and asset differently. They see the benefit as the chance to win the prize by participating in the drawing (a “derived benefit”). They also see the asset as the right to participate in the drawing (akin to an option held), a right that Tropic controls as a consequence of having purchased the lottery ticket. That right might be realized in either of two ways. One way would be for Tropic to hold onto the ticket and participate in the drawing. The other way would be for Tropic to sell the ticket or otherwise transfer his right to participate in the drawing to another party. Tropic’s ticket obviously has value to other parties, as reflected by the fact that tickets are being actively traded in the local secondary market. Accordingly, Tropic does not have to wait for the drawing to take place to realize a benefit from his ticket but could instead choose to sell the ticket before the drawing. Thus, it might not be essential for Tropic himself to participate in the drawing for his right to provide a benefit.

For those that view the asset as Tropic’s right to participate in the drawing, whether or not Tropic’s ticket is drawn as the winning ticket may be an important issue in measuring the value of the right, and hence in measuring the asset, but not in recognizing the asset. They would argue that even though the odds of his winning are slim, so long as they are anything greater than zero, his right has value—albeit perhaps a small value—and that right constitutes the asset. Their approach to assessing that value might be described as a weighted probability—or expected value—approach. In this case, the ticket has a weighted probability or expected value of $100 [(.9999 \times 0) + (.0001 \times $1 million) = $100].

Still others may argue that whether the ticket should be recognized as an asset depends on what Tropic intends to do with the ticket. He may decide to hold the ticket until the drawing, thereby exercising the right to participate in the drawing, or he may decide to

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4 Another way of viewing the case is from the perspective of the local charity that is holding the lottery. If the charity has sold 10,000 tickets (and collected $1,500,000 in cash), does it have a liability? If so, can the charity have a liability without there being corresponding assets on the part of the ticket holders?
sell that right to someone else prior to the drawing. If Tropic does intend to sell the ticket, there are those that would recognize an asset based on Tropic's stated intent so long as a secondary market exists (which it does) and Tropic's intent is consistent with his present course of action (for example, if he is actively searching for a buyer). Others may argue against basing recognition on intent because Tropic's intent is inherently unverifiable—one does not know what will happen until it actually does—and, even if it were known, his intent is subject to change. The same arguments hold if Tropic stated his intent to keep the ticket.

The working group agrees that an asset exists in Tropic's right to participate in the drawing and should be recognized because it can be sold in the secondary market.

**Question (b):** If there is no secondary market, should Phil N. Tropic recognize the lottery ticket as an asset?

**Discussion:** Those who would base recognition of the ticket largely on the presence of a secondary market would have difficulty treating the ticket as an asset if that secondary market does not exist because that market allows Tropic the alternative of realizing an immediate cash flow of $95. In addition, those who base their recognition of the ticket as an asset on what they perceive as having a reliable measure provided by the secondary market might also have difficulty recognizing the ticket as an asset if that market does not exist.

However, some who would recognize the ticket as an asset if a secondary market exists might still recognize it absent the market. Some might do so because, despite the lack of an active secondary market for the ticket, Tropic still may be able to transfer his rights to someone else. For example, he might transfer either the rights themselves or the winnings (if received) by means of a separate contract (such a contract entered into prior to the drawing might have a fair market value approximating the ticket's expected value of $100). Others might do so because the ticket nonetheless has a positive expected value that reflects the presence of an economic benefit and can be measured with reasonable reliability. They believe that recognizing the ticket at its expected value would provide a logical basis for recognition of an accumulation of tickets up to and beyond 50 percent (or higher probability threshold) of the total number sold. The alternative of suspending recognition until a given probability threshold is reached and then recognizing in full seems to them less reflective of the changing economic exposures inherent in a buildup of tickets.

Most members of the working group would not recognize the ticket as an asset if there is no secondary market; however, a minority would support using an expected value approach as a basis for recognition.
Part b. The Multiple Prize Lottery

Phil N. Tropic purchased a second lottery ticket for $150 from a different charity. The ticket allows him to participate in a drawing that will be held in 30 days, in which the winning tickets will be selected from among the 10,000 tickets that were printed and sold. The schedule of prizes for this lottery is as follows:

1 prize of $100,000
10 prizes of $10,000 each
100 prizes of $1,000 each
1,000 prizes of $300 each
4,000 prizes of $100 each

Thus, a total of $1,000,000 in prizes will be awarded to 5,111 ticketholders.

Question: Should Phil N. Tropic recognize the lottery ticket as an asset?

Discussion: Rather than the 1 in 10,000 chance of winning the 1 prize in part a of this case, Tropic now has a 5,111 in 10,000 chance of winning some prize. Because Tropic now has a greater likelihood of winning than not winning (51 percent), those who may have rejected recognizing the lottery ticket as an asset in part a because the likelihood of not winning was more likely than not presumably would be willing to recognize it in this part of the case. Moreover, Tropic’s intent to hold or sell the ticket assumes lesser importance to those who also regard intent as a significant consideration because, under either scenario (selling or holding the ticket), Tropic will more likely than not receive a cash flow.

However, those who have a high recognition threshold (virtually certain or highly likely) still would not recognize the ticket as an asset because Tropic’s chance of winning the drawing and ultimately realizing a cash prize is only 51 percent. On the other hand, if Tropic intends to sell the ticket (assuming that a secondary market exists), those with a high threshold might recognize the ticket as an asset because it is virtually certain that Tropic will realize a benefit upon the sale, although others might not do so because Tropic’s intent is not verifiable.
EXPLORATORY WELL

The Fillups Company is in the process of drilling a well to explore for oil reserves (an "exploratory well"). To date, Fillups has spent $5 million on the well.

On completion of the drilling, Fillups either will find proved reserves of oil (which could be worth $100 million or more) or declare the well to be a worthless "dry hole." The company's experience has been that only 1 out of 10 exploratory wells ultimately result in finding proved reserves, with the rest being declared dry holes.

Question: Should Fillups recognize its in-process exploratory well as an asset?

Discussion: The first question is whether an asset exists. At the center of that question is whether the event giving rise to the benefit has already occurred, and not all would agree that it has. That difference in opinion may be described in terms of the "one-event view" and the "two-event view."

Under the one-event view, Fillups's acquisition of the lease that allows it to drill for and produce oil is the requisite past event that gave rise to the benefit. In contrast, under the two-event view, in addition to acquiring the lease, Fillups must actually find oil for the benefit to exist. Thus, the requisite past event is the second ("confirming") event—discovering the oil. Because Fillups has not yet found any oil, those who hold the two-event view do not believe an asset exists.

However, for those who believe an asset exists (the one-event view), there is another question: whether the asset should be recognized. That raises the issue of how the benefit (and the asset) is perceived and of the probability that the benefit will be realized.

Some view the benefit as the cash that would be obtained from selling the oil (the "ultimate benefit") and the asset as the oil reserves. For them, the probability of the benefit ultimately being realized depends on the probability of finding oil. Accordingly, the issue depends on the probability threshold that is required. Those who require a high threshold would not recognize the exploratory well as an asset because Fillups's chance of finding oil and realizing the value of any reserves is not virtually certain or highly likely. In fact, even those with a lower probability threshold of more likely than not would not
realize an asset because Fillups’s chance of finding oil is only 1 in 10. Both those groups use the unweighted approach to probability in which ultimate realization of the benefit must be probable regardless of the magnitude of the benefit.

Alternatively, there are those who perceive the future benefit as the opportunity to explore for oil (a “derived benefit”) and view the asset as the right to explore for and keep (and ultimately sell) any oil found. Fillups obtained control of that right when it acquired the lease to drill for and produce oil. Future benefit might also come in the form of Fillups’s selling its rights to another party (also a “derived benefit”) because the exploratory well may have value to another company. That is, companies occasionally buy and sell exploratory wells while they are still in process. In addition, stronger companies may buy exploratory wells from weaker companies for the purpose of drilling deeper than the original owner could afford to do. Thus, Fillups itself would not necessarily have to find oil for its exploratory well to have future economic benefit.

For those who focus on derived rather than ultimate benefits, the requisite past event is acquiring the lease, and an asset should be recognized at the time those rights are acquired. The probability of actually finding oil—so long as it is greater than zero—is not an issue in determining whether an asset exists that should be recognized. However, the probability of Fillups’s ever finding oil reserves may be an important issue in measuring the value of that right. This approach to assessing the value of the asset might be described as a weighted probability approach.

[The working group agreed that the well is an asset because it gives the company rights to benefits. However, there were some differences of opinion about when that asset should be recognized. A minority would recognize it only if there was a derived value (resale), while all others would recognize it if there was a reasonable expectation of a future economic benefit. The incurring of costs seemed to create a presumption of recoverability until proved otherwise.]
LONGEVITY BONUSES

Paternal Products Company has established a program of longevity bonuses for its employees in lieu of a conventional pension plan. The plan provides that upon retirement or termination the employee will be paid a lump-sum bonus equal to 20 percent of the employee’s highest annual salary multiplied by the number of years of service to the company. To illustrate, an employee leaving the company after 5 years of service would be paid a longevity bonus equal to 100 percent of his or her highest salary. Similarly, an employee with 30 years of service would be paid a bonus equal to 600 percent of his or her highest salary.

**Question:** Ignoring discounting considerations, should Paternal base the measure of its liability for longevity bonuses on: (a) the highest salaries to date of its employees and their years of service to date or (b) its forecast of when its employees will terminate their employment and what their highest future salaries will be when they terminate?

**Discussion:** The bonuses that Paternal’s employees earn vest at the end of every year so there is little question that Paternal ultimately will have to pay the bonuses. However, how Paternal measures its liability for longevity bonuses depends on what that liability represents. By definition, liabilities are obligations to make future sacrifices of assets as a result of past events. However, there are differences of opinion about what Paternal’s perceived sacrifice is, and hence, what its perceived liability is.

Some would argue that the past event is the rendering of service by employees, that the future sacrifice is the payment of bonuses for the service rendered to date (a “derived sacrifice”), and that the liability is the “payable” that relates to the bonuses earned to date. Thus, they would measure Paternal’s liability on a “current payment” basis (essentially a settlement notion); that is, based on the highest salaries to date of Paternal’s employees and their years of service to date.

Others view the future sacrifice as the ultimate payment of the bonuses to employees (the “ultimate sacrifice”) as promised in the bonus contract and the liability as the “payable” that relates to all bonuses that will be earned by those employees. They would measure the liability on a “ultimate payment” basis; that is, based on Paternal’s forecast of when its employees will terminate their employment and what their highest future salaries will be when they terminate.

Still others might argue that a liability does not exist until the employees actually terminate or retire. For them, the requisite past event for recognizing a liability is termi-
nation or retirement rather than service because Paternal has no obligation until that time; hence, they would recognize no liability until then. Accordingly, measurement is not an issue for them given the facts of this case.

Those that support measuring Paternal’s obligation based on alternative (a) believe that measurement of the liability should reflect any increase in salaries in the year those increases occur. Accordingly, Paternal’s annual expense would increase each year as services are rendered and salaries rise. Essentially, they would measure the liability at the end of each year on a “current payment” basis and charge the increase in the corresponding liability to expense.

In their view, measurement of the liability should reflect only the sacrifice Paternal is obligated to bear (that related to past service), namely the amount it would have to pay its employees if they terminated today. In addition, some also note that Paternal is not irrevocably committed to future salary increases. Thus, Paternal might change its policy regarding increases it might give to employees in the future, thereby changing the amount of the bonuses that would be calculated following alternative (b).

Alternatively, those that support measuring Paternal’s liability based on alternative (b) believe that measurement of the liability should reflect the ultimate payment that Paternal will have to make. That method of measurement requires that Paternal forecast termination dates and salary at termination at each reporting date and charge to expense a pro rata portion of the total liability thus determined. In their view, measuring the liability based on forecasts of termination dates and future salary levels as in alternative (b) is appropriate because those events are both probable and foreseeable.

Some that support alternative (b) note alternative (a) embodies an unrealistic assumption that all employees would terminate at the balance sheet date. Others defend alternative (b) because they believe the accounting should reflect differences in bonus plans as these differences apply to different employees. For example, if a company hired two employees at the same date, giving one of them a bonus based on today’s salary and the other a bonus based on final salary, calculating the bonus using alternative (a) would result in the same annual accrual for both employees while using alternative (b) would result in different accruals that reflect the difference in the bonus contracts.

[The working group generally supports alternative (b) (measurement based on forecasts of expected ultimate future cash flows payable based on service to date); however, a significant minority of the working group favors alternative (a).]

Although the case ignores discounting considerations, the working group supports discounting the expected future cash payments.
FUTURE SITE RESTORATION

Hard Rock Mining Company owns two strip mines of approximately the same size. Both are subject to environmental statutes that mandate Hard Rock to restore each site on completion of mining operations. Hard Rock forecasts that restoration will cost about $10 million for each mine when it is undertaken. Of those costs, about $4 million relates to the restoration of “overburden” that is removed in preparing for mining operations; the rest is directly proportional to ore mined.

Hard Rock just purchased Mine A for $25 million. Mine A has been operating for 15 years and is expected to continue operating for another 10 years. Mine B is a new mine that Hard Rock has just finished preparing for mining operations (overburden has been removed) and is expected to continue to operate for 25 years.

Question (a): Should Hard Rock recognize any future costs for site restoration in conjunction with its purchase of Mine A, and if so, in what amount (ignoring discounting considerations)?

Discussion: Does Hard Rock have a liability for future restoration costs at the time it purchased Mine A? Some argue that it does not have a liability at the date of purchase because it is not obligated to anyone; that is, it does not have a contract with anyone to perform the restoration. Absent a contract, they believe that Hard Rock does not have a liability at the date of purchase because the obligation—legal or constructive—does not arise until mining operations have been completed.

Others believe that, rather than assuming a liability, Hard Rock has acquired an impaired asset. In their view, Hard Rock’s purchase price reflects that impairment and, absent a statute requiring that the site be restored, Hard Rock would have been willing to pay more for the mine.

Still others believe that Hard Rock does have a liability because the statute requires each mining site to be restored; thus, an obligation arises when a site is initially prepared for mining. Accordingly, the requisite past event for Mine A is the removal of the “overburden,” which occurred 15 years ago, and the requisite past event for Hard Rock is the

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6If a statute did not exist, but Hard Rock announced its intent to restore the mine site to its original condition, some might argue that the announcement created a constructive or equitable obligation (as opposed to a legal obligation). Moreover, if Hard Rock had previously restored other mine sites that were not covered by statute, Hard Rock’s stated intent would be consistent with its present or past actions.
date that it acquired Mine A because that is when it assumed an already-existing obligation. Accordingly, if Hard Rock were to cease mining operations immediately after purchasing Mine A, it nonetheless would be obligated for the costs to restore the mine site that had accrued up to that time.

For those who believe that Hard Rock does have a liability as a result of purchasing Mine A, the next question is how to measure that liability. Some argue that the measurement of the liability should be based on the amount related to the overburden and the ore mined over the past 15 years—that is, on a “current payment” or “settlement” basis. Assuming that Hard Rock’s forecast of $10 million in restoration costs is a reasonable estimate, they would measure the liability for restoration costs as $7.6 million—$4 million related to the overburden and $3.6 million related to the remaining estimated $6 million (15/25 x $6 million = $3.6 million). They would increase the cost of the mine by $7.6 million and record a corresponding liability, and amortize the added $7.6 million cost over the remaining 10-year life of the mine as depletion expense. In addition, they also would accrue an additional $2.4 million of expense and liability over the remaining 10 years (10/25 x $6 million), thereby bringing the liability to $10 million by the end of the mine’s 25-year useful life.

Others would include the remaining ore to be mined in the measurement of Hard Rock’s restoration liability; that is, they would measure on an “ultimate payment” basis and recognize the full forecasted cost of $10 million. This would be achieved by increasing both the asset and the liability by $10 million and then depleting the $10 million in the asset account as the ore is mined over the remaining 10 years of the mine’s expected useful life. Thus, upon completion of mining operations, Hard Rock would have a liability on its books for the $10 million related to restoration costs.

Still others might measure the liability at 60 percent of the full forecasted cost of $10 million, or $6 million, on the basis that 60 percent of the ore already has been mined. This would be achieved by increasing the asset and recognizing a liability and then depleting the asset and accruing the remaining $4 million over the remaining life of the mine.

Yet others, while agreeing that a liability exists at the date of purchase, would charge the entire amount of the liability (at whatever amount the liability is measured) to expense on the date of purchase, thereby not charging any portion of the liability to expense over the remaining useful life of the mine.

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7 Some believe that advances in technology should be anticipated and taken into consideration, whereas others do not.
**Question (b):** Should Hard Rock recognize any site restoration costs in conjunction with opening Mine B, and if so, in what amount (ignoring discounting considerations)?

**Discussion:** The first question is does Hard Rock have a liability for future restoration costs at the time it opens Mine B? The difference between Mine B and Mine A is that Mine B is a new mine that is about to be opened—it has not been in operation as Mine A has been. The stage of operations should affect the amount of restoration costs to be recognized but not alter the basic viewpoints about the existence of a liability. Thus, those who do not believe a liability exists for restoration costs related to Mine A because the mining operations have not been completed would use the same argument for Mine B.

Those who would recognize a liability for the restoration costs associated with the “overburden” in Mine A would also recognize a similar liability for the overburden restoration costs associated with Mine B. Under the statute, Hard Rock is required to restore the overburden that has been removed; thus, Hard Rock is, at a minimum, obligated to restore the overburden in both mines. As for the future restoration costs, those who believe Mine A has a liability equal to the restoration costs associated with the ore mined (“current payment” approach) believe that since Hard Rock has not mined any ore in Mine B, it should not recognize any future restoration costs beyond that related to the overburden—$4 million. Some might increase the asset and the liability by $4 million and then deplete the $4 million over time, while others would recognize as expense the $4 million immediately upon opening the mine. In either case, the additional $6 million in restoration costs would be recognized as expense annually in proportion to the ore mined.

Those who would have measured the liability for future restoration costs at the date of purchase of Mine A as the full $10 million (“ultimate payment” approach) would argue that Hard Rock is just as liable for the entire future restoration costs at the date of the opening of Mine B because incurrence of those restoration costs is implicit in recovery of the cost of the mine.

And those who would not recognize anything in conjunction with the opening of Mine B, but rather would accrue the liability and expense over the expected life of Mine B, would recognize $400,000 annually for the next 25 years.
IDLE DRILLING RIG

The Wildcatter Exploration Company, a small independent company, owns an oil field drilling rig. Wildcatter purchased the rig new during the height of the energy boom when prices for crude oil ranged between $25 and $30 per barrel. The rig was taken out of service following the free fall in world oil prices in the mid-80s and has been out of service ever since.

Wildcatter’s management believes that the invested cost of the rig is recoverable because the downturn in oil prices is only temporary and prices will return to boom levels once again. The current price of oil has languished around $19 per barrel and there is virtually no market for used drilling rigs.

**Question:** Should Wildcatter base its decision on whether its drilling rig is an “impaired asset” on present economic conditions or assumptions about future ones?

**Discussion:** The issue is whether it is appropriate to base accounting on predictions that future economic conditions will be different from those today. Some argue that it is appropriate for Wildcatter to base its ability to recover the drilling rig’s carrying amount on its assumptions that the downturn in oil prices is only temporary and prices will return to the boom levels. They assert that the carrying amount of the rig is recoverable because it will be put back in service or be sold when oil prices rise.

However, others question whether accountants are qualified to assess predictions about future economic conditions. In their view, absent compelling evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions. In essence, their view is consistent with the stock market notion that the best predictors of tomorrow’s stock prices are today’s stock prices. Indeed, the range of crude oil prices between $25 and $30 per barrel at the height of the energy boom may have been “temporary” and the current price of $19 per barrel may be more “permanent.” Absent evidence to the contrary, the $19 price should therefore be the basis for assessing whether the rig is an “impaired asset.”

[The working group agreed that, absent evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions.]
Measurement Issues: The Role of Future Economic Conditions

“SEE-THROUGH” OFFICE BUILDING

Dauntless Development Company owns what is referred to as a “see-through” office building, as the glass-walled structure is largely unoccupied and most floors are unfinished internally. The building is now five years old and was the last one completed during the downtown building boom.

Although the building is less than 30 percent occupied, management believes there is no reason that the company’s invested cost (including cost of construction) will not be recoverable over the building’s expected 50-year life. Current vacancy rates are such that there is a 10- to 12-year supply of equivalent vacant space available in the area.

Question: Should Dauntless base its decision about whether its building is an “impaired asset” on present economic conditions or assumptions about future ones?

Discussion: The issue is whether it is appropriate to base accounting on predictions that future economic conditions will be different from today. Some believe that it is appropriate for Dauntless to project that the office building occupancy rates will improve in the future such that the invested cost (carrying amount) of the building will be recovered over the building’s expected 50-year life. They might base their projections on historical trends or recent indications of an upturn in local occupancy rates.

However, others question whether accountants are qualified to assess predictions about future economic conditions. In their view, absent compelling evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions. They note that with less than 30 percent of the building occupied, Dauntless does not appear able to recover its costs—even over 50 years; thus, the facts in the case do not present compelling evidence to the contrary. Even if demand for office space were to increase, newer buildings may be more attractive to prospective tenants, and hence the rents that could be charged for this building might have to be reduced to be competitive. Moreover, fundamental changes may be occurring that reduce the long-term demand for office space as more companies cut back on the amount of their office space and have their employees share space, work out of “mobile offices,” or out of their homes (“telecommuting”).

[The working group agreed that, absent evidence to the contrary, assumptions about future economic conditions should be based on current economic conditions.]
Measurement Issues: The Role of Future Legal Requirements

FUTURE TAX RATE CHANGES

Gargantuan Company operates three separate divisions, each of which operates in a different taxing jurisdiction. At the end of the current year, each of the divisions has a $100,000 income tax loss carryforward, all of which Gargantuan expects to realize in the coming year.

Division A operates in a jurisdiction that has a flat income tax rate of 10 percent. A tax cut has been enacted into law, commencing at the beginning of the coming year, that will lower the rate to 8 percent. However, because of economic difficulties, leading officials have publicly acknowledged that the tax cut will almost certainly have to be delayed.

Division B operates in a jurisdiction that has a flat income tax rate of 15 percent. However, because of a vibrant economy and governmental budgetary surpluses, the business community has lobbied strongly for a cut in the rate to 12 percent, effective at the beginning of the coming year. Recent polls of elected officials and the general public indicate widespread support for the rate cut.

Division C operates in a jurisdiction that has a progressive income tax rate system, with a rate schedule as follows:

<table>
<thead>
<tr>
<th>Taxable Income</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to $500,000</td>
<td>10%</td>
</tr>
<tr>
<td>Above $500,000</td>
<td>20%</td>
</tr>
</tbody>
</table>

Division C has had taxable income of about $400,000 in each of the past several years. However, it recently was awarded a large government cost-plus contract that will almost certainly double its taxable income in the coming year.

Question: What income tax rates should be used to measure the income tax carryforwards of Divisions A, B, and C?

Discussion: The issue for Divisions A and B is whether it is appropriate for Gargantuan to base its accounting on assumptions about future legal requirements; for Division C, the issue is not assumptions about future legal requirements, but rather the assumptions Gargantuan can appropriately make about its own future taxable income.

Division A

Whether Gargantuan should use the enacted rate of 8 percent in measuring the income tax carryforward that it expects Division A to realize in the next year or the current 10 percent rate involves making assumptions about future legal requirements.
Some argue that because leading officials have publicly acknowledged that the tax cut will almost certainly be delayed, Gargantuan should use the higher rate of 10 percent in measuring Division A’s income tax carryforward. In their view, future changes in legal requirements that meet a high probability threshold may be used as a basis for accounting estimates.

Others believe that no matter how certain, future changes in law should not be anticipated; only requirements already enacted or substantially enacted should be used to measure assets and liabilities. As such, Gargantuan should use the enacted rate of 8 percent in measuring Division A’s income tax carryforward. When and if the tax rate cut is delayed, Gargantuan would remeasure Division A’s income tax carryforward using that new rate.

[The working group supports using the enacted rate of 8 percent because future changes in law—other than those already enacted or substantially enacted—should not be used to measure assets and liabilities.]

Division B

Division B’s situation is the opposite of Division A’s. It operates in a jurisdiction with an income tax rate of 15 percent, but due to a vibrant economy officials are supporting a cut in the rate to 12 percent, effective at the beginning of the next year. Should Gargantuan use the current 15 percent rate for Division B or the expected 12 percent rate?

As stated previously, some argue that because there is widespread support among elected officials and the general public for a cut in the tax rate, Gargantuan should project that the rate will be cut by year-end and use the lower rate of 12 percent in measuring Division B’s income tax carryforward. In their view, future changes in legal requirements that meet a high probability threshold may be used as a basis for accounting estimates.

Others believe that only enacted or substantially enacted legal requirements should be used to measure assets and liabilities; because a poll of officials announcing support for a change in the tax rate does not equate to “substantially enacted,” Gargantuan should continue to use the 15 percent rate for Division B until a law has been passed changing that rate. If the rate is changed by law sometime next year, it would be appropriate for Gargantuan to remeasure Division B’s income tax carryforward at the next reporting date.

[The working group supports using a 15 percent rate until a new rate has been enacted or substantially enacted into law.]
Division C

Division C’s situation is different from those of the other two divisions. It operates in a jurisdiction that has a progressive income tax rate and Gargantuan has reason to believe Division C will be subject to a higher tax rate than usual in the coming year because of a new government contract that is expected to double its taxable income. Thus, the issue is not what assumptions Gargantuan can make about legal requirements, but what assumptions it can make about its own future taxable income.

Some believe that Gargantuan should use the tax rate it has been using in the past (10 percent) for Division C because it is not certain that the Division’s taxable income will be more than $400,000. That is, many events will occur in the next year, both positive and negative, that will affect Division C’s taxable income just as surely as the new contract, although those events may not at this time be as “foreseeable and probable.” In addition, predicting what the average tax rate will be next year for Division C is likely to be very difficult.

However, others argue that because the contract has already been awarded (not just expected to be awarded) and Division C’s annual taxable income in recent years has been close to $500,000 (the level at which the tax rate increases), it would be difficult to argue that the contract will not increase its income and its tax rate at all. Although Division C’s income may not double, an increase of 25 percent would put it into the next tax bracket; thus, a rate other than 10 percent would be appropriate.

Some would support Gargantuan’s using the average graduated tax rate applicable to the amount of Division C’s expected taxable income in the period in which the carryforward is expected to be realized. Gargantuan forecasts that Division C’s taxable income will be at least double its taxable income in the past, that is at least $800,000. Based on that forecast, a weighted-average or “blended” rate of about 13.75 percent ($500,000 @ 10 percent; $300,000 @ 20 percent) should be used to measure the income tax carryforward.

However, others take a “FIFO approach” and use a 10 percent rate because the first $500,000 will be taxed at a 10 percent rate—and that is the income against which the carryforward would be applied first. Still others would take a “LIFO approach,” and use a 20 percent tax rate, assuming that the carryforward be applied against the last dollars of taxable income.

[Members of the working group would use different rates: a part of the working group would use a weighted-average rate, another part would use a 10 percent rate (on the basis that the first $100,000 is assumed to relate to the loss carryforward), and another part would use a 20 percent rate.]

8 FASB Statement No. 109, Accounting for Income Taxes, adopts that view.
Appendix C

AGGREGATION AND COMBINATION

An issue that is related to the future events question concerns how the asset is viewed. Stated another way, what is the real-world—or underlying—asset that is to be accounted for?

What constitutes the prototype asset has important ramifications for accounting. That is because assets that are accounted for one way when viewed alone may be accounted for differently if they are viewed as being part of a larger asset. For example, gains or losses that otherwise might be recognized on an asset viewed alone may be deferred if the asset is seen as part of a larger asset until the larger asset’s costs are ultimately “matched” against revenues it generates.

Aggregation

One dimension of the issue may be described as aggregation. Aggregation involves viewing similar or identical assets as though they constituted a single, larger asset. An example is treating a portfolio of marketable securities as if it were a single asset. All components of an aggregation continue to exist in the same form as before being aggregated and can be disaggregated. In that context, the issue is:

*On what basis or in what circumstances, if any, should similar or identical assets be aggregated for purposes of recognition and measurement?*

That issue has variously been described as the “portfolio problem,” the “grouping problem,” or the “unit of account problem.”

Combination

Another dimension of the issue may be described as combination. Combination involves treating dissimilar but related assets as if they constitute a single, larger asset. An example is a manufactured product, in which various raw materials, labor, and the like, are combined and treated as a single asset. Combinations often involve physical and economic transformations that may be irreversible, either physically or economically. Indeed, components of a combination may lose their identity and be incapable of being “discombined” from one another.

Combinations raise some especially difficult issues. An example is an entity that purchases an option to lock itself in against the risk of future price increases on raw materials it plans to purchase for the manufacture of its usual products. In that case, should the event of acquiring the option be considered the first step in manufacturing the inven-
tory? If so, the option might be considered part of the inventory, with its cost being part of the inventory cost (and with subsequent changes in the option's value being ignored). However, if the event of acquiring the option is not considered part of manufacturing the inventory, the option would be treated as a separate asset and accounted for separately, with subsequent changes in the option's value being recognized as gains and losses (on the basis that the option is a speculative instrument). In that context, the question is:

On what basis or in what circumstances, if any, should dissimilar assets be combined for purposes of recognition and measurement?

The problem exists because the "boundaries" of assets are not well defined, that is, the points at which an asset's existence begins and ends are sometimes rather ambiguous. Many assets are the products of "chains" of events rather than singular events; hence, which event in the chain is the event that brings an asset into being is often subject to disagreement.

That issue is important for several reasons. One is because combining dissimilar items to a significant degree can result in deferring gains and losses that otherwise might not be deferred. Another is because those combinations may have the consequence of departing too far from what might be regarded as a representationally faithful portrayal of underlying assets and liabilities. Finally, those combinations may place a particularly heavy reliance on an assumption that management's plans for the items being combined have not changed.

Working Group View

The working group does not have a consensus view on how the asset aggregation or asset combination problems should be resolved.
# Appendix D

## LIST OF CONFERENCE PARTICIPANTS

### Australia
- **Ian Mackintosh**
  - Deputy Chairman
- **Warren McGregor**
  - Technical Director
  - Accounting Standards Board
  - Accounting Standards Board

### Belgium
- **Guy Gelders**
  - Chairman
- **Luk Benets**
  - Commission des Normes Comptables
  - Commission des Normes Comptables

### Canada
- **Alex Milburn**
  - Chairman
- **John Denman**
  - Accounting Standards Director
  - Accounting Standards Board
  - Canadian Institute of Chartered Accountants

### Denmark
- **Stig Enevoldsen**
  - Chairman
  - Accounting Standards Committee
  - Panel

### European Commission
- **Gisbert Wolff**
  - Head of Unit
  - DGXV Commission of the European Communities

### Fédération des Experts Comptables Européens (FEE)
- **Jens Röder**
  - Vice President
- **Saskia Slomp**
  - Technical Secretary

### France
- **Jean-Paul Milot**
  - Secretary General
- **Dominique Ledouble**
  - Member
  - Conseil National de la Comptabilité
  - Conseil National de la Comptabilité

### Germany
- **Heinz Kleekämper**
  - Dietz Mertin
  - Institut der Wirtschaftsprüfer
  - Institut der Wirtschaftsprüfer

### International Accounting Standards Committee
- **Eiichi Shiratori**
  - Chairman
- **Michael Sharpe**
  - Deputy Chairman
- **David Cairns**
  - Secretary General
- **Ronald Murray**
  - Chairman of Financial Instruments Steering Committee

### Ireland
- **Declan Bourke**
  - Technical Director
  - Institute of Chartered Accountants in Ireland

### Italy
- **Giancarlo Strada**
  - Consiglio Nazionale dei Dottori Commercialisti
Japan
Kiyomitsu Arai
Kimikaki Nakajima
Chairman
Senior Managing Director
Etsuo Sawa
Senior Research Fellow, International

Mexico
Maria Estela Imamura
Felipe Pérez Cervantes

Netherlands
Hans Franse
Herman Marseille
Chairman
Vice Chairman

New Zealand
Peter Haüs

Norway
Atle Johnsen
Erik Mamelund

South Africa
Douglas Brooking

Sweden
Sigvard Heurlin

Switzerland
Giorgio Behr
Thomas Stenz
Chairman
Secretary General

United Kingdom
David Tweedie
Allan Cook
Geoffrey Whittington
Frank Jenkins
Chairman
Technical Director
Academic Adviser
Government Observer, DTI
Assistant Technical Director
Andrew Lennard
Peter Stilling
Christopher Nobes
Henry Gold

United States of America
James Leisenring
L. Todd Johnson
Vice Chairman
Research Manager

Business Accounting Deliberation Council
Corporation Finance Research Institute
Japanese Institute of Certified Public Accountants

Mexican Accounting Principles Commission

Raad voor de Jaarverslaggeving
Raad voor de Jaarverslaggeving

New Zealand Society of Accountants and Accounting Standards Review Board

Norsk RekenskapsStiftelse

South African Institute of Chartered Accountants

The Swedish Financial Accounting Standards Council

Fachkommission für Empfehlungen zu Rechnungslegung
Fachkommission für Empfehlungen zu Rechnungslegung

Accounting Standards Board

Accounting Standards Board

Accounting Standards Board

Accounting Standards Board

UK & Ireland representatives on IASC
UK & Ireland representatives on IASC
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Financial Accounting Standards Board
Financial Accounting Standards Board