

Project

Revenue Recognition

Topic

Determining the transaction price: uncertain consideration

Introduction

1. This paper considers how an entity should determine the transaction price and recognize revenue when the customer promises an amount of consideration that is uncertain.
2. The answer to that question depends on various issues such as the nature of an entity's contractual rights and obligations, and an entity's ability to estimate the outcome of uncertain future events.
3. The Boards discussed those issues at length in March 2011. No decisions were reached because of the lack of clarity on the interaction of the various aspects of the revenue model. (Moreover, the issues are similar to issues in other projects on which the views of individual Board members are diverse.)
4. Hence, the staff has prepared the table on the following page to summarize:
 - (a) three of the steps to apply the proposed revenue model,
 - (b) the staff's recommendations for the Boards, and
 - (c) the key questions for the Boards.
5. In the sections of the paper following the table, the staff provides additional commentary and analysis.

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Steps of the model	Staff's recommended description of how to apply each step	Questions for the Boards
<p>Step 1: Determine the transaction price</p>	<p>An entity needs to determine the transaction price for two reasons: (1) it is the amount allocated to separate performance obligations, and (2) it is an input to the onerous test.</p> <p>The transaction price is the total amount of consideration that the entity expects to receive/realize for the whole contract.</p> <p>An entity would determine the transaction price at the amount more likely than not to be received, unless the entity has a large number of contracts with similar characteristics in which case the entity would determine the transaction price at the expected value (i.e. the probability-weighted amount).</p>	<p>Should an entity use a more likely than not measurement technique unless the entity has a large number of contracts with similar characteristics (in which case it would use an expected value)?</p> <p>If not, what technique should an entity use to determine the transaction price in all cases?</p>
<p>Step 2: Allocate the transaction price</p>	<p>An entity should allocate to each separate performance obligation the amount of consideration the entity expects to receive in exchange for satisfying that performance obligation.</p>	<p>See questions in Agenda Paper 2B / FASB Memo 141B.</p>
<p>Step 3: Recognize revenue (if the amount allocated to a satisfied performance obligation is reasonably assured to be received)</p>	<p>When an entity satisfies a performance obligation, the entity should recognize revenue at the amount allocated to that performance obligation unless the amount is not “reasonably assured” to be received, which would be the case in each of the following circumstances:</p> <ol style="list-style-type: none"> 1. The customer could avoid paying an additional amount of consideration without breaching the contract (e.g. a sales-based royalty). 2. The entity has no experience with similar types of contracts (or other persuasive experience). 3. The entity has experience, but that experience is not predictive of the outcome of the contract based on an evaluation of various factors (e.g. time until the uncertainty is resolved, susceptibility to factors outside the influence of the entity, the extent of the entity’s experience, the number and variability of possible consideration amounts). 	<p>Do the Boards agree that revenue should be constrained to amounts that are “reasonably assured” to be received?</p> <p>If not, what revenue recognition constraint do the Boards prefer and why?</p>

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Step 1: Determine the transaction price

The objective of determining the transaction price

6. Determining the transaction price is one of the main steps to apply the proposed revenue recognition model. That step requires an entity to consider information that presumably the entity already would consider when pricing the goods or services promised in the contract.
7. In practice, it may not be necessary for an entity to explicitly determine the transaction price and allocate that amount to separate performance obligations in a contract. For some contracts, an entity simply would recognize revenue for transferred goods or services at the amount of consideration that is contractually due from the customer. That method of recognizing revenue would be consistent with the core principle of the revenue model for some time and materials contracts and other similar contracts under which the customer is obliged to pay an amount of consideration that varies in accordance with the quantity of goods or services the customer receives.
8. In concept, however, there are two reasons why it is necessary for the revenue standard to specify how an entity would determine the transaction price. First, the transaction price is the amount that an entity would allocate to the separate performance obligations in a contract (that is, for a contract with more than one performance obligation). Second, the transaction price is a necessary input to the onerous test.
9. The Exposure Draft defined the transaction price as follows:

The amount of consideration that an entity receives, or expects to receive, from a customer in exchange for transferring goods or services, excluding amounts collected on behalf of third parties (for example, taxes).
10. In accordance with that definition, the objective when determining the transaction price is to determine the amount the entity *expects to receive* in exchange for the

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goods or services promised in the contract. That is, the objective is to predict the total amount of consideration that ultimately will be realized from the contract rather than to depict the value of the contract at each reporting date. The Exposure Draft prescribed a single technique for meeting that objective—that is, a probability-weighted technique.

Techniques for meeting the objective of determining the transaction price

11. Most respondents to the Exposure Draft disagreed with the proposed probability-weighted technique. Respondents thought that in many circumstances, the technique would result in a transaction price that does not depict the amount the entity expects to receive (for example, uncertainty with a binary outcome).
12. Hence, in March 2011, the Boards reconsidered whether a probability-weighted technique is appropriate in all circumstances. No decisions were reached. But the staff recommended in Agenda Paper 10D (FASB Memo 140D) *Uncertain consideration – measurement*, that an entity should be permitted to use more than one method to meet the objective of determining the transaction price. The staff recommended the following:
 - (a) If an entity has a large number of contracts with similar characteristics, the amount the entity expects to receive is the probability-weighted amount.
 - (b) If an entity does not have a large number of contracts with similar characteristics, the amount the entity expects to receive is the amount more likely than not to be received.
13. The staff also considered a “most likely” measurement technique. The staff thinks that technique would be appropriate for determining uncertain amounts with a binary outcome, because it generates the same results as a more likely than not technique. However, for other cases the staff thinks the most likely technique could result in a transaction price that does not depict the amount the entity

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expects to receive/realize for the whole contract (that is, it could fail to meet the core principle of the revenue model).

14. For example, consider the following distribution of possible consideration amounts:

Probability	Amount
40%	2,000
30%	1,000
20%	600
10%	0

15. In this example, CU2,000 is the individual amount that is “most likely” to be received. However, that amount is not the amount of consideration that the entity expects to receive because the probability of receiving CU2,000 is only 40%.
16. Determining the transaction price at the amount more likely than not to be received (which would be CU1,000 in this example) does not constrain the transaction price. Rather, it is a technique that an entity would use to meet the objective of determining the transaction price.
17. Although the amount allocated to *all* performance obligations would not be constrained in accordance with the staff’s recommendation, the staff is recommending a constraint on the amount of revenue recognized for *satisfied* performance obligations (See Step 3).

Step 2: Allocate the transaction price

18. See Agenda Paper 2B (FASB Memo 141B) on allocating the transaction price.

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Step 3: Recognize revenue if amount is reasonably assured

19. The Exposure Draft proposed that an entity should recognize revenue only if the transaction price can be “reasonably estimated”. In March 2011, the Boards discussed how to improve the constraint proposed in the Exposure Draft (see the March 2011 Agenda Paper 10E / FASB Memo 140E *Uncertain consideration – constraint*).
20. The Exposure Draft stated that the transaction price can be reasonably estimated only if both of the following conditions are met:
 - (a) the entity has experience with similar types of contracts (or access to the experience of other entities if it has no experience of its own); and
 - (b) the entity’s experience is relevant to the contract because the entity does not expect significant changes in circumstances.
21. Paragraph 39 of the Exposure Draft then provided the following factors that reduce the relevance of an entity’s experience:
 - (a) the consideration amount is highly susceptible to external factors (for example, volatility in the market, judgment of third parties, and risk of obsolescence of the promised good or service);
 - (b) the uncertainty about the amount of consideration is not expected to be resolved for a long time;
 - (c) the entity’s experience with similar types of contracts is limited; and
 - (d) the contract has a large number of possible consideration amounts.
22. Most respondents to the Exposure Draft supported a constraint on revenue recognition and generally agreed with the proposed guidance on how an entity would determine whether an amount can be reasonably estimated. Hence, the staff thinks that most of the guidance in the Exposure Draft on “reasonable estimates” can be carried forward into the final standard.
23. However, the staff recommends the following changes to the Exposure Draft:

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- (a) Use the term “reasonably assured” rather than “reasonably estimated”,
- (b) Change the criterion of “the entity’s experience is relevant” to “the entity’s experience is predictive”, and
- (c) Clarify that an amount is not reasonably assured if the customer can avoid paying an additional amount of consideration without breaching the contract (e.g. a sales-based royalty).

24. The table in Appendix A lists alternative constraints that were considered.

Reasonably assured versus reasonably estimated

25. The staff thinks that the cumulative amount of revenue an entity recognizes should be limited to the amount the entity is reasonably assured to receive. The primary reason for that drafting change is that in some circumstances an entity might be able to reasonably estimate an amount even though the entity is not reasonably assured to receive that amount in accordance with the guidance in the revenue standard. In other words, the term “reasonably assured” seems to be a more appropriate label for the constraint on the amount of revenue an entity would recognize in accordance with the final revenue standard. The term “reasonably estimated” seems to be a better term in the context of estimating the overall transaction price. However, as noted in paragraph 17 of this paper, the overall transaction price would not be constrained in the revenue model.
26. In addition, a “reasonably assured” label would be more appropriate after adding guidance to the final standard to clarify that an entity should not recognize revenue if the customer can avoid making additional payments without breaching the contract (as discussed in paragraphs 29–31).

Relevant experience versus predictive experience

27. To determine that an amount is reasonably assured, the staff recommends that the Boards carry forward the criterion in the Exposure Draft that an entity have experience with similar contracts (or other persuasive experience such as access to

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the experience of others or other persuasive evidence). An entity's experience is necessary but not sufficient to conclude that an amount is reasonably assured.

28. The Exposure Draft said that an entity's experience also must be "relevant" to the contract because the entity does not expect significant changes in circumstances. The staff recommends modifying that criterion to require that an entity's experience must be "predictive" of the outcome of the contract. The staff thinks that the term "predictive" would better align with the objective of determining and allocating the transaction price which is to allocate to each performance obligation the amount of consideration the entity expects to receive in exchange for the transferred goods or services underlying that performance obligation.

Additional payments that the customer could avoid

29. The third change to the Exposure Draft that the staff is recommending relates to additional payments of consideration that the customer has the ability to avoid without breaching the contract. The most common example of that circumstance is sales or usage-based royalty contracts in which an entity transfers a product or license to a customer and the amount of consideration the customer pays depends entirely on the customer's future sales to other parties or on the customer's usage of the product or license (that is, royalty-type arrangements).
30. In those circumstances, nearly all responses to the Exposure Draft were consistent in the view that the most useful pattern of revenue recognition would be to recognize revenue only as and when the future sales occur and the uncertainty is resolved. However, the reasons for supporting that outcome are mixed. The staff has heard the following:
- (a) the entity does not have a right to the additional consideration until the uncertainty is resolved.
 - (b) the entity has a separate performance obligation for each instance of the customer using or selling the entity's transferred product.
 - (c) the amount of consideration is not reasonably assured.

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31. The staff considered but rejected the first two reasons. In some royalty-type arrangements, the customer pays a fixed amount of consideration at contract inception and the entity has no remaining performance obligations after transferring to the customer the rights and access to the entity's intellectual property. In those contracts, the staff thinks it is clear that the entity has satisfied its performance obligation and has a right to consideration. The staff thinks that a change in only the payment terms (that is, from a fixed to a variable payment) should affect the measurement of an entity's rights but should not affect the existence of the right and the nature of the entity's performance obligations.
32. Consequently, the staff thinks the best way to clarify the accounting for royalty-type arrangements is for the revenue standard to add a criterion stating that the amount of consideration is not reasonably assured if the customer can avoid paying an additional amount of consideration without breaching the contract (e.g. a sales-based royalty). Consequently, an entity would not be required to estimate future royalties for purposes of recognizing revenue at the beginning of the contract when the entity transfers a product (or license) to the customer. Rather, an entity would recognize revenue as the uncertainty is resolved (see the example in paragraph 34).

Examples

33. This section of the paper illustrates the staff's recommendation with the following examples:
 - (a) Royalty,
 - (b) Performance bonus,
 - (c) Trailing commission,
 - (d) Incentive fee, and
 - (e) Multiple-element arrangement.

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Royalty

An entity enters into a non-exclusive license agreement with a customer for five years. Under the agreement, the customer agrees to pay CU1 for each product it manufactures and sells using the entity's intellectual property.

34. In concept, the transaction price would reflect the entity's assessment of the number of products that the customer is expected to manufacture using the entity's intellectual property over the five-year license period. However, in practice the entity may not need to determine and allocate the transaction price because the amount of consideration allocated to the transferred license is not reasonably assured to be received.
35. When the entity satisfies its performance obligation by transferring the licensed intellectual property, it does not recognize revenue because the amount of the transaction price allocated to the performance obligation is not reasonably assured to be received. That is because the customer can avoid paying an additional amount of consideration. Hence, the entity would recognize revenue for the CU1 royalty payment as the customer sells its products and the uncertainty is resolved.

Performance bonus: Scenario 1

An entity enters into a contract to construct an asset for a fixed fee of CU10,000 plus a performance bonus for completing construction by a specified date. The entity determines that the contract contains a single performance obligation.

The entity has experience with this type of contract and that experience is predictive. The entity estimates a 45% probability of receiving the performance bonus. The entity does not have a large number of contracts with similar characteristics.

36. The entity determines that the transaction price is CU10,000, because the amount of the performance bonus that the entity is more likely than not to receive is nil.
37. Because the contract has just one performance obligation that is satisfied continuously, it is not necessary for the entity to allocate the CU10,000 to separate

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performance obligations. Rather, the entity would recognize revenue as the contract progresses by selecting an appropriate measure of progress (e.g. an output or an input method) and applying that measure of progress to the CU10,000.

38. The amount of revenue recognized in this example is not constrained. Although the transaction price does not include any consideration relating to the performance bonus, that is because the entity does not expect to receive any bonus payment (rather than because the amount of the bonus payment is not reasonably assured to be received).

Performance bonus: Scenario 2

Same facts as the previous scenario except the entity estimates that there is a (i) 40% probability of receiving no bonus; (ii) 30% probability of receiving a bonus of CU1,000; (iii) 20% probability of CU1,500; and (iv) 10% probability of CU2,000.

39. The entity determines that the transaction price is CU11,000, because the amount of the bonus that the entity is more likely than not to receive is CU1,000. Hence, the entity allocates CU11,000 to the performance obligation.
40. As the entity satisfies its performance obligation, it recognizes revenue by applying a measure of progress to the CU11,000. The entity determines that amount is reasonably assured to be received because the entity has experience with this type of contract and that experience is predictive.

Trailing commission

An entity sells a five-year life insurance policy on behalf on an insurance company for a commission of CU100. In addition, the entity will receive an additional commission of CU10 each year for as long as the policyholder does not cancel its policy.

The entity regularly sells similar policies and, therefore, has a large number of contracts with similar characteristics. Furthermore, from past contracts, the entity has reliable data about the likely level of policyholder

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terminations and has no evidence to suggest that previous policyholder behaviour will change.

41. The entity uses a probability-weighted technique to determine a transaction price of, say, CU145 because it has a large number of similar contracts. The entity allocates CU145 to the performance obligation.
42. When the entity satisfies its performance obligation by selling the insurance policy, it recognizes revenue of CU145 because it determines that this amount is reasonably assured to be received. The entity concludes that its past experience is predictive, even though the total amount of commission that the entity ultimately will receive depends on the actions of a third party (i.e. whether the policyholder cancels its policy).
43. Note that the additional consideration amounts in this example are not precluded from recognition as revenue. That is because in contrast to the royalty example, the customer—the insurance company—cannot prevent payment of the additional consideration.

Incentive fee

An entity enters into a one year contract with a customer to provide investment management services. The entity receives a quarterly management fee based on a percentage of assets under management. The entity also receives a performance-based incentive fee of ten percent of the fund's return in excess of the return of an observable index at the end of the year. The customer can cancel the contract with reasonable notice. If the contract is cancelled, the incentive fee would be calculated at the cancellation date based on the fund and index returns to date.

44. The transaction price would reflect the sum of the estimated quarterly payments (based on the fixed management fee and the uncertain value of the assets under management at the end of each quarter) and the entity's estimate of the performance-based incentive fee at the end of the year. That transaction price would be allocated to the single performance obligation to provide investment management services for one year.

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45. The entity would recognize revenue as the services are provided throughout the year. The amount of revenue recognized each quarter would be limited to the management fee for the current quarter. That is because:
- (a) the amount of the management fee that the entity expects to receive for the remainder of the year is not reasonably assured because that amount is based on future values of the assets under management that are subject to market volatility; and
 - (b) the entity is not reasonably assured to receive the incentive fee. Although the entity has experience with similar contracts, that experience is not predictive of the outcome of the contract at the end of the year because the amount of consideration is highly susceptible to factors outside the influence of the entity (i.e. volatility in the market).

Multiple-element arrangement

An entity enters into a contract to sell hardware, software, and two years of support services. The entity sells those items separately and, hence, has observable standalone selling prices for each item. The customer receives a discount for buying all three items as a bundle.

The customer promises to pay a fixed amount of CU100,000 plus an annual bonus if the entity's annual average service level exceeds the average service level for the industry. The entity concludes that the bonus relates to all three items in the contract (i.e. the amount is not reasonable relative to the payment terms and separate performance obligations in the contract).

The entity does not have a large number of contracts with similar characteristics.

46. The entity would estimate the total transaction price by adding the CU100,000 fixed amount to the estimated variable amount. The entity would estimate the variable amount using a more likely than not technique because it does not have a large number of contracts with similar characteristics.

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47. The entity would allocate the total transaction price (including the estimated uncertain amount) based on the standalone selling prices of the hardware, software, and support services.
48. For the hardware and software, the entity would recognize revenue when the customer obtains control of the hardware and software. The amount of revenue recognized would be the amount allocated to those performance obligations, unless that amount is not reasonably assured to be received.
49. To determine whether the amount allocated to the hardware and software is reasonably assured to be received, the entity must consider various factors and evaluate whether the entity's experience is predictive of the outcome of the contract.
50. If the entity's experience with the support services is limited and the market conditions are volatile, the entity would conclude that its experience is not predictive. Hence, the variable payment would not be reasonably assured to be received. Conversely, the entity might have extensive experience in the industry and the susceptibility of the uncertain consideration amount to external factors (e.g. the entity's competitors and other factors that affect the industry average service levels) might be low. In that case, the entity would conclude that its experience is predictive and, hence, the variable payment is reasonably assured to be received.
51. For the support services, the entity would recognize revenue as the service is provided (i.e. the entity's measure of progress probably would be support hours provided relative to total hours expected to be provided). The amount of revenue recognized would be the amount allocated to the support services plus any amount that may have been allocated to the hardware and software but not previously recognized as revenue (if it wasn't reasonably assured to be received).

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Appendix A Alternative constraints on cumulative revenue recognized

	“Fixed”	“Noncontingent”	“Fixed or determinable”	“Measured reliably”
Description	The amount to which the entity presently is entitled to receive.	The amount that is not contingent on the entity’s future performance.	The amount that is fixed or determinable, depending on the circumstances.	The amount that can be measured reliably.
Comments	<ul style="list-style-type: none"> • Is more conservative than current practice. • Would often result in an entity not recognizing revenue when goods or services are transferred. • Would minimize estimates of uncertain consideration and the possibility of revenue reversals in subsequent periods. 	<ul style="list-style-type: none"> • Is similar to US GAAP on multiple-element arrangements. • Is preferred by some industries (e.g. many telcos). • Would significantly change current accounting for other industries (e.g. construction) because the total amount of consideration often is contingent on future performance. 	<ul style="list-style-type: none"> • Is consistent with general revenue guidance in US GAAP. • Without a clear definition, would require extensive application guidance and examples. • Would allow estimates of uncertain amounts if the amount is “determinable” on the basis of the entity’s relevant experience. 	<ul style="list-style-type: none"> • Is consistent with general revenue guidance in IFRSs. • Would require an entity to use significant judgment in determining whether an amount can be measured reliably. • Could allow an entity to recognize revenue sooner than the entity would recognize revenue today (e.g. royalties).