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Project	**Revenue recognition**
Topic	**Time value of money**

Purpose

1. This paper seeks the Boards' views on:

   (a) when the transaction price for a contract with a customer should reflect the time value of money of the promised consideration; and

   (b) how to account for the time value of money component of the promised consideration, including the selection of an appropriate discount rate.

Staff recommendations

2. The staff recommends that:

   (a) the Boards affirm the proposal in the Exposure Draft that an entity should adjust the amount of promised consideration to reflect the time value of money if the contract includes a financing component that is significant to that contract;

   (b) the Boards clarify that a financing component is significant only if both of the following conditions are met:

      (i) the effects of the time value of money are significant because either:

         (A) there is a significant timing difference between when the entity transfers the promised goods or

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services to the customer and when the customer pays for those goods or services; or

(B) the interest rate that is explicit or implicit within the contract is significant.

(ii) the contractual payment terms have the dominant purpose of providing financing either to the customer or to the entity.

(c) as a practical expedient, an entity should not be required to reflect the time value of money in the measurement of the transaction price when the period between payment by the customer and the transfer of the promised goods or services to the customer is less than one year.

Structure of this paper

3. This paper is organized into the following sections:

    (a) summary of the main proposals (paragraphs 4-5)

    (b) should an entity account for the time value of money (paragraphs 6-8);

    (c) when should an entity account for the time value of money (paragraphs 9-21)

    (d) practical concerns (paragraphs 22-33);

    (e) how should an entity account for the time value of money (paragraphs 34-43); and

    (f) private company considerations (paragraph 44).

Summary of the main proposals

4. In the Exposure Draft, *Revenue from Contracts with Customers*, the Boards proposed that an entity should reflect the time value of money in the measurement of the transaction price if the contract includes a material financing component (whether explicitly or implicitly). The Exposure Draft explains that

the effect of the time value of money would be material if payment from the customer is due either significantly before or significantly after the transfer of goods or services to the customer. The Exposure Draft stated that for many contracts the time value of money effect would not be material.

5. Paragraph BC103 explained the Boards' reasons for reflecting the time value of money in contracts with customers. In summary, those reasons are as follows:
    (a) Entities are not indifferent to the timing of the cash flows in a contract. Therefore, reflecting the time value of money portrays an important economic feature of the contract.
    (b) Not recognizing the financing component could misrepresent the profit of a contract.
    (c) Contracts with explicitly identified financing components would be accounted for consistently with contracts in which the financing component is implicit in the contract price.

Should an entity account for the time value of money?

6. Most respondents agreed with the conceptual rationale for adjusting the promised amount of consideration to reflect the effects of the time value of money. However, many of those respondents questioned whether the benefits of accounting for the time value of money would necessarily justify the complexity involved. In other words, respondents were generally concerned with *when* the measurement of the transaction price should reflect the time value of money rather than *if* that measurement should reflect the time value of money.
7. Consequently, as a first step in the redeliberations on this topic, the staff recommends that the Boards affirm their decision that—as a general principle—an entity should reflect the time value of money in the measurement of the transaction price for the contract with the customer.
8. The next section considers when an entity should apply that principle to account for its contracts.

When should an entity account for the time value of money?

9. Many respondents disagreed with the statement in paragraph 45 of the Exposure Draft that a contract with a customer has a material financing component if a payment from the customer is due either significantly before or significantly after the transfer of goods or services to the customer. Those respondents were concerned that, based on that definition of a material financing component, the proposals in the Exposure Draft could require an entity to account for the effects of the time value of money when either:

    (a) the time value of money is not material to the individual contract but for a portfolio of similar contracts the combined time value of money effect would be material to the entity as a whole; or

    (b) the time value of money component of a contract arises for reasons other than financing.

10. In either of those situations, the respondents commented that accounting for the time value of money would not reflect the economic intent of the parties. For example:

    (a) customary business practice in some industries and jurisdictions is to offer deferred payment terms without a significant cash sales discount (e.g. payment within 30 or 60 days) and payment in advance may be common in other industries or jurisdictions; and

    (b) an entity may receive an advance payment as a security deposit to limit the entity's risk of loss if the customer does not perform or as compensation for costs it has incurred or will incur in preparing to satisfy its performance obligations.

11. Some respondents suggested that the Boards could alleviate some of those concerns by:

    (a) specifying a minimum period when time value of money does not need to be accounted (e.g. if the transfer of goods or services by the entity and payment by the customer occurs within one year); or

(b) not adjusting for the time value of money if the customer pays in advance (for reasons mentioned in paragraph 10(b) of this paper).

Material financing component

12. The staff thinks that many of the concerns raised by the respondents can be addressed by:

    (a) clarifying the basis for assessing whether a contract with a customer has a financing component that is material; and

    (b) clarifying the meaning of a material financing component.

Clarifying the basis for the materiality assessment

13. As noted in paragraph 9(a), some respondents were unsure whether an entity should assess if the financing component is material to the individual contract or to the entity as a whole. One reason for this confusion was that some respondents commented that materiality is typically assessed at the entity level (i.e. the financial statements as a whole). Paragraph BC105 stated that the Boards intended for the materiality assessment to apply at the contract level, but the staff concedes that this clarification would not be readily apparent to the typical reader of the standard. To resolve that confusion, the staff recommends that the revenue standard should:

    (a) avoid referring to material and instead specify that an entity assesses whether the financing component is *significant*; and

    (b) clarify that the assessment applies separately to each contract.

What is a financing component?

14. Paragraph 45 of the Exposure Draft implied that an entity has a contract with a material financing component if the passage of time between performance by the entity and payment by the customer is significant (i.e. there is a significant timing difference). However, many respondents commented that an entity's

usual business practice is also relevant for assessing whether a contract includes a financing component. Those respondents were concerned that the understandability of an entity's financial statements may diminish if an entity that does not have a business practice of providing finance to customers or obtaining finance from customers has to discount the promised consideration and subsequently present the unwinding of the discount as interest income or interest expense.

15. The staff agrees with those comments and thinks that the revenue standard should clarify that an entity should account for a financing component in a contract with a customer only if both of the following conditions are met:

    (a) the effects of the time value of money are significant because either:

        (i) there is a significant timing difference between when the entity transfers the promised goods or services to the customer and when the customer pays for those goods or services; or

        (ii) the interest rate that is explicit or implicit within the contract is significant.

    (b) the contractual payment terms have the dominant purpose of providing financing either to the customer or to the entity. This may be evidenced by factors such as:

        (i) the amount of customer consideration would be substantially different if the customer paid in cash at the time of transfer of the goods or service; or

        (ii) the customer would not have entered into the transaction without the extended payment terms (i.e. the offer of financing).

The effects of the time value of money are significant

16. The time value of money implicit in a contract with a customer is likely to be significant if ignoring the time value of money could substantially misrepresent

the amount of revenue that should be recognized in an annual reporting period. For instance, this could happen when:

(a) performance by the entity and payment by the customer occur during different annual reporting periods; or

(b) the discount rate is high because the customer is a credit risk or the transaction is being conducted in an economy that is experiencing high rates of inflation.

17. In either of those cases, recognizing revenue at the time the good or service transfers to the customer and in the amount of the promised consideration could obscure the fact that the entity either has assumed the risk of accepting a deferred payment from the customer or has agreed to accept a lower contract price in return for being paid in advance. Consequently, separately recognizing the effects of the time value of money as interest expense or interest income may provide a more faithful depiction of those contracts.

18. However, as noted in paragraph 15, the staff thinks that the purpose of the financing should also be considered before an entity is required to identify and account separately for a significant financing component that is implicit in a contract.

Dominant purpose of providing financing

19. The staff expects that only a small population of contracts would have payment terms with the dominant purpose of providing financing either to the customer or to the entity. This is because, although deferred or advance payment terms provide either the customer or the entity with the (implicit) benefit of the time value of money, that benefit is generally expected to be incidental to the primary reason for the entity and the customer agreeing to those payment terms.

20. The following table outlines some common examples whereby the time value of money could be an incidental feature of the contract.

Type of contract or payment term	Purpose of the payment terms
Goods or services sold on standard industry payment terms. Those terms might be payment within 30 days, 60 days, 90 days or longer.	Those payment terms arose for historical reasons. Generally speaking, the payment terms provided by the entity would correspond to the time required by the customer to receive and process the invoice and mail the cheque for payment. In many industries, those historical practices are generally accepted and embedded as standard payment terms.
Prepaid phone calls or customer loyalty points	A time value of money component may exist for the portfolio of contracts but not for an individual contract. These contracts typically price the promised goods or services at a fixed amount and the customer chooses when to consume those goods or services. Some customers may choose to consume those goods or services immediately; other customers may consume those goods or services at a future date.
Prepaid subscription contracts and season tickets	For these types of contracts, the business model typically requires a minimum subscriber base—and therefore a minimum constant cash flow—to underwrite the provision of the goods or services for a specified period. The staff expects that the payment terms typically involve prepayment to avoid collectibility risks.
Retention payment	The customer may negotiate for the contractual payment terms to include a retention that is payable only on successful completion of the contract or on achievement of a specified milestone. The purpose of the retention is to provide the customer with additional leverage to encourage the entity to satisfactorily

	complete their obligations under the contract.

21. Analyzing whether advance payments arising from long-term contracts (e.g. construction or manufacturing) have the dominant purpose of providing the entity with financing is more complex. This issue is discussed later in the paper at paragraphs 28-31.

Practical concerns

22. Some respondents raised concerns with applying the time value of money proposals to the following types of contracts or payment terms:

    (a) short-term contracts;

    (b) contracts with advance payments; and

    (c) multiple element arrangements.

    This section of the paper considers those concerns.

Short-term contracts

23. Several respondents suggested that the Boards should exempt an entity from accounting for the financing component in a contract if the transfer of goods or services by the entity and payment by the customer is expected to occur within a short period of time. Most of those respondents suggested that the exemption should apply to contracts with an expected duration of approximately one year, which is similar to exemptions contained in existing requirements (e.g. in paragraph 835-30-15-3 of the FASB Accounting Standards Codification).

24. The main advantage of exempting an entity from accounting for any time value of money effects arising from short-term contracts is that it would simplify compliance with the revenue standard. This is because an entity would not be required to:

(a) conclude whether those contracts contain the attributes of a significant financing component (as outlined in paragraph 15 above); or

(b) determine the interest rate that is implicit within those contracts.

25. In addition, the staff expects that the time value of money implicit in most short-term contracts would not be significant. Therefore, the exemption should have a limited effect on the pattern of revenue recognition because the exemption would include only those implicit financing arrangements that are expected to expire during the following annual reporting period (i.e. when either the customer pays or the entity performs).

26. The main disadvantage of the exemption is that it could produce arbitrary outcomes in some cases. That disadvantage was noted by the Boards during the development of the Exposure Draft and, as such, the Boards decided to not propose that an entity could ignore the effects of financing if the time period was less than a specified period, such as one year. As paragraph BC105 explains, the "Boards observed that the time value of money could be material for short-term contracts with high implicit interest rates and, conversely, may be immaterial for long-term contracts with low implicit interest rates".

27. On balance, the staff recommends that the Boards include an exemption in the revenue standard for short-term contracts. Specifically, the staff recommends that an entity should reflect the time value of money in the measurement of the transaction price only when the period between payment by the customer and the transfer of the promised goods or services to the customer is greater than one year.

Contracts with advance payments

28. Some respondents also suggested that the Boards should exempt an entity from reflecting in the measurement of the transaction price the effects of the time value of money associated with advance payments from customers. They noted that, under existing practices, entities typically do not recognize the time value of money implicit in advance payments.

29. The main arguments for exempting an entity from accounting for any time value of money effects arising from advance payments is that it would:

    (a) simplify compliance (for similar reasons to those outlined in paragraph 24 above in the context of the exemption for short-term contracts);

    (b) avoid the 'gross up' of revenue (e.g. revenue would be recognized at the amount of the CU100 paid by the customer rather than at the combined amount of, say, CU121 if the discount rate implicit in the contract resulted in the accretion of interest of CU21 over 2 years); and

    (c) reflect the economics of the arrangement. For instance, as one construction contractor (from a private company) explained:

    > Many long term contracts provide for advance payments to contractors from their customers in order to pay for up front costs prior to actual installation. In most cases, this money, when received from the customer, is then immediately passed on to another supplier or subcontractor for the purchase of stored materials, fabrication costs, equipment purchases, etc. The contractor simply acts as a conduit. We believe that it is the owner's responsibility to finance the construction project and if the owner wants their project built on time, they should provide the funds to accomplish that in a timely fashion. Most long term contracts have retainage provisions up to 10% of the contract amount which will be held until the end of the project by the customer. In today's economic climate, the retainage may actually exceed the contractor's bid margin, which means that the contractor will become the financier of the project for the owner unless the contractor can manage to front-end load the project or receive funds in advance to pay suppliers when due and to cover the contractors overhead during construction. This front-end loading or advance payments acts to push the cash flow deficit towards the end of the project instead of all during the project. The contractor is not going to collect any interest on the retainage held by the owner. (CL #26)

30. The main argument against providing this exemption is that ignoring the time value of money effects of advance payments could substantially skew the amount and pattern of revenue recognition in cases where the advance payment is large and occurs well in advance of the transfer of the goods or services to the customer. For example, this could occur in a long-term manufacturing contract whereby control of the underlying good only transfers to the customer upon completion.

31. Accordingly, the staff recommends that the Boards should not exempt entities from accounting for the time value of money effects of advance payments. Instead, the staff thinks that an entity that should apply the general principle recommended in paragraph 15 and assess whether:

    (a) the effects of the time value of money of the advance payment are significant; and

    (b) the advance payment has the dominant purpose of providing financing to the entity.

Multiple-element arrangements

32. A few respondents commented that reflecting the time value of money in the measurement of the transaction price could be complex for contracts in which the entity will transfer multiple goods or services to a customer at different times. Those respondents explained that a strict reading of the Exposure Draft suggests that an entity would need to use simultaneous equations to measure the transaction price and allocate that amount to the separate performance obligations in the contract.

33. Although accounting for the time value of money effects associated with a multiple element arrangement are likely to be more complex than contracts to transfer a single good or service, the staff does not think the Boards intended for an entity to use complex mathematical calculations to comply with the proposals in the Exposure Draft. The staff thinks that those calculations are unnecessary because they provide a degree of precision in applying one aspect of the model that cannot necessarily be replicated in applying other aspects of the model (e.g. estimating variable consideration or standalone selling prices that are unobservable). The staff thinks that an entity should use a reasonable basis for determining the measurement and allocation of transaction price in those cases. Appendix A illustrates one method that could be used to measure the transaction price for a multiple element arrangement.

Summary of staff recommendations and questions for the Boards

Questions for the Boards
1. The staff recommends that the Boards affirm the proposal in the Exposure Draft that an entity should adjust the amount of promised consideration to reflect the time value of money if the contract includes a financing component that is significant to that contract. Do the Boards agree? 2. The staff recommends that the Boards clarify that a financing component is significant only if: (a) the effects of the time value of money are significant because either: (i) there is a significant timing difference between when the entity transfers the promised goods or services to the customer and when the customer pays for those goods or services; or (ii) the interest rate that is explicit or implicit within the contract is significant; and (b) the contractual payment terms have the dominant purpose of providing financing either to the customer or to the entity. Do the Boards agree? 3. The staff recommends that as a practical expedient, an entity should not be required to reflect the time value of money in the measurement of the transaction price when the period between payment by the customer and the transfer of the promised goods or services to the customer is less than one year. Do the Boards agree?

How should an entity account for the time value of money

34. In the Exposure Draft, the Boards proposed that:

 (a) the discount rate should be the rate that would be used in a separate financing transaction between the entity and its customer. That rate would reflect the credit characteristics of the parties to the contract as

well as any collateral or security provided by the customer or the entity; and

(b) the effect of the financing (i.e. interest expense or interest income) should be presented separately from the revenue from the goods or services.

Determining the discount rate

35. Some respondents mentioned that it would be difficult and costly to determine the discount rate that would be used in a separate financing between an entity and the customer. This is because most entities that are within the scope of the draft revenue standard do not enter into separate financing transactions with their customers. Furthermore, some respondents were concerned that an entity would need to determine a discount rate specifically for each individual customer. Those respondents commented that this would not be practical, especially for entities with large volumes of customer contracts. Because of those concerns, a few respondents suggested that an entity should use a different rate to discount the transaction price—suggestions included the risk-free rate or the entity's incremental borrowing rate.

36. The staff thinks that its recommendations at paragraphs 15 and 27 (about the meaning of a significant financing component and the exemption for short-duration contracts) would alleviate many of the concerns raised by those respondents. The effect of those recommendations is that an entity would not be required to account for the time value of money that is implicit in many contracts. For the remaining contracts, the staff expects that the entity and the customer would typically separately negotiate the contractual payment terms after considering factors such as inflation rates and the customer's credit risk. Hence, the staff expects that an entity should have access to sufficient information to be able to determine the discount rate that would be used in a separate financing between an entity and the customer.

37. Accordingly, the staff recommends that the Boards retain the proposal in the Exposure Draft that an entity should use a customer specific discount rate (i.e. a rate that reflects both the time value of money and credit risk) when reflecting the time value of money in the transaction price. (Agenda paper 10A / FASB memo 140A discusses in further detail the role of credit risk in measuring the transaction price.)

Remeasurement of the time value of money effects

38. The Exposure Draft did not specify whether an entity should re-evaluate the effects of the time value of money subsequent to the initial measurement of the transaction price. However, some respondents queried whether an entity would be required to revise that measurement for either:

    (a) a change in the assessment of the discount rate; or

    (b) a change in the estimated timing of the transfer of the goods or services to the customer.

39. The staff thinks that an entity should reflect in the measurement of the transaction price only the time value of money that is implicit in the contract at contract inception. Hence, subsequent changes in the effects of the time value of money should not be reflected in the measurement of transaction price. The staff's view is that the entity should account for the contract it has agreed with the customer. Assuming a fixed-price contract, that agreement 'locks in' a contract price and payment terms that reflects the parties' views on the time value of money at that moment. And because subsequent changes in the time value of money would not change the amount of customer consideration, the staff does not think it is relevant to make a subsequent change to the measurement of the transaction price.

40. The staff notes this recommendation contrasts with the Boards' recent decision to use an 'unlocked' discount rate in the measurement of insurance contracts. However, the staff thinks this differential treatment is justified because the

insurance project is pursuing a measurement model whereas the revenue recognition project is pursuing an allocation model.

Presentation of interest expense and interest income

41. Some respondents also disagreed with the Boards' proposals on the time value of money because the unwinding of the discount would be presented as interest income or interest expense rather than as a change to the measurement of revenue. For instance, a preparer commented that:

> However, we do not agree with adjusting the transaction price and imputing revenue on prepayments of the transaction consideration. This would result in the recognition of revenue in excess of the cash received from the customer. While we agree that access to cash before performance obligations are satisfied provides an opportunity for the entity to earn additional income, we believe that this income relates to the entity's investing activities and not its operating activities. [...] Furthermore, the recognition of interest expense artificially inflates a company's financing costs. A company with no debt would present finance costs because it collects cash earlier. We do not believe this presentation would provide relevant information to users. (CL #283)

42. Some users were also concerned with that basis of presentation. For instance, one user stated:

> The resulting revenue and gross margin would include an interest component, which is not linked to cash inflows. If this provision is adopted as proposed, we would recommend the Boards mandate separate disclosure of the amount of imputed interest income included in revenue for every period (including interim periods). We believe the imputed interest should be separate from product sales and margins. (CL #965)

43. By clarifying when a significant financing exists, the staff thinks many of the presentation concerns on interest income and expense will be addressed because most contracts will not be regarded as having a significant financing component. Hence, the staff recommends retaining the Exposure Draft's proposal that the effect of financing should be presented separately from revenue. That is because the staff thinks that contracts with significant financing components have distinct economic characteristics—one relating to the transfer of goods or

services to the customer and another relating to a financing arrangement—and those characteristics should be accounted separately.

Private company considerations

44. The concerns raised by respondents from public companies on accounting for the effects of the time value of money were also shared by respondents from private companies. The staff thinks that the staff recommendations contained in this paper will equally address the concerns that respondents from private and public companies had with the time value of money proposals presented in the Exposure Draft.

Appendix A

Time value of money effects in a multiple element arrangement

A1. The following example illustrates one method that could be used to measure the transaction price for a multiple element arrangement.

Fact pattern

- An upfront cash payment of CU100
- Deliverable A is to be delivered in 2 years and has a standalone selling price of CU100 (i.e. customer would pay CU100 at day 1 for the deliverable to be delivered in 2 years)
- Deliverable B is to be delivered in 5 years and has standalone selling price of CU200
- Financing rate of 6%

Journal entries

DR Cash 100
CR Contract liability 100
To recognize the contract liability for the CU100 prepayment
(Note: The entity would not need to allocate the transaction price at this time. But, assuming a standalone selling price allocation was performed, the entity would allocate CU33 to A and CU67 to B)

DR Interest expense 12 (100 x 1.06^2 - 100)
CR Contract liability 12
To recognize the interest expense on CU100 at 6% for 2 years (from contract inception until the transfer of deliverable #1)

DR Contract liability 37 (112 total contract liability x 1/3 [deliverable A is one third of the total contract liability based on the initial selling price allocation])
CR Revenue 37 (33 initial allocation to A plus one third of the 12 increase in the contract liability)
To recognize revenue related to the transfer of deliverable A

DR Interest expense 14 (75 carrying amount of contract liability x 1.06^3 – 75)
CR Contract liability 14
To recognize the interest expense on the remaining contract liability of CU75 (112 – 37) at 6% for 3 years (years 3 – 5)

DR Contract liability 89
CR Revenue 89 (67 initial allocation to B plus interest related to B)
To recognize revenue related to the transfer of deliverable B