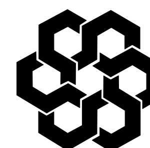

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International Accounting Standards Board

This document is provided as a convenience to observers at Financial Instruments Working Group meetings, to assist them in following the discussion. It does not represent an official position of the IASB. Board positions are set out in Standards.

Note: These notes are based on the staff paper prepared for the Financial Instruments Working Group Meetings. Paragraph numbers correspond to paragraph numbers used in the Financial Instruments paper. However, because these notes are less detailed, some paragraph numbers are not used.

INFORMATION FOR OBSERVERS

IASB Meeting: **Financial Instruments Working Group**
Paper: **Agenda Paper 8D**

Financial Instruments: Due Process Document (DPD)

Recognition and Measurement of certain contracts

PURPOSE OF PAPER

1. This paper discusses the fair value measurement of certain contractual financial instruments whose cash flows depend upon whether the other party to the contract exercises an option that would be beneficial to the entity. That is, the entity does not control whether the other party to the contract exercises that option. This paper examines:

    a. How a loan with a prepayment option should be measured and characterized from the holder's perspective, and

    b. How a credit card contract should be measured and characterized from the credit card company's perspective

2. This paper considers:

    a. The cash flows that should be used in measuring such contracts

    b. Whether different types of value in such contracts should be identified and, if so, whether they should be recognized and reported separately.

LOAN WITH PREPAYMENT OPTION

Background

3. The borrower, under the terms of the contract, has the right to repay the loan in whole or in part at any time it chooses before its stated contractual maturity. The stated monthly payment requirement actually is a minimum payment. That is, the borrower holds a call option over its own debt with an exercise price equal to the amount of unpaid principal and interest.

4. One reason that borrowers would exercise an option to call back a loan (prepay) is that they are able to re-issue the loan (or refinance) on similar terms at a more beneficial rate; that is, when market interest rates on comparable loans are below the interest rate on the existing loan instrument. (That motivation is similar to the motivation to exercise an in-the-money stock option.) If that were the only consideration, the borrower would always exercise its call option when market rates are below the contract rate and would never exercise that call option if market rates are not below the contract rate.

5. Obviously, however, there are many other factors that affect a borrower's decision about whether or not to prepay. For example, a borrower may decide to prepay even though it cannot refinance at a lower rate because the borrower may want to sell the collateral property or may have free cash that it cannot invest at a rate higher than the contract rate on the loan. A borrower may decide not to prepay when it could refinance at a lower rate because the time and effort required to refinance may make refinancing undesirable from the borrower's viewpoint. If

the borrower is an unsophisticated consumer, that borrower may not even be aware that current market interest rates are lower than the contract rate.

6. Market participants who hold prepayable loans as assets or are considering investing in prepayable loans ('market participants') consider all outcomes with nonzero probabilities. These possible outcomes will include prepayments and non-prepayments due to factors other than interest rates.

7. The U.S mortgage loan secondary market is deep and liquid, and price quotes are available daily for loans of different terms and to borrowers with different demographics. That market demonstrates unequivocally that investors base their prepayment assumptions on historically verifiable borrower behavior (prepayment speed statistics). To reiterate, fair value is based on observed prices, and observed prices of prepayable loans clearly include the effects of borrower prepayment behavior that the lender cannot compel and would not expect based purely on interest rates.

8. That analysis raises the following question: Should investors separately report the portion of the value of those prepayable loans that would not exist if borrowers were expected to exercise their options based solely on interest rates?

Possible approach A – report entire fair value as a single number

9. The entire fair value of the prepayable loan could be reported as a single number.

10. This would be consistent with the prices that market participants would set for the loan in any transfer. Market participants consider all expected cash flows in assessing fair value – including those that are expected to arise from the exercise or otherwise of an option that the holder of the instrument has written and therefore does not control exercise of.

11. Such an approach would also be consistent with the notion that the holder of the loan controls the contract, and can transfer the contract in a sale transaction.

Possible approach B – allocate entire fair value between two different assets

12. Alternatively, the entire fair value of the loan could be allocated between that value over which the investor has a contractual present right to and controls (the 'financial' portion), and that value that would not exist if borrowers were expected to exercise their options based solely on interest rates (the 'nonfinancial' portion).

13. The financial portion of the fair value of a prepayable loan would never be greater than the unpaid principal and interest balance. So, for a prepayable loan with a principal value of CU100, the financial portion would always be CU100 or less (plus any accrued interest).

14. A fair value for the loan above CU100 would only occur if the borrower's market interest rate was less than the contract amount. However, if that were so, the borrower "should" have repaid.

15. Allocating part of the entire fair value of the loan as a nonfinancial portion would require that:

    a. We describe the part of the fair value of the loan that relates to the nonfinancial portion (for example, as a customer relationship)

    b. We would also need to decide whether (for practical or other purposes) that nonfinancial portion is recognized and, if so, whether it is measured together with the part labeled as the right to benefit from an existing contract (or the financial portion).

16. Separating the nonfinancial part of the fair value of the loan would not necessarily be easy to do because some of the assumptions used in pricing stock options cannot be applied. For example, the assumption that a stock option will not be exercised until the expiration date because doing so sacrifices some time value clearly does not apply to the prepayment option. The prepayment option does not expire until the loan is prepaid in full, at which time, it has no value anyway. A different set of assumptions might have to be developed for each different type of prepayable loan. One particularly difficult assumption to develop would be an

interest rate “volatility” analogous to the stock price volatility in a stock option pricing model.

17. Given that the financial portion of the fair value of a prepayable loan would never be greater than the unpaid principal and interest balance, one way to separate would be to declare any value over the contractual amount due to be nonfinancial. However, that would be an imprecise estimate because the actual financial portion based on interest rate volatility could easily be less than the unpaid balance. It is also not clear what incremental benefit such a separation would provide to users even if it could be done precisely.

18. The argument for separating a portion of the value and reporting it as nonfinanical is based on the fact that the holder of the loan cannot compel the borrower to exercise or refrain from exercising the prepayment option. Said differently, a written option can only be a liability; any expected benefit that the holder might expect as a result of the option being exercised when it “should not” be, or not exercised when it “should” be, does not arise from the contractual rights that the holder has.

19. **Questions to members:**

    a. **Should the expected benefit to the holder of the loan arising from the expected exercise or otherwise of the prepayment option (the nonfinancial portion) be separated from entire fair value of the prepayable loan? If not, why not?**

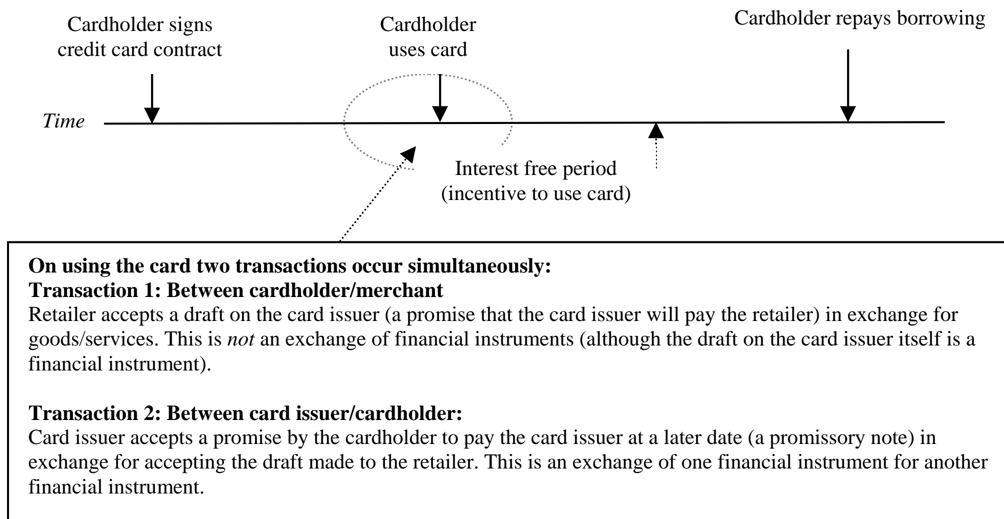
    b. **If you consider that a nonfinancial portion should be separated, then: (a) how would you separate and measure the nonfinancial portion? (b) what would you label the nonfinancial portion as? (c) would you recognize the nonfinancial portion?**

CREDIT CARD AGREEMENT

Background

20. To avoid confusion over *what* we are trying to measure in a credit card contract let us detail the option a credit card company writes to the holder of the credit card.

21. The following diagram provides a chronological representation of this option to borrow when the cardholder uses the card to purchase goods or services from a third-party retailer (the cardholder's option to "put" its own debt instrument to the card issuer in exchange for a payment directly to a merchant)[1] .



22. The credit card contract sets outs the terms of the promissory note (that is, the terms under which the cardholder can borrow money). Such terms might include an interest-free borrowing period as well as the right by the cardholder to extend the payment periods. However, it is important to note that we are not, in this paper, seeking to measure the promissory note itself (which includes an option

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[1] A card holder can also normally use the card to obtain cash advances from the card issuer. Such a cash advance would be an exchange of cash for a promise by the card holder to repay the credit card company. This exchange would meet the definition of a financial instrument.

very similar to the option in the prepayable loan described in the previous section of this paper).[2]

23. In this paper we are addressing the fair value that might be attributed to the option written by the card issuer under which the card issuer is obligated to exchange transaction 2 if and when the card holder decides to use their credit card. This option meets the definition of a *financial instrument*.

24. The credit card company also has a contractual agreement with the retailer[3]. The agreement with the retailer sets out the *payment terms* for any drafts on the card company that are accepted by the retailer when the card holder uses the card. Such payment terms usually include what is called an interchange fee, which means that the retailer who accepts the card receives less than face value when it presents the draft to the card company for payment. The typical discount is a few percentage points.

25. Interchange fees reduce the cash outflows of the credit card company relating to settlement of the draft, making the exercise of the option to borrow by the card holder economically attractive to the card company even if the cardholder pays immediately and incurs no interest charges. The interchange contract, which is between the retailer and a bank affiliated with Visa, MasterCard, or another card sponsor, has little or no value by itself. It is simply an agreement to participate in the card sponsor's network. Such contracts are available to any retailer or other merchant that meets predetermined criteria and agrees to follow the sponsor's processing requirements. Thus, those contracts are not scarce resources that result in assets or liabilities.

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[2] The credit card receivable requires a minimum payment computed using an implied term of several years, but the cardholder is permitted to pay in full at any time.

[3] In reality, the agreements will actually be between a company such as Visa or MasterCard and the retailer, with another agreement between the card issuer and a company such as Visa or MasterCard.

Transfers of contracts and factors that result in exercise of the option contract

26. Credit card contracts are occasionally transferred by one card issuer to another, and in all cases we are aware of, the entity receiving the contracts pays the entity giving up the contracts. Consequently, the only reasonable conclusion to draw is that the fair values of the contracts are positive which means they are assets.

27. Credit card contracts raise similar issues as prepayable loans, in that a written option appears to provide economic benefit to the option writer (the card issuer), but some of that benefit is derived from factors that might be considered to be nonfinancial (because card holders use their credit cards for reasons other than interest rate considerations – for example it may be more convenient or secure than other forms of payment).

Potential financial and nonfinancial value

28. Although the issue with credit card contracts is similar to the issue with prepayable loans, the nonfinancial value of a credit card contract is potentially much more significant. In fact, if a financial/nonfinancial split were applied to a credit card contract, the result would be a financial liability and nonfinancial asset. The financial liability would measure the unconditional obligation the card issuer has to enter into the exchange transaction in situations in which the expected fair value of that transaction would result in an economic burden (rather than benefit) for the issuer – such as the situation in which the credit quality of the card holder has deteriorated significantly since issuance of the card)

29. As noted previously, card holders usually use their cards (exercise their option to borrow) when interest rates on other loans with comparable terms are lower than the contractual rate on borrowings under the card. Thus, nearly all of the fair value of a credit card contract would be considered nonfinancial.

30. That discussion raises the following question:

Should card issuers separately report the portion of the value of a credit card contract with a cardholder that would not exist if cardholders were expected to exercise their options based solely on interest rate considerations?

Possible approach A – report entire fair value as a single number

31. Reporting the entire fair value of a credit card contract as a single asset arising from the right to benefit from an existing contract would be consistent with the notion that the holder of the credit card contract controls the contract, and can transfer the contract in a sale transaction. The contract clearly gives rise to an asset of the card issuer that appears to be viewed as a single asset by market participants.

Possible approach B – separate fair value between a financial liability and nonfinancial asset

32. Separating the value of the credit card contract into a financial liability portion and a nonfinancial asset portion would require standards to be established to identify the financial liability (the difference between that and fair value would be the nonfinancial asset). It would also require card issuers to implement the necessary systems to gather the required data to make the computation.

33. Separating the fair value of the credit card contract into a nonfinancial asset portion and a financial liability portion would be consistent with the argument that, because the holder of the asset cannot compel the cardholder to exercise its option to borrow, and the cardholder does not borrow solely because of interest rates, then any economic benefit attributed to that exchange transaction is not a financial asset.

Questions to members:

a. **Should the entire fair value of a credit card contract be measured and reported as a single asset? If so, should that be labeled a financial asset or a nonfinancial asset? Why?**

b. **Should the fair value of a credit card contract be considered to consist of a financial liability and a nonfinancial asset? If so, would you (a) recognize the nonfinancial asset? (b) if you would recognize the nonfinancial asset, would you report it together with, or separately from, the financial liability, and why?**

c. **If your view on credit card contracts is different from your view on prepayable loans, what is the reason for the difference?**