

Memo No. 1

MEMO

Issue Date **May 31, 2017**

Meeting Date(s) **TRG Meeting, June 12, 2017**

Contact(s)	Emily De Revere	Lead Author	Ext. 468
	Shayne Kuhaneck	Project Lead	Ext. 386
	Matt Esposito	Assistant Director	Ext. 377

Project	Transition Resource Group for Credit Losses		
Project Stage	Post-Issuance		
Issue(s)	Discounting Expected Cash Flows Using an Entity's Effective Interest Rate		

Disclaimer: *This paper has been prepared for discussion at a public meeting of the Transition Resource Group for Credit Losses. It does not purport to represent the views of any individual members of the Board or staff. Comments on the application of generally accepted accounting principles (GAAP) do not purport to set out acceptable or unacceptable application of GAAP. Stakeholders are strongly encouraged to listen to feedback about this staff paper from Topicom TRG members and Board members during the TRG meeting and to read the meeting summary, which will be prepared by the staff after the meeting.*

Memo Purpose

1. Stakeholders have informed the staff that there are questions about the guidance in Accounting Standards Update No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, regarding the outcome of using an entity's effective interest rate to discount expected cash flows when applying a discounted cash flow (DCF) method to estimate credit losses.
2. The issue discussed in this memo is similar to the issue discussed in Memo 2, "Scope of Purchased Financial Assets with Credit Deterioration Guidance for Beneficial Interests within Subtopic 325-40," in that the issue presented is related to whether expectations of prepayments should affect an entity's analysis. However, the issue discussed within this memo affects the measurement of the allowance for any entity utilizing a DCF method to estimate credit losses, while the issue in Memo 2 affects a scoping question.
3. This memo summarizes the implementation issues and provides staff analyses of those issues. The staff will seek input from members of the Transition Resource Group for Credit Losses (TRG) about these implementation issues.

Question for the TRG Members

1. Do the TRG members agree with the staff's view in this memo?

Background

4. The measurement objective of the current expected credit losses (CECL) methodology is to present the net amount expected to be collected on financial assets. The allowance for credit losses is a valuation account that is deducted from a financial asset's amortized cost basis to present that amount. Entities have flexibility in determining which method to use to determine their allowance for credit losses (that is, DCF methods, loss rate methods, etc.). However, if an entity chooses a discounted cash flow method, the amendments in Update 2016-13 provide specific guidance:

326-20-30-4 If an entity estimates expected credit losses using methods that project future principal and interest cash flows (that is, a discounted cash flow method), the entity shall discount expected cash flows at the financial asset's **effective interest rate**. When a discounted cash flow method is applied, the allowance for credit losses shall reflect the difference between the amortized cost basis and the present value of the expected cash flows. If the financial asset's contractual interest rate varies based on subsequent changes in an independent factor, such as an index or rate, for example, the prime rate, the London Interbank Offer Rate (LIBOR), or the U.S. Treasury bill weekly average, that financial asset's effective interest rate (used to discount expected cash flows as described in this paragraph) shall be calculated based on the factor as it changes over the life of the financial asset. Projections of changes in the factor shall not be made for purposes of determining the effective interest rate or estimating expected future cash flows.

Effective Interest Rate (as defined in the *FASB Accounting Standards Codification's*[®] Master Glossary)

The rate of return implicit in the financial asset, that is, the contractual interest rate adjusted for any net deferred fees or costs, premium, or discount existing at the origination of acquisition of the financial asset. For purchased financial assets with credit deterioration, however, to decouple interest income from credit loss recognition, the premium or discount at acquisition excludes the discount embedded in the purchase price that is attributable to an acquirer's assessment of credit losses at the date of acquisition.

5. Stakeholders noted the definition of effective interest rate (EIR) as the EIR that is utilized for interest income recognition. In most instances, the EIR that is used for interest income recognition does not consider expected prepayments.¹

¹ Exceptions include interest income models set forth in Subtopic 325-40, Investments—Other—Beneficial Interests in Securitized Financial Assets, and in paragraphs 310-20-35-26, 310-20-35-33, and 320-10-35-38.

6. Additionally, all financial assets (whether or not they are utilizing a DCF method) must measure expected credit losses over a specific term. Paragraph 326-20-30-6 states, in part:

326-20-30-6 An entity shall consider estimated prepayments in the future principal and interest cash flows when utilizing a method in accordance with paragraph 326-20-30-4. An entity shall not extend the contractual term for expected extensions, renewals, and modifications, unless it has a reasonable expectation at the reporting date that it will execute a troubled debt restructuring with the borrower.

Issue: Discounting Expected Cash Flows at the Effective Interest Rate

7. Stakeholders have highlighted that when there is an inconsistency in the loan term used to calculate the EIR as compared with the loan term used to project expected cash flows, the difference in term can drive a difference between the “net amount expected to be collected” and the amortized cost on a discounted basis. To illustrate this issue, the staff has developed a simple example. In this example, the staff assumes *no expected credit losses*. The staff acknowledges that this assumption is both unrealistic and, in certain cases, contrary to the requirements of the amendments in Update 2016-13; however, it is important to remove credit loss estimates from the illustration to highlight the issue.

Example—Prepayments

8. Consider a 5-year nonamortizing loan with a par value of \$100,000 and a coupon rate of 10 percent. Furthermore, assume that the holder expects (a) the borrower to prepay 50 percent of the loan at the end of the second year and (b) no credit losses. Contractual and expected cash flows are as follows:

	<u>Time 1</u>	<u>Time 2</u>	<u>Time 3</u>	<u>Time 4</u>	<u>Time 5</u>
Contractual Cash Flows	10,000	10,000	10,000	10,000	110,000
Expected Cash Flows	10,000	60,000	5,000	5,000	55,000

9. The EIR for this loan depends on whether the asset is held at a discount or a premium. Appendix A of this memo illustrates the following two scenarios:
 - (a) The loan was purchased at a discount for \$90,000.
 - (b) The loan was purchased at a premium for \$110,000.
10. Consider first the loan purchased at a discount for \$90,000. Panel A of Appendix A illustrates the loan’s amortization table based on contractual cash flows. Based on the contractual cash flows and the purchase price, the loan’s effective interest rate is 12.8 percent (the contractual EIR). Panel B illustrates the loan’s amortization table based on contractual cash flows with expected prepayments. Based on the contractual cash flows with expected prepayments and the purchase price, the loan’s effective interest rate is 13.9 percent (the adjusted EIR). When expected prepayments are considered against a loan purchased at a discount, the effective rate of return is *greater* than when expected prepayments are not considered.

11. Consider next the loan purchased at a premium for \$110,000. Panel C of Appendix A illustrates the loan’s amortization table based on contractual cash flows. Based on the contractual cash flows and the purchase price, the loan’s effective interest rate is 7.5 percent (the contractual EIR). Panel D illustrates the loan’s amortization table based on contractual cash flows with expected prepayments. Based on the contractual cash flows with expected prepayments and the purchase price, the loan’s effective interest rate is 6.6 percent (the adjusted EIR). When expected prepayments are considered against a loan purchased at a premium, the effective rate of return is less than when expected prepayments are not considered. The difference in calculated rates can be summarized as follows:

	Loan Purchased @ Discount	Loan Purchased @ Premium
EIR based on Contractual (i.e., Contractual EIR)	12.8%	7.5%
EIR based on Contractual + Prepayments (i.e., Adjusted EIR)	13.9%	6.6%

12. Unless an entity considers prepayments in determining interest income, the rate that is consistent with the definition of the effective interest rate is the contractual EIR. In this example, the EIR would be 12.8 percent for the loan purchased at a discount, and 7.5 percent for the loan purchased at a premium.

13. However, because there is an inherent difference (that is, the consideration of prepayments) between the cash flows used to determine the effective interest rate and the cash flows used to determine the net amount expected to be collected, the consideration of prepayments *alone* will drive a difference between the amortized cost basis and the net amount expected to be collected. The following table summarizes these differences in the context of the example provided:

	Loan Purchased @ Discount		Loan Purchased @ Premium	
	Discounted @ 12.8%	Discounted @ 13.3%	Discounted @ 7.5%	Discounted @ 6.6%
Amortized Cost Basis	90,000	90,000	110,000	110,000
Present Value of Contractual Cash Flows + Expected Prepayments	92,633	90,000	107,220	110,000
Difference	2,633 <i>(Column A)</i>	- <i>(Column B)</i>	(2,780) <i>(Column C)</i>	- <i>(Column D)</i>

14. In this example, prepayments alone would cause the net amount expected to be collected to be less than the amortized cost basis if the loan is held at a premium (Column C). Effectively, the recognition of the premium on a prepayable loan is accelerated when a discounted cash flow approach is used to measure expected credit losses. Therefore, an entity in this position would be required to record an allowance for credit losses under the amendments in Update 2016-13, *even though no credit losses are expected*.

15. When expected credit losses are introduced into a stream of expected cash flows, the phenomenon illustrated above does not change. If expected cash flows are discounted based on the contractual

EIR, the expectation of prepayments will *always increase* the allowance for credit losses for financial assets held at a *premium* (Column C), whereas the expectation of prepayments will *always offset* the allowance for credit losses held at a *discount* (Column A). Stakeholders consider these outcomes to be issues because this misalignment between the contractual life and estimated life does not appropriately isolate credit risk.

16. Conversely, if the stream of expected cash flows is discounted at the adjusted EIR, there is no difference between the present value of expected cash flows and the amortized cost basis (Columns B and D).
17. Stakeholders have pointed out that this issue is technically present under current guidance. Entities holding impaired loans subject to the impairment guidance within Subtopic 310-10, Receivables—Overall (originally issued as FASB Statement No. 114, *Accounting by Creditors for Impairment of a Loan*), are required to discount expected cash flows at the contractual EIR. However, loans subject to that guidance are generally insignificant compared with an entity's total portfolio of loans and are typically not held at substantial premiums. Therefore, the issue is not as acute as it is under CECL where a DCF methodology may be applied to any portfolio, including performing portfolios held at significant premiums.

Troubled Debt Restructuring

18. Pursuant to the Master Glossary definition of a troubled debt restructuring (TDR), a TDR is executed if there has been an adverse change in the borrower's credit:

Troubled Debt Restructuring

A restructuring of a debt constitutes a troubled debt restructuring if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider.

19. Changes in cash flows for a TDR may relate to interest rate concessions or changes in terms of the instrument, including the maturity date. Upon execution of a TDR, these changes in cash flows are considered to be driven by a credit event. To capture the change from the original contractual cash flows to the new contractual cash flows after executing the TDR as a credit loss, an entity must use the original contractual EIR as the necessary discount rate. Before the execution of a TDR, changes in expected cash flows for an expected TDR also are considered to be driven by credit. Therefore, the scope of the discounting issue mentioned above does not include TDRs because a TDR's effect on expected cash flows is due to credit.

Staff Analysis

20. The measurement objective of the CECL methodology is to present a financial asset's net amount expected to be collected, and the staff believes that to faithfully represent that amount, credit risk

should be isolated as the driver for the allowance for credit losses. Therefore, the staff does not believe that the consideration of prepayments *alone* should affect the allowance for credit losses.

21. However, the staff acknowledges that as interpreted, consideration of prepayments alone may overstate or understate the allowance for credit losses. Therefore, the staff notes that if an entity considers estimated prepayments in determining estimated cash flows in accordance with paragraph 326-20-30-6, the discounting of expected cash flows at the financial asset's effective interest rate adjusted for such prepayment estimates will result in greater precision when determining the allowance for credit losses. Furthermore, the staff adds that the adjusted EIR should be updated periodically to match any changes in prepayment expectations.
22. However, the staff notes that entities should be given the choice, through an accounting policy election, on whether they would like to use an adjusted EIR when using a DCF method to determine the allowance for credit losses for several reasons.
23. First, a very limited number of stakeholders have raised this issue primarily in the context of prepayable financial assets held at a significant premium because these few stakeholders are considering using a DCF approach on performing pools of loans to determine the relevant net amount expected to be collected. However, the circumstance in which this issue is most apparent is not pervasive because discount and premium balances are more commonly insignificant when compared with the total loan portfolio. Therefore, any effect on the allowance for credit losses related to the use of contractual EIR would be immaterial.
24. Second, as described in paragraph 17 above, this issue is technically present under current guidance for impaired loans. While a DCF approach is available to be used for performing loan pools, the staff understands that stakeholders will generally utilize their current approach and apply a DCF approach only for loans that have defaulted. Therefore, a *requirement* to consider prepayments in the discount rate would add complexity to the measurement guidance because that may necessitate significant system changes. This added complexity would not be justified by the benefits because use of the contractual EIR is currently acceptable.
25. Lastly, the amendments in Update 2016-13 allow different measurement methodologies. It would be therefore be inconsistent with the amendments to state that there is only one method to calculate a discount rate. Therefore, the staff notes that judgment in developing a discount rate should be allowed. Also, the staff adds that the Board intended for the amendments in Update 2016-13 to be scalable and that not all entities may have the systems to adjust contractual EIR for prepayments.
26. The staff notes that the accounting policy election to use an adjusted EIR should be made at the class of financing receivable level (as defined in the Master Glossary of the Codification). A class of financing receivables is a subset of a portfolio segment (as defined in the Master Glossary of the Codification). Practically, entities may elect to use an adjusted EIR at the portfolio segment level

because the use of an adjusted EIR may require significant systems changes. However, because the issue may not be acute across all classes of financing receivables within a portfolio segment, the staff does not believe that entities should be required to make the election at the portfolio segment level.