Norsk RegnskapsStiftelse



International Accounting Standards Board 30 Cannon Street London EC4M 6XH UK

Oslo, 30 June 2010

Dear Sir/Madam

Exposure Draft Amortised Cost and Impairment

Norsk RegnskapsStiftelse (the Norwegian Accounting Standards Board) appreciates the opportunity to comment on the Exposure Draft on Amortised Cost and Impairment.

We believe changes in the current amortised cost model is warranted and we would offer strong support to a model which is based on an expected loss approach. However, we believe the model proposed by IASB is unnecessary complex and also that this model to some extent fail to be in line with the classification criteria for using amortised cost in IFRS 9.

IFRS 9 will contain two models for measurement of financial assets, fair value and amortised cost. The requirements for using amortised cost are a business model based on the intention to collect the contractual cash flows from instruments containing basic loan features (basic loan features as defined in IFRS 9.4.2(b)). Once an instrument with basic loan features becomes impaired we believe the intention of holding the instrument will change. As such we believe instruments which are individually impaired (in the meaning that it is more probable than not that at least some contractual cash flows will not be collected) should not be considered to be instruments which are held to collect contractual cash flows. Hence we would ask IASB to reconsider whether the amortised cost measurement category should include financial assets that have become individually impaired.

We have in appendix A to this letter inserted a more detailed description of an alternative model which in our view would be more principle based since it captures only instruments held to collect contractual cash flows, and with a different approach to recognising changes to expected cash flows.

We believe the "expected cash flows" should be assessed and estimated on a portfolio level. The reason being that the estimate at inception of each individual financial asset would be that the full contractual payments would be received over the life of the asset, otherwise it is unlikely that the financial asset has been originated within a business model that qualify for amortised cost. However, for a portfolio of assets the assessment would likely be different since it is expected, even at inception, that some of the contractual cash flows from the portfolio would not be received even though it may not be known which specific assets in the portfolio that will not perform. As such, it could be argued that it makes more sense to apply



the expected loss approach on initial recognition and in subsequent measures on a portfolio level.

Our responses to the questions raised by IASB are attached in Appendix B to this letter.

Please do not hesitate to contact us if you would like to discuss any specific issues addressed in our response, or related issues, further.

Yours faithfully,

Erlend Kvaal

Chairman of the Technical Committee on IFRS of Norsk RegnskapsStiftelse

Appendix A: Alternative model recommended by the Norwegian Accounting Standards Board

Appendix B: The Norwegian Accounting Standards Board's response to the questions asked in the ED

Appendix C: Excel model comparing the alternative model with the staff example of the exposed model



Appendix A

Alternative Model recommended by the Norwegian Accounting Standards Board

Background¹

IFRS 9 contains two models for measurement of financial assets, fair value and amortised cost. Financial assets not measured at amortised cost will be measured at fair value and visa versa. In this respect it is important to develop clear and precise principles for distinguishing between these two measurement categories, hence the objective of the amortised cost model has to be assessed on this background.

What is then the "amortised cost"?

⇒ A method of spreading income (interest income less expected impairment) and expenses over the holding period of a financial asset or financial liability².

Before we elaborate further on the content of amortised cost, taking into consideration the aim of reducing complexity, the goal of internal consistency and the constraint of cost and benefits of different alternatives, we should consider:

- A) When is amortised cost considered³ more relevant than fair value?
 - ⇒ When the financial instrument is held to receive contractual cash-flows over the expected term of the instrument,

and

- B) When is amortised cost not to be applied?
 - ⇒ When the contractual cash-flow of the financial instrument represents something else than repayment of principal and interest payment on outstanding principal.
 - ⇒ When the business model relevant for the holding of the financial instrument is something else than to hold the instrument to expected contractual maturity and to receive contractual cash-flows in the period up to and including expected contractual maturity.

Further on the scope of amortised cost

Based on the present wording of IFRS 9 it could be questioned if the business model relevant for the holding of a financial instrument is consistent with measurement at amortised cost if for that specific financial instrument the entity is not foreseeing to receive or pay all contractual cash-flows in the period up to and including expected contractual maturity. This assessment has to be made at each reporting date.

Judgement must be applied in determining whether a financial instrument or a portfolio of financial instruments is held as part of a business model qualifying for amortised cost.

The following are indicators that a <u>financial instrument</u> is not held as part of a business model qualifying for amortised cost:

⇒ The probability of receiving or paying all contractual cash-flows of the financial instrument up to and including expected contractual maturity is less than 50 percent.

¹ In this appendix expected is defined as the probability weighed expected outcome of an uncertain future cash-flow or event.

² Going forward we will in this appendix focus the discussion on financial assets.

³ In a modified IFRS 9 model as indirectly laid out in this appendix.



- ⇒ The financial instrument is held in a separate portfolio consisting of financial instruments which due to increased risk of non-performance has been separated from the portfolio in which it was previously managed to receive a special management aimed at recouping maximal possible cash-flow as opposed to all contractual cash-flows.
- ⇒ The entity is in process of renegotiating or marketing the financial instrument in a way that reflects a significant expectation of not receiving or paying all remaining contractual cash-flows on the instrument up to and including expected contractual maturity.
- The contractual payments on the financial instrument are past-due and the entity has transferred it to a portfolio of non-performing financial instruments that are managed differently from financial instruments in which the entity foresees to receive all contractual cash-flows up to and including expected contractual maturity.

The following fact patterns are in isolation not inconsistent with a business model qualifying for amortised cost:

- A financial instrument that is part of a portfolio of financial instruments managed together based upon the assumption that all contractual cash-flows up to and including expected contractual maturity is to be paid or received, but where at a portfolio level an expectation exists that not all contractual cash-flows up to and including expected contractual maturity is to be paid or received.
- A downgrading of a financial instrument indicated that it is a increased risk that not all contractual cash-flows up to and including expected contractual maturity is to be paid or received, but the entity still managed the cash flows based upon an expectation that the counterpart will meet its contractual obligations.

The following are indicators that a <u>portfolio of financial instruments</u> might not be held as part of a business model qualifying for amortised cost:

- ⇒ The portfolio is managed by a unit or group within the entity that focus on managing high risk loan or loans in default.
- ⇒ The portfolio is acquired at a price that indicates that significant contractual cashflows identifiable on a single asset level are not expected to be honoured.
- A portfolio of financial instruments is managed based on the explicit assumption that contractual cash-flows are not to be received or paid.
- ⇒ Interest rate risk management is significantly adjusted to take into consideration credit related non-performance risk.

Amortised cost model

We believe an effective interest rate model with reassessed expected losses is an appropriate model for amortised cost measurement. Some of the specifics related to this model include:

- ⇒ Impairment is only to be recognised on recognised financial assets.
- ⇒ Impairments are to be recognised using an allowance account.
- ⇒ Financial assets measured at amortised cost are to be presented at amortised cost that is net of impairments in the statement of financial position.
- ⇒ Impairment of assets continuing to be measured at amortised cost is only recognised at a portfolio level.
- ⇒ Impairment is the incurred time fraction of the net present value of contractual cashflows not expected to be received, that is the expected losses, up to and including expected contractual maturity.



- ⇒ The standard should not regulate further technically how impairment is to be calculated.
- ⇒ The discount rate used in measuring impairment could be either the reassessed effective discount rate at the level of the individual asset or at the level of the portfolio, the contractual effective interest rates, or a risk-free interest rate.
- ⇒ The entity has to evaluate and document its assessments of how assets that are derecognised or reclassified from amortised cost to another category effect impairment of financial assets belonging to the relevant portfolio(s) that continues to be measured at amortised cost.

Issues relating to reclassification

The proposed model will require reclassification between amortised cost and an "impairment category" when a financial asset or financial liability no longer qualifies for amortised cost. This might be the situation when an entity assesses that for a specific financial asset it does no longer expect to receive all contractual cash inflows due to credit deterioration.

- ⇒ A decrease in the carrying amount resulting from a financial asset transferring from being recognised at amortised cost to being recognised as an "impaired asset" is to be presented as impairment in the statement of comprehensive income.
- ⇒ If an entity has classified a financial assets at fair value per IFRS 9.4.2(b) and now expects to receive or pay all remaining contractual cash-flows up to and including expected contractual maturity and thus is applying a business model reflecting this expectation the financial instrument is to be measured at amortised cost using fair value at that date as a deemed cost.

List of benefits

In our view the proposed model features the following important benefits:

- ⇒ Most institutions manage their financial assets on the basis of open portfolios. Since our understanding is that IASB's ECF approach requires a closed portfolio, that is a steady population of items, it is not in accordance with how most financial and non-financial institutions manage their business. In contrast our model will work well on both open and closed portfolios, and thus reflect the operations of businesses.
- ⇒ In the discussions of the Expert Advisory Panel one of the operational difficulties that have been identified with the IASB's ECF approach is that it features an integrated EIR calculation that would require integration of the data in the accounting and risk systems, data that financial institutions store under separate systems today. In our model this operational issue is not present because the calculation of the effective interest rate is decoupled from the calculation of impairment. Respondents to the IASB's Request for information have also raised concerns about the necessary system changes and how variable rate instruments would be treated. Since our model is build on a "decoupling" approach it will be easier to apply to variable rate instruments, and will require minimal requirements for changes in existing IT systems. Because of this it could also be implemented with a short lead-time.
- The proposed model maximises the use of data known to the reporting entity (effective interest rate based upon contractual versus expected cash flows thus also no reestimate of estimated effective interest rates neither at instrument nor portfolio level, impairment based upon expected losses on a portfolio level versus based upon expected cash flows at instrument level). We expect that it will be easy to estimate fair value of individually impaired financial assets as the entity will already have at hand



- identified expected cash flows, generally the cash flows will be of short duration or in the case of traded bonds there will be market data available.
- □ In the basis for conclusions to the ED, impairment based on fair value is rejected by the IASB on the grounds that it is considered inconsistent with a cost-based approach. Under our proposed model this basis for rejection is not valid. This is because we argue that a cost-based approach in itself is not appropriate for individual identified impaired loans under the Business model approach in IFRS 9. Our proposed model therefore contributes to an internal consistent model for financial instruments both as to when amortised cost is to be applied and in the calculation of amortised cost.
- The application guidance to the ED includes in B17 a practical expedient that is given in order to facilitate a cost-effective and simplified way of determining amortised cost. Since our model is largely consistent with that method, we believe that our proposal will reduce complexity and at the same time result in an outcome that is an appropriate approximation of the outcome that would result from applying the method in the exposure draft.

Please see the attached excel file for a further explanation of the alternative model proposed and a comparison of this model with the example provided by IASB staff of the exposed model.



Appendix B

The Norwegian Accounting Standards Board's response to the questions asked in the ED

Objective of amortised cost measurement (paragraphs 3–5) Question 1

Is the description of the objective of amortised cost measurement in the exposure draft clear? If not, how would you describe the objective and why?

As described in the front letter and in appendix A we believe that amortised cost measurement should only be used for instruments which meet the classification criteria in IFRS 9; ie that instruments are held to collect contractual cash flows. As such we believe individually impaired loans and receivables would not meet the "held to collect contractual cash flows" test and that accounting for these instruments should not be combined with the accounting for financial instruments which are not individually impaired. For a more elaborate description of our views on this we refer to appendix A.

Based on this we do not agree with the description of the objective of amortised cost measurement in the exposure draft since we believe it is not fully consistent with the basic principles in IFRS 9.

Also, the objective of amortised cost measurement needs to be clear both for the amortised cost measurement of assets and the amortised cost measurement of liabilities. In the proposed wording in paragraph 3 "effective return" is used to describe this objective. This expression is not defined and although it is easy to understand "effective return" if we consider an asset we question whether this wording is suitable regarding the objective for measurement of liabilities. In our view "effective return" is not commonly used in the context of measurement of financial liabilities, hence we would request the Board to rewrite the objective to make the objective of amortised cost measurement for financial liabilities clearer.

Ouestion 2

Do you believe that the objective of amortised cost set out in the exposure draft is appropriate for that measurement category? If not, why? What objective would you propose and why?

We believe that the methodology for the calculation of amortised cost should be made separately from the measurement of impairment charges. Therefore we believe that the last part of the sentence in paragraph 5 should be deleted: "as well as the initial estimate of expected credit losses on a financial asset". Our proposed methodology (as described in appendix A) would also align the measurement objective of amortised cost for both assets and liabilities. We are also convinced that such choice of methodology will make it easier for the users of the financial statements to predict future cash flows, thereby better fulfilling the objective described in paragraph 1 "useful information to users of financial statements for their assessment of the amounts, timing and uncertainty of future cash flows".

In addition, the costs of implementing and applying the principles and approaches proposed in the exposure draft may be higher than the expected benefits. We are uncertain as to whether



the precision requested in the exposure draft is possible to apply in order to receive the best and most accurate estimate. We believe it is difficult (and sometimes impracticable) to assess and set a timing for probability weighted expected losses on individual loan engagements. We envisage that it would only be in rare circumstances entities would be able to have a reliable estimate on the timing of expected future losses, especially at inception of the loan engagement. In most cases we believe entities are predicting estimated losses on a portfolio level, and that the expectation is not materialized in cash flows at given times, but more as an estimate of the size of future credit losses.

However, the "concept" of a portfolio also needs to be further developed or elaborated upon in the exposure draft. In order to secure a consistent application it is important to clarify how a portfolio approach should be applied. In the model proposed in the ED the initial estimate of expected credit losses is critical since the current proposal would not allow an entity to change this estimate on subsequent measurement. All subsequent reassessments would be recognised in comprehensive income immediately. As such, it is essential that the approach on initial recognition represents the best estimate, and we believe such an estimate would more often be obtained using a portfolio approach rather than to use a "single asset" approach.

Measurement principles (paragraphs 6–10) Ouestion 3

Do you agree with the way that the exposure draft is drafted, which emphasises measurement principles accompanied by application guidance but which does not include implementation guidance or illustrative examples? If not, why? How would you prefer the standard to be drafted instead, and why?

In principle we believe it is important to have clear and precise measurement principles accompanied by an equally clear and precise application guidance in order to secure or facilitate a consistent approach throughout different jurisdictions and different entities applying IFRS. However we also believe it is important to include illustrative examples and implementation guidance. We acknowledge that IASB has set up an expert panel which will help out in this respect, but nevertheless we believe the application of the standard in a consistent manner is dependent upon clear guidance and good illustrative examples which consider the practical implications of applying the requirements in the exposure draft.

We would also ask the Board to consider whether paragraph 9 in the exposure draft is justified. In our view this paragraph is not necessary and could be deleted.

Question 4

- (a) Do you agree with the measurement principles set out in the exposure draft? If not, which of the measurement principles do you disagree with and why?
- (b) Are there any other measurement principles that should be added? If so, what are they and why should they be added?
- a)
 On an overall basis, we believe that the measurement principles should provide decision useful information to debt and equity investors. As such we believe that an expected loss model represents an improvement compared to current requirements in IAS 39. An incurred



loss model would always bear the risk of recognizing losses later than most users and regulatory authorities would view as optimal. An expected loss approach would in many instances have a conceptually sounder starting point than an incurred loss model.

We have stated elsewhere in this response that we believe the amortised cost model should only be applied on financial instruments which are not impaired since impaired financial instruments would not pass the "held to collect contractual cash flows" criteria. We would therefore ask IASB to reconsider the accounting for impaired instruments.

There are also several aspects of the proposed model we would urge the Board to clarify and make more explicit in order to increase a common understanding on how the proposed changes should be applied. The increased use of unobservable input combined with removing the "incurred loss trigger" would automatically increase the use of management judgements in the financial statements. As a consequence of this we would like to see more elaborated principle based guidance on the application of the proposed expected loss model. We acknowledge that it is difficult to develop requirements related to assessing forward looking information which would lead to consistent application.

In addition we believe it is important to consider whether the proposed accounting for effects of changes in estimates would represent the most decision useful information for the primary users or whether other approaches would be better. In the proposal, expected credit losses would be estimated at the inception of the asset and then at each subsequent measurement date. No gain or loss would be recognized at inception since the estimated initial expected loss would be allocated over the expected life of the asset. Gains or losses arising as a consequence of subsequent reassessment would be recognized immediately in the statement of comprehensive income. We do not agree with this approach. Estimates of future credit losses are subject to many uncertain factors which potentially could vary much from one period to the other. As expressed above (under 2) it is in our view difficult to assess and set the timing for expected losses on initial recognition. In many instances a more precise estimate is possible to make as the assets matures. We would therefore prefer a model where the initial estimate is updated at subsequent measurement dates in order to reflect the best estimate. It is clearly expressed in IAS 8.36 that a change in accounting estimate "shall be recognised prospectively by including it in profit and loss in (a) the period of the change, if the change affects that period only, or (b) the period of the change and future periods if the change affects both."

Both the initial estimate and subsequent assessment of expected credit losses would impact the effective return of the asset. As such, we would ask the Board to clarify why subsequent reassessments should be recognized immediately in the statement of comprehensive income instead of updating the initial estimate made. The latter approach would imply that the portion of "gain or loss" related to future cash flows should be amortised over the remaining life of the asset.

It follows from paragraph 7 in the exposure draft that "Amortised cost reflects at each measurement date current input regarding the cash flow estimates." This is further elaborated in Appendix B paragraph B8 of the exposure draft from which the following is excerpted;

"Historical data such as credit loss experience are adjusted on the basis of current observable data to reflect the effects of current conditions that did not affect the period on



which the historical data are based (...) Estimates of changes in expected cash flows reflect and are directionally consistent with changes in related observable data from period to period (such as changes in unemployment rates, property prices, commodity prices, payment status or other factors that are indicative of credit losses on the financial asset or in the group financial assets and their magnitude.)"

This should be further clarified. For example, the unemployment rate in Norway in December 2009 was 3.3 %, but expectations at that point in time were that the unemployment rate would rise to higher levels. If this rate affects impairment should then the assessment as of December be based on the current observable rate or expectations about increases in the unemployment rate in future periods (when the asset matures.)?

In order to clarify the principle underlying estimations of future cash flows we should therefore ask the Board to clarify whether;

- The estimation of future cash flows should be based on conditions existing at the balance sheet date or whether (for instance observable unemployment rates, observable prices etc)
- The estimation of future cash flows should be based on expectations of future changes in conditions existing at the balance sheet date.

We acknowledge that the latter approach would increase the use of management judgements in the estimates, but at the same time we also believe that information should be included in the assessment of future credit losses.

As described under a) we believe impaired financial instruments would not meet the criteria in IFRS 9 with regards to be classified in a category where amortised cost would be the measurement attribute. This is further elaborated in appendix A.

Objective of presentation and disclosure (paragraphs 11 and 12) Question 5

- (a) Is the description of the objective of presentation and disclosure in relation to financial instruments measured at amortised cost in the exposure draft clear? If not, how would you describe the objective and why?
- (b) Do you believe that the objective of presentation and disclosure in relation to financial instruments measured at amortised cost set out in the exposure draft is appropriate? If not, why? What objective would you propose and why?

We believe the description of the objective and disclosure in relation to financial instruments measured at amortised cost has to be more precise and more aligned with the objective of amortised cost. In this respect we also question whether the current wording gives a precise and accurate description. The "financial effect" is in our view not a very precise description. Also, we believe "the quality of financial assets" should be further clarified.



Presentation (paragraph 13)

Question 6

Do you agree with the proposed presentation requirements? If not, why? What presentation would you prefer instead and why?

We have some comments related to the proposed presentation requirements, but in principle we broadly agree with the proposal.

We acknowledge that practical expedients already included in the current proposal can justify a simplified approach for those entities where the effect of discounting is immaterial. Therefore we believe that it is rational to have the same presentation requirements regardless if the business model is earn interest income or if interest income is just a minor part of the income for the entity.

However, we presently fail to understand why the extra burden imposed on the calculation of the effective interest rate by introducing a requirement to calculate the effect interest rate both for contractual and expected cash flows are motivated. We therefore urge the Board to clarify why this additional burden on preparers (compared to current requirements) is necessary.

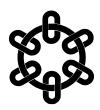
Disclosure (paragraphs 14–22) Ouestion 7

- (a) Do you agree with the proposed disclosure requirements? If not, what disclosure requirement do you disagree with and why?
- (b) What other disclosures would you prefer (whether in addition to or instead of the proposed disclosures) and why?

a) and b)

We broadly agree with the principles underlying the proposed disclosure requirements but believe that further refinement is needed in order to make sure that the requirements meets the information requirements from primary users and stays relevant in situations of open portfolios. In particular we are concerned of the lack of information related to the segregation (if any) into portfolios. We believe it is important to understand and have transparency into which particular portfolios entities have grouped their financial instruments subject to amortised cost.

We believe that it is questionable as to whether disclosing stress testing information (paragraph 20) would give primary users decision useful information. The disclosure requirements could in some instances incentivise entities to not perform severe stress testing, but instead use internal stress testing that produces a desired outcome since the disclosure requirement is linked to internal risk management procedures. Furthermore, stress testing is normally made of an estimated future performance. There might be severe legal risks in certain jurisdictions to display such information. It is normally also part of the hearth of the business which may be damaging for the entities competitive advantage to display such information to competitors. Also, we would like the Board to clarify what would qualify as "stress testing" for the purpose of disclosure requirements.



Effective date and transition (paragraphs 23–29) Question 8

Would a mandatory effective date of about three years after the date of issue of the IFRS allow sufficient lead-time for implementing the proposed requirements? If not, what would be an appropriate lead-time and why?

We believe a mandatory effective date of three years after the requirements are issued would allow sufficient lead-time for implementing the new requirements. We would however ask the Board to clarify whether implementation is dependent upon adopting other phases of IFRS 9.

Question 9

- (a) Do you agree with the proposed transition requirements? If not, why? What transition approach would you propose instead and why?
- (b) Would you prefer the alternative transition approach (described above in the summary of the transition requirements)? If so, why?
- (c) Do you agree that comparative information should be restated to reflect the proposed requirements? If not, what would you prefer instead and why? If you believe that the requirement to restate comparative information would affect the lead-time (see Question 8) please describe why and to what extent.

a), b) and c)

We do not agree with the proposed transition requirements since we believe retrospective application would increase the burden on preparers on initial application and could in some instances make the required lead-time to implement the proposal to short. We believe a simplified approach could be justified in order to make the implementation period as short as possible and also in order to make as many preparers as possible able to implement the new requirements earlier than they otherwise would be able to do. As such we would favour a solution where comparative information were not restated and where expected credit losses were included in the initial estimate.

As explained in our answer above we would prefer a model were the initial estimates were updated in subsequent periods. Such a model would be easier to implement.

Ouestion 10

Do you agree with the proposed disclosure requirements in relation to transition? If not, what would you propose instead and why?

We do not agree with the proposed disclosure requirements related to transition. We believe the requirement proposed in paragraph 28 is burdensome to fulfil and we do not see that this information provides decision useful information to primary users. If IASB would like to keep paragraph 28 in the final version we would request IASB to include a description of why the benefits of such disclosures outweigh the cost of producing it.



Practical expedients (paragraphs B15–B17) Question 11

Do you agree that the proposed guidance on practical expedients is appropriate? If not, why? What would you propose instead and why?

We support the inclusion of practical expedients in the proposal and we believe the proposed guidance on practical expedients is appropriate. However, we believe further guidance is needed. See our answer below.

Question 12

Do you believe additional guidance on practical expedients should be provided? If so, what guidance would you propose and why? How closely do you think any additional practical expedients would approximate the outcome that would result from the proposed requirements, and what is the basis for your assessment?

We believe additional guidance on practical expedients should be provided. The proposals included in the exposure draft would significantly change the current accounting for financial instruments measured using amortised cost. As such we believe the proposal would represent considerable operational challenge for many entities, hence practical expedients are necessary in order to ensure a less costly and more efficient transition to a new standard than otherwise would be the outcome. The Expert Advisory Panel would probably develop further practical guidance in this respect. We would especially welcome more guidance related to non financial institutions since we are of the opinion that many of these entities would find the new requirements burdensome and would like further guidance in relation to the application of "immaterial". This should especially be considered for disclosure requirements where the practical expedients included in the proposal provides little relief for non financial institutions.

We believe it is important to conclude and finalise the objective and measurement principles related to amortised cost before further guidance is developed.

Additional comment

We would like to bring to the attention of IASB that there is a technical incorrectness in the description in paragraph B1. Please consider the following financial instrument that for the sake of this argument is measured at amortised cost and have the following features. It is initially issued at par. It is repaid at par after 4 years. It is AAA rated. It has a predetermined annual interest rate of 3 % for the first 2 years and 4 % for the last two years. Based upon this it has an effective interest rate of 3.4829 %. The amortised cost value at end of year 1, 2 and 3 can not be reached by applying the description in paragraph B1 (nor the current description in IAS 39.9).

Appendix C: Excel model comparing the alternative model with the staff example of the exposed model

This example demonstrates the calculation mechanics of our proposed approach on fixed rate financial instruments. It is build on the IASB staff examples posted on the IASB webpage under the title *Amortised cost and impairment of financial assets*. Assumptions are adjusted to aggregate to the same assumptions that is assumed in the IASB staff example.

This example illustrates a pool of 100 loans with nominal amount of 10 000 per loan, a contractual interest rate of 10% and a maturity of 5 years.

At the end of period 2, the originally expected loss estimates are revised in order to reflect higher per annum defaults than originally expected. As a consequence, the allowance account at the end of period 2 is adjusted to reflect the revised estimates. No further adjustments are made in periods 3 to 5 as there are no further revisions of estimates, neither for individually identified impaired loans or the portfolio. The change in the allowance account is due to changes in the risk-free interest rates, the time fraction and individual loans being transferred out of measurement at amortised cost to measurement at fair value

At the end of period 3 the bank incurs a loss of 2 000 on 10 identified loans. The expected future losses on these loans are 3 552 in period 4 and 88 746.20 in period 5. These loans are no longer managed under a business model with the intention to collect the contractual cash flows and they are therefore now measured at fair value. The rest of the expected losses, that is 2 368 in period 4 and 59 164,2 in period 5, are linked to the portfolio (not identified to specific loans).

At the end of period 4 the bank incurs a loss of 5 920, which 2 368 are related to 5 new identified loans. The expected loss in period 5 on these loans are 44 373.10. The rest of the expected loss in period 5 are linked to the portfolio and the other previously individually identified loans.

In the last period the bank incurs a loss of 147 910.40, which 14 791 are related to 2 new identified loans. The bank no longer expects losses on the loans in the portfolio.

IASB MODEL

P&L	1	2	3	4	5
Gross interest revenue	100 000	100 000	100 000	100 000	100 000
Initial expected credit losses allocated to the period	-11 603,94	-12 629,68	-19 745,00	-21 313,58	-22 674,32
Net interest revenue	88 396,06	87 370,32	80 255,00	78 686,42	77 325,68
Gains and losses resulting for changes in estimates	-	-67 863,88	-	-	-0,00
Interest expense	-	-	-	-	-
Profit before income tax	88 396,06	19 506,44	80 255,00	78 686,42	77 325,68
Balance sheet					
Loan	988 396,06	907 902,50	890 157,50	874 763,92	0
Cash	100 000,00	200 000,00	298 000,00	392 080,00	1 344 169,60
Total assets	1 088 396,06	1 107 902,50	1 188 157,50	1 266 843,92	1 344 169,60
Equity	1 088 396,06	1 107 902,50	1 188 157,50	1 266 843,92	1 344 169,60
Total equity and liabilities	1 088 396,06	1 107 902,50	1 188 157,50	1 266 843,92	1 344 169,60

Reconciliation of allowance account	1	2	3	4	5
Opening balance allowance	=	11 603,94	92 097,50	109 842,50	125 236,08
Allocation of initial expected credit losses	11 603,94	12 629,68	19 745	21 313,58	22 674,32
Increase/decrease due to changes in loss estimates	-	67 863,88	-	-	-0,00
Recorded loss/Reversals	-	-	2 000	5 920	147 910,40
Closing balance allowance	11 603,94	92 097,50	109 842,50	125 236,08	-

ALTERNATIVE MODEL

		_	_		_
P&L	1	2	3	4	5
Interest income	100 000	100 000	100 000	90 000	85 000
Credit loss (expense)/recovery allowance	-10 842,09	-40 868,79	9 172,86	20 214,03	11 009,96
Net interest income	89 157,91	59 131,21	109 172,86	110 214,03	96 009,96
Loss/recovery due to reclassification	-	-	-68 481,59	-39 609,00	-14 443,02
Net interest income after credit loss expense	89 157,91	59 131,21	40 691,27	70 605,03	81 566,94
Fair value changes	-	=	=	1 446,94	1 570,30
Profit before income tax	89 157,91	59 131,21	40 691,27	72 051,96	83 137,25
Balance sheet					
Loans at amortised cost	989 157,91	948 289,12	865 772,44	838 642,02	=
Loans at fair value	-	-	25 207,96	30 310,34	-
Cash	100 000	200 000	298 000	392 080	1 344 169,60
Total assets	1 089 157,91	1 148 289,12	1 188 980,39	1 261 032,35	1 344 169,60
Equity	1 089 157,91	1 148 289,12	1 188 980,39	1 261 032,35	1 344 169,60
Total equity and liabilities	1 089 157,91	1 148 289,12	1 188 980,39	1 261 032,35	1 344 169,60

Reconciliation of allowance account	1	2	3	4	5
Opening balance allowance	=	10 842,09	51 710,88	34 227,56	11 357,98
Write-offs/Reversals	=	-	-8 310,46	-2 655,55	-348,02
Increase/(decrease) in credit loss allowances and provisions recognized in the					
income statement	10 842,09	40 868,79	-9 172,86	-20 214,03	-11 009,96
Closing balance allowance	10 842,09	51 710,88	34 227,56	11 357,98	-

10 000,00 Nominal amount of each loan

10 % Coupon interest rate

100 # loans

1 000 000,00 Total lending volume

10 % EIR (excluding future losses)

8,840 % EIR (expected cash flow approach)

Initial Default Rates Period	Contr	actual CF	Per annum	Cumulative	Expected CF%	Expected CF
		-1 000 000,00	Ter annum	Camalative	Expected Ci 70	-1 000 000,00
	1	100 000,00	0,00 %	0,00 %	100,00 %	•
	2	100 000,00	0,00 %	•	•	· ·
	3	100 000,00	1,00 %	•	•	•
	4	100 000,00	2,00 %	•	•	•
	5	1 100 000,00	3,00 %	•	· ·	•
Updated Default Rates (end of period 2)			2,00 /-		3 .,== /3	2 000 200, 10
Period	Contr	actual CF	Per annum	Cumulative	Expected CF%	Expected CF
	3	100 000,00	2,00 %	2,00 %	98,00 %	98 000,00
	4	100 000,00	4,00 %	5,92 %	94,08 %	94 080,00
	5	1 100 000,00	8,00 %	13,45 %	86,55 %	952 089,60
Amortised cost, interest revenue and gain/loss from revis	ion of e	stimates				
					Balance before re	-
Dowland	_					
Periou	Open	ing balance	Interest revenue	Cash flows	estimate	Impairment loss
	Open 1	1 000 000,00	Interest revenue 88 396,06		988 396,06	•
	•	•		100 000,00		-
	1	1 000 000,00	88 396,06	100 000,00 100 000,00	988 396,06	- -67 863,88
	1 2	1 000 000,00 988 396,06	88 396,06 87 370,32	100 000,00 100 000,00 98 000,00	988 396,06 975 766,38	-67 863,88 -
	1 2 3	1 000 000,00 988 396,06 907 902,50	88 396,06 87 370,32 80 255,00	100 000,00 100 000,00 98 000,00 94 080,00	988 396,06 975 766,38 890 157,50	-67 863,88 -
	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50	88 396,06 87 370,32 80 255,00 78 686,42	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60	988 396,06 975 766,38 890 157,50 874 763,92	- -67 863,88 - - -
P&L	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60	988 396,06 975 766,38 890 157,50 874 763,92	- -67 863,88 - - -
P&L Gross interest revenue	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50 874 763,92	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68 2	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60 2 3 100 000,00	988 396,06 975 766,38 890 157,50 874 763,92 - 4 100 000,00	-67 863,88 - - - - - 5 100 000,00
P&L Gross interest revenue Initial expected credit losses allocated to the period Net interest revenue	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50 874 763,92 1	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68 2	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60 2 3 100 000,00 (19 745,00)	988 396,06 975 766,38 890 157,50 874 763,92 - 4 100 000,00	-67 863,88 - - - - - 5 100 000,00
	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50 874 763,92 1 100 000,00 (11 603,94)	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68 2 100 000,00 (12 629,68)	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60 2	988 396,06 975 766,38 890 157,50 874 763,92 - 4 100 000,00 (21 313,58)	-67 863,88 - - - - - 5 100 000,00 (22 674,32)
P&L Gross interest revenue Initial expected credit losses allocated to the period Net interest revenue	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50 874 763,92 1 100 000,00 (11 603,94)	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68 2 100 000,00 (12 629,68) 87 370,32	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60 2	988 396,06 975 766,38 890 157,50 874 763,92 - 4 100 000,00 (21 313,58)	-67 863,88 - - - - - 5 100 000,00 (22 674,32) 77 325,68
P&L Gross interest revenue Initial expected credit losses allocated to the period Net interest revenue	1 2 3 4	1 000 000,00 988 396,06 907 902,50 890 157,50 874 763,92 1 100 000,00 (11 603,94)	88 396,06 87 370,32 80 255,00 78 686,42 77 325,68 2 100 000,00 (12 629,68) 87 370,32	100 000,00 100 000,00 98 000,00 94 080,00 952 089,60 2	988 396,06 975 766,38 890 157,50 874 763,92 - 4 100 000,00 (21 313,58)	-67 863,88 - - - - - 5 100 000,00 (22 674,32) 77 325,68

Balance sheet					
Loan	988 396,06	907 902,50	890 157,50	874 763,92	0,00
Cash	100 000,00	200 000	298 000	392 080,00	1 344 169,60
Total assets	1 088 396,06	1 107 902,50	1 188 157,50	1 266 843,92	1 344 169,60
Equity	1 088 396,06	1 107 902,50	1 188 158	1 266 843,92	1 344 169,60
Total equity and liabilities	1 088 396,06	1 107 902,50	1 188 157,50	1 266 843,92	1 344 169,60

Reconciliation of allowance account	1	2	3	4	5
Opening balance allowance	-	11 603,94	92 097,50	109 842,50	125 236,08
Allocation of initial expected credit losses	11 603,94	12 629,68	19 745,00	21 313,58	22 674,32
Increase/decrease due to changes in loss estimates	-	67 863,88	-	-	-0,00
Recorded loss/Reversals	-	-	2 000,00	5 920,00	147 910,40
Closing balance allowance	11 603,94	92 097,50	109 842,50	125 236,08	-

10 000,00 Nominal amount of each loan

10 % Coupon interest rate

100 # loans

1 000 000,00 Total lending volume

10,00 % EIR (excluding future losses)

Spot (risk free zero-coupon) and f		1	2	3	4	5
Spot rates	0	5,00 %	5,84 %	6,16 %	6,35 %	6,49 %
Forward rates		5,00 %	6,68 %	6,79 %	6,92 %	7,05 %
Torward rates	End of period 1	3,00 70	0,00 /0	0,73 70	0,32 %	7,03 70
Spot rates			6,68 %	6,74 %	6,80 %	6,86 %
						Forward rates =
Forward rates			6,68 %	6,79 %	6,92 %	7,05 % Actual spot rates
	End of period 2					
Spot rates				7,14 %	7,22 %	7,30 % Change in rates
Forward rates				7,14 %	7,30 %	7,46 %
	End of period 3					
Spot rates					4,74 %	4,46 % Change in rates
Forward rates					4,74 %	4,18 %
	End of period 4					
Spot rates						4,18 %
						Forward rates =
Forward rates						4,18 % Actual spot rates
Initial Default Rates						
					Expected	
Period	Contractual CF	Per annui	m Cumulative	Expect	ted CF% portfolio	
	0	-1 000 000,00				
	1	100 000,00	0,000 %	0,000 %	100,000 %	-
	2	100 000,00	0,000 % 1,000 %	0,000 %	100,000 %	1 000 00
	3	100 000,00 100 000,00	2,000 %	1,000 % 2,980 %	99,000 % 97,020 %	1 000,00 2 980,00
	5	1 100 000,00	3,000 %	2,980 % 5,891 %	94,109 %	64 796,60
	3	1 100 000,00	3,000 %	J,031 70	34,103 %	04 / 30,00

Updated Default Rates (end of period 2)						
Period	Contractual CF	Per annum	Cumulativ	1 0	Expected CF%	Expected loss portfolio
i cilou	3 100 00		2,00 %	2,00 %	98,00 %	
	4 100 00		4,00 %	5,92 %	94,08 %	· · · · · · · · · · · · · · · · · · ·
	5 1 100 00	•	8,00 %	13,45 %	86,55 %	•
Overview of loss estimates		,			·	
			2	3	4	5
	Individual loans identified impaired in period 2 (A	ctual				
	and expected losses) - 0 loans		-	-	-	-
	Portfolio		-	2 000,00	5 920,00	·
Expectations as of end of period 2	Total		-	2 000,00	5 920,00	147 910,40
				2		
				3	4	5
	Individual loans identified impaired in period 2 (A	ctual				
	and expected losses) - 0 loans	-1 -1		-	-	-
	Individual loans identified impaired in period 3 (A	ctuai		2 000 00	2.552.00	00.746.24
	and expected losses) - 10 loans			2 000,00	3 552,00	· · · · · · · · · · · · · · · · · · ·
Formatations as of and of assist 2	Portfolio			2 000 00	2 368,00	
Expectations as of end of period 3	Total			2 000,00	5 920,00 2	
	Individual loans identified impaired in period 2 (A	ctual				, ,
	and expected losses) - 0 loans	ctuai			_	_
	•	atual.				
	Individual loans identified impaired in period 3 (A and expected losses) - 10 loans	ctuai			3 552,00	88 746,24
	•	-41			3 332,00	00 /40,24
	Individual loans identified impaired in period 4 (A	ctuai			2 200 00	44 272 42
	and expected losses) - 5 loans Portfolio				2 368,00	
Expectations as of end of period 4	Total				5 920,00	14 791,04 147 910,40
expectations as of end of period 4	Total				3 920,00	147 910,40
	Individual loans identified impaired in period 2 (A	ctual				5
	and expected losses) - 0 loans					-
	Individual loans identified impaired in period 3 (A	ctual				
	and expected losses) - 10 loans					88 746,24
	Individual loans identified impaired in period 4 (A	ctual				
	and expected losses) - 5 loans					44 373,12
	Individual loans identified impaired in period 5 (A	ctual				
	and expected losses) - 2 loans					14 791,04
	Portfolio					-
Expectations as of end of period 5	Total					147 910,40

Initial expectations of development of allowances (a	at time 0)					
	1	1	. 2	3	4	5
	2	-	_			
	3	292,58	624,25	1 000,00		
	4	611,61	1 304,92	2 090,38	2 980,00	
	5	9 937,90	21 203,55	33 966,30	48 421,69	64 796,60
Allowance before write-offs/reversals		10 842,09	23 132,73	37 056,68	51 401,69	64 796,60
Updated expectations of development of allowance			2	3	4	5
	2		1 244,48	2 000,00		
	4		2 574,78	4 137,93	5 920,00	
	5		47 891,62	•	,	147 910,40
Total allowance before write-offs/reversals	_		51 710,88	83 104,55	116 033,64	147 910,40
Updated expectations of development of allowance	s (at end of period 3)			3	4	5
	3					
	4			1 695,63	,	F0.1C4.1C
Total allowance before write-offs/reversals	5			32 531,94 34 227,56		59 164,16 59 164,16
Updated expectations of development of allowance	s (at end of period 4)			34 227,30	47 799,93	59 104,10
C paulicus on accompanions of another incompanions of another incompanions of accompanions of	4					
	5				11 357,98	14 791,04
Total allowance before write-offs/reversals					11 357,98	14 791,04
Updated expectations of development of allowance	s (at end of period 5)				4	5
Table II and the form the first of the same is	5					-
Total allowance before write-offs/reversals	_					_
			Accumulated actual	Accumulated actual	Accumulated actual	
			and expected cash	and expected cash	and expected cash	Accumulated actual
			flows of loans	flows of loans	flows of loans	and expected cash
				individually identified		flows of loans in the
Cash flows			3 - 10 loans	as impaired in period 4 - 5 loans	as impaired in period 5 - 2 loans	remaining portfolio at AC
	1	100 000,00	20.000		2.00.10	100 000,00
	2	100 000,00				100 000,00
	3	98 000,00	8 000,00			90 000,00
	4	94 080,00	6 448,00	2 632,00		85 000,00
	5	952 089,60	21 253,76	10 626,88	7 208,96	913 000,00
			Loans individually	Loans individually	Loans individually	
			Loans individually identified as impaired		Loans individually identified as impaired	
			in period 3 - 10 loans		in period 5 - 2 loans	
	Amortized cost for individual impaired loa	ns	101 689,54			•
	Fair value of expected future cash flows		25 207,96			1,00 %
	Cash flow		8 000,00			
	3 Individual impairment		-68 481,59			

	Amortized cost for individual impaired loans		52 344,45		
	Fair value of expected future cash flows	20 206,89	10 103,45		1,00 %
	Cash flow	6 448,00	2 632,00		
	Individual impairment		-39 609,00		
	4 Fair value change	1 446,94			
	Amortized cost for individual impaired loans			21 651,98	
	Fair value of expected future cash flows	-	-	-	
	Cash flow	21 253,76	10 626,88	7 208,96	
	Individual impairment			-14 443,02	
	5 Fair value change	1 046,87	523,43		
Notional balance	1 000 000,00	1 000 000,00	900 000,00	850 000,00	-
Loan loss account	-10 842,09	-51 710,88	-34 227,56	-11 357,98	-
Net balance loans in portfolio	989 157,91	948 289,12	865 772,44	838 642,02	-
Individual loans identified impaired	-	-	25 207,96	30 310,34	-
Total	989 157,91	948 289,12	890 980,39	868 952,35	-
P&L	1	2	3	4	5
Interest income	100 000,00	100 000,00	100 000,00	90 000,00	85 000,00
Credit loss (expense)/recovery allowance	-10 842,09	-40 868,79	9 172,86	20 214,03	11 009,96
Net interest income	89 157,91	59 131,21	109 172,86	110 214,03	96 009,96
Loss/recovery due to reclassification	-	-	-68 481,59	-39 609,00	-14 443,02
Net interest income after credit loss expense	89 157,91	59 131,21	40 691,27	70 605,03	81 566,94
Fair value changes	-	-	-	1 446,94	1 570,30
Profit before income tax	89 157,91	59 131,21	40 691,27	72 051,96	83 137,25
	·			·	,
Balance sheet					
Loans at amortised cost	989 157,91	948 289,12	865 772,44	838 642,02	-
Loans at fair value	-	-	25 207,96	30 310,34	-
Cash	100 000,00	200 000,00	298 000,00	392 080,00	1 344 169,60
Total assets	1 089 157,91	1 148 289,12	1 188 980,39	1 261 032,35	1 344 169,60
E-mile.	1 000 157 01	1 1 10 200 12	1 100 000 20	1 261 022 25	1 244 160 60
Equity Total equity and liabilities	1 089 157,91 1 089 157,91	1 148 289,12 1 148 289,12	1 188 980,39 1 188 980,39	1 261 032,35 1 261 032,35	1 344 169,60 1 344 169,60
Total equity and liabilities	1 089 157,91	1 148 289,12	1 188 980,39	1 261 032,35	1 344 169,60
Reconciliation of allowance account	1	2	3	4	5
Opening balance allowance	-	10 842,09	51 710,88	34 227,56	11 357,98
Write-offs/Reversals	-	-	-8 310,46	-2 655,55	-348,02
Increase/(decrease) in credit loss allowances and					
provisions recognized in the income statement	10 842,09	40 868,79	-9 172,86	-20 214,03	-11 009,96
Closing balance allowance	10 842,09	51 710,88	34 227,56	11 357,98	-